



United States Department of the Interior



BUREAU OF RECLAMATION
Rapid City Field Office
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Rapid City, SD 57701

IN REPLY REFER TO:

DKAO-EA-2025-001
2.1.4.17

VIA ELECTRONIC MAIL ONLY

Memorandum

To: Dakotas Area Office
Attention: DK-3000 (Central Files)

From: Scott Hettinger
Acting Area Manager

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Subject: Finding of No Significant Impact and Environmental Assessment No. DKAO-EA-2025-001 for Northwest Eagle Butte Drought Resiliency Project, Mni Wašté Water Company, Eagle Butte, Cheyenne River Reservation, South Dakota

The Bureau of Reclamation has completed the Environmental Assessment (EA) and has issued a Finding of No Significant Impact (FONSI) for the Northwest Eagle Butte Drought Resiliency Project, proposed by the Mni Wašté Water Company (MWWC) in Eagle Butte, located on the Cheyenne River Reservation in South Dakota.

The project will provide clean drinking water to 37 currently unserved or underserved residences. Residents in the area currently haul water from up to 10 miles away or rely on poor-quality wells. The project is funded through Reclamation's WaterSMART grant program, which supports drought resiliency and infrastructure modernization. The FONSI and EA are attached.

If further information is needed, please contact Ms. Corinna Hanson, Natural Resource Specialist, at (605) 519-5489 or CMHanson@usbr.gov. If you are deaf, hard of hearing, or have a speech disability, please dial 7-1-1 to access telecommunications relay services.

Attachment

cc: DK-1000 (SHettinger), DK-2000 (SMDahl, CHaines), DK-5000 (AGue, APersinger),
DK-5100 (JHammer, CMHanson, JKnutson)

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— BUREAU OF —
RECLAMATION

DKAO-EA-2025-001

Finding of No Significant Impact And Final Environmental Assessment for

Northwest Eagle Butte Drought Resiliency Project

**Mni Wašté Water Company
Eagle Butte, South Dakota**

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UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF
RECLAMATION DAKOTAS
AREA OFFICE BISMARCK,
NORTH DAKOTA

FINDING OF NO SIGNIFICANT IMPACT

of

FINAL ENVIRONMENTAL ASSESSMENT

FOR

Northwest Eagle Butte Drought Resiliency Project

Mni Wašté Water Company
Eagle Butte, South Dakota

NO. DKAO-EA-2025-001

Recommended: ASHLEY PERSINGER Digitally signed by ASHLEY PERSINGER
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Dakotas Area Office

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Andrea Gue
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Scott Hettinger
Acting Area Manager
Dakotas Area Office

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

Introduction

Issuance of this Finding of No Significant Impact (FONSI) follows the completion of the Environmental Assessment for the Northwest Eagle Butte Drought Resiliency Project within the Mni Wašté Water Company (MWWC) rural water system in Eagle Butte, South Dakota.

The FONSI describes the reasons why the finding for the proposed action will not significantly impact the human environment. This document contains the FONSI and Final Environmental Assessment.

Certification and Decision Documentation (DM1 Section 4.1)

As the Responsible Official, I certify that Reclamation has considered all relevant information raised during the NEPA process and that the NEPA process has concluded. The Proposed Action, including listed environmental commitments, is the selected action for implementation, and complies with all applicable plans, laws, and statutes.

SCOTT
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Date: 2025.12.22 08:42:14 -06'00'

Responsible Official

Date

**Finding of No Significant Impact
of
Environmental Assessment
for
Northwest Eagle Butte Drought Resiliency Project Mni Wašté Water Company
Eagle Butte, South Dakota**

The United States Department of Interior - Bureau of Reclamation (USBR) proposes to fund the Northwest Eagle Butte Drought Resiliency Project (the Project) within the Mni Wašté Water Company (MWWC) service area. The Project would bring reliable, quality drinking water to 37 unserved residences on the Cheyenne River Reservation in South Dakota.

The breadth and depth of analysis in the EA ensured that the USBR considered the factors mandated by NEPA; that the environmental assessment represents USBR's good-faith effort to prioritize documentation of the most important considerations required by statute; that this prioritization reflects the USBR's expert judgment; and that any considerations addressed briefly or left unaddressed were, in USBR's judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed.

This Project would include:

1. Installation of 12.3 miles of water pipeline, to include:
 - a. Approximately 9,120 linear feet of 6-inch diameter buried PVC pipe;
 - b. Approximately 27,550 linear feet of 4-inch diameter buried PVC pipe;
 - c. Approximately 26,951 linear feet of 2-inch diameter buried PVC pipe;
 - d. Approximately 120 linear feet of 12-inch diameter horizontal directional drilled PVC encasement pipe;
 - e. Approximately 190 linear feet of 10-inch diameter horizontal directional drilled PVC encasement pipe;
 - f. Approximately 880 linear feet of 6-inch diameter horizontal directional drilled PVC encasement pipe;
 - g. Approximately 65,520 linear feet of tracer wire and associated locating and testing system;
 - h. Miscellaneous appurtenances including isolation gate valves, automatic air release valves, direct bury gate valves, blow-off assemblies, service taps, curb stops, and meter pits;
 - i. Temporary and permanent erosion control, fencing, reclamation and seeding;
2. Ongoing and future MWWC activities necessary to operate, maintain, repair, and/or replace existing potable water infrastructure needed to provide water service to all residents on the Cheyenne River Reservation.
3. Construction according to the Environmental Commitments as described in Chapter 4, Environmental Commitments, within the Final Environmental Assessment.

Four agency responses were received during the scoping period for the Environmental Assessment (EA) in response to USBR's scoping notice. The comments were referenced and incorporated where appropriate within the environmental impact categories addressed in the final EA. Agency responses were received from the USDA Natural Resources Conservation Service (NRCS), South Dakota Department of Game, Fish and Parks (SDGFP), United States Fish and Wildlife Service (USFWS), and the South Dakota Department of Agriculture and Natural Resources (SDDANR).

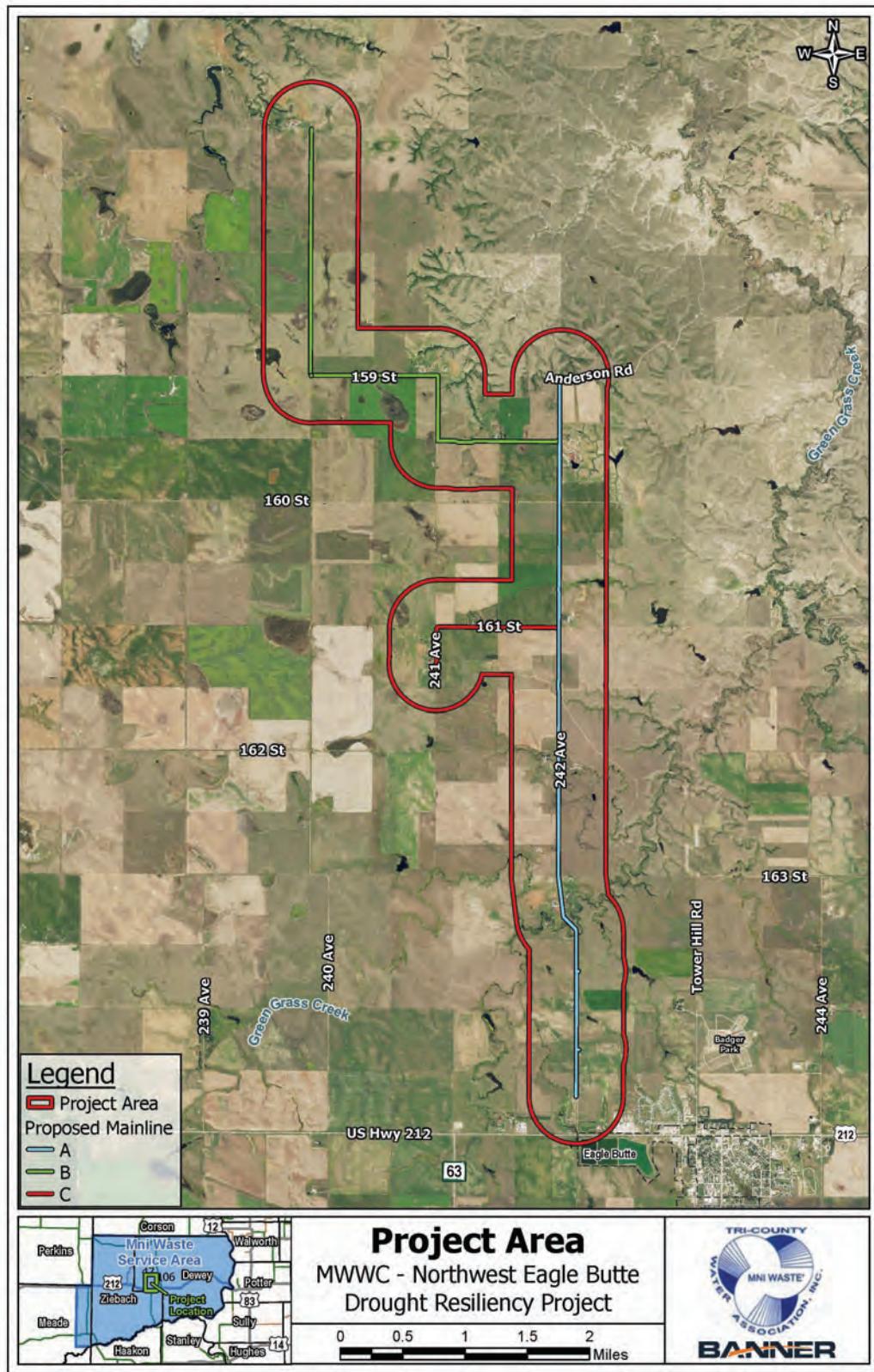
The USDA NRCS determined that the project as outlined will have no impact on prime or important farmland.

The SDGFP detected no environmental conflicts for the project. A search of the South Dakota Natural Heritage Database returned no occurrences of endangered, threatened, or rare species in the project area. SDGFP requested that any construction vehicles, vessels, or equipment coming into contact with surface waters in South Dakota be thoroughly cleaned prior to use. This commitment is found in Table 10 on page 65 of the EA. SDGFP also commented on the Endangered Species Act requirements, threatened bald and golden eagles, and migratory bird protections, which are addressed in Table 10 on page 65 of the EA.

The USFWS stated that their agency had no comments to provide during the NEPA process.

SDDANR determined that no adverse impacts would occur to air quality, drinking water, groundwater, solid or hazardous waste, or mineral development. SDDANR stated that all surface waters are considered waters of the State, protected under 74:51:01 and any project proposing to impact, alter, use, or discharge any substance including fill materials must contact SDDANR prior to engaging in the proposed activity. A NPDES permit for stormwater discharges will be required for projects impacting tribal lands. Appropriate erosion and sediment control measures must be installed to control the discharge or pollutants from the construction site. These commitments are found in Table 10 on pages 64 and 65 of the EA. SDDANR's Resource Conservation and Forestry (RCF) Division recommended that special construction measures be taken to preserve and protect tree health by avoiding damage to tree roots, stems, or branches. This commitment is found in Table 10 on page 66 of the EA.

Figure 1. Overview map of the Project Area



Agency Decision

No Action.

Under the No Action Alternative, the Project would not be constructed and the existing MWWC facilities would be operated and maintained. There would be no immediate environmental impacts resulting from the no-action alternative, as no construction-related activities would take place. The identified residences would continue to be unserved or underserved by the MWWC system. Thirty-seven residences would continue to be unserved or underserved by the MWWC system. Currently in the Project Area, individual customers haul water from up to 10 miles away or utilize wells with poor water quality as their water supply. Anecdotal reports indicate the wells have been subject to seasonal fluctuations and are not able to consistently meet the needs of the residents. Requests for new connections to the MWWC have been denied because of a lack of water supply and/or pressure. Due to the water plant operating at its maximum capacity of 1.2 million gallons per day, the area faces a moratorium on new housing, limited fire response times, and major setbacks to much-needed business development on the reservation (USDA 2014).

The No Action Alternative would not meet the purpose and need as identified for the Proposed Action or meet the economic, public health, and environmental needs of all residents within the internal boundaries of the Cheyenne River Reservation. Therefore, this alternative was rejected.

Proposed Action.

Reclamation has determined that the Proposed Action, Reclamation's preferred alternative, as described in the Environmental Assessment DKAQ-EA-2025-001 will not result in significant impacts to the human and natural environment; therefore, an environmental impact statement will not be prepared. A complete description and analysis of the project's anticipated environmental impacts are contained in the final EA.

The reasons for the FONSI determination are summarized as follows:

1. All requirements of the National Environmental Policy Act have been met, including public involvement and coordination with Federal, State, and local agencies.
2. This action will not have significant effect on the quality of the human environment.
3. All stipulations of the Clean Water Act and other applicable Federal laws, regulations, and guidelines concerning wetlands and water resources will be satisfied prior to any construction. Environmental commitments include the coordination with U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service prior to construction, as necessary.
4. USBR has determined the Proposed Action will have no effect on the black-footed ferret, northern long-eared bat, piping plover, rufa red knot, and the whooping crane.
5. USBR has determined the Proposed Action is not likely to jeopardize the monarch butterfly, Suckley's cuckoo bumble bee, and the Western regal fritillary.

6. USBR has determined the Proposed Action would have no impacts to migratory birds or raptors. Environmental commitment measures have been incorporated into the project's design to eliminate potential impacts to migratory birds.
7. All stipulations of the National Historic Preservation Act (NHPA) and other applicable Federal laws, regulations, and guidelines concerning cultural resources will be satisfied prior to any potential project construction. Avoidance measures will be incorporated into the project's design to reduce or eliminate impacts to historic properties. Espinoza Cultural Services, LLC (ECS) was contracted to perform a Level III cultural resource assessment for the project. The project area was inventoried by ECS with the assistance of 11 CRST Traditional Cultural Specialists. During the survey, one Isolated Find was identified in the project area. A Section 106 Report written by Dee Ann Espinoza documenting the recommended finding of No Historic Properties was sent to the Cheyenne River Sioux THPO. Additionally, ECS recommended that a CRST-certified Traditional Cultural Specialist monitor ground disturbing activities during project construction.
8. USBR has determined the Proposed Action would have no impacts to Indian Trust Assets.
9. All applicable Federal and State environmental laws, regulations, and executive orders will be adhered to.
10. USBR is including a list of environmental commitments as part of the proposed action to be implemented in order to (a) prevent, minimize, or offset the occurrence of potential adverse environmental effects and (b) ensure compliance with applicable Federal and State regulations designed to protect fish and wildlife resources, important habitats and sensitive areas, cultural and paleontological resources, human health and safety, and the public interest.

Environmental Commitments

MWWC would ensure the environmental commitments are implemented. All appropriate environmental commitments would be incorporated into each site-specific design, included in all construction contracts and specifications, and applied during construction and in Operations and Maintenance (O&M) activities post-construction. No mitigation measures will be implemented under the Proposed Action as currently described.

Over the past two decades, USBR has conducted public scoping and consultation with state and local governments associated with water supply projects throughout North and South Dakota which have resulted in development and implementation of proven methods that minimize or avoid adverse environmental effects during construction and O&M. Environmental commitments applicable to the Project's construction and O&M activities are described in **Table 1**.

Table 1. Required Environmental Commitments for the Proposed Action

Surface Waters, Wetlands, Floodplains
Construction through wetland basins will occur through open trench methods. Existing basin contours will be restored, and trenches will be sufficiently compacted to prevent any drainage along the trench or through bottom seepage. Green Grass Creek will be directionally bored unless site conditions allow for trenching.
Project proponent and contractor will be responsible for compliance with Section 404 of the Clean Water Act and avoid permanent impacts to jurisdictional wetlands. NWP 58 authorizes activities “required for the construction, maintenance, repair, and removal of utility lines for water … provided the activity does not result in the loss of greater than ½-acre of waters of the United States.” NWP 58 requires pre-construction notification if a Section 10 permit is required, or the discharge will result in greater than 0.10 acre of waters of the United States.
If unavoidable permanent impacts to jurisdictional wetlands are necessary, the USBR and MWWC will develop a compensatory wetland mitigation plan and concurrently implement the plan after review and approval by the USACE, as authorized by the Clean Water Act.
To minimize water quality impacts, Green Grass Creek will be directionally bored. However, if construction would commence later in the summer or fall when the creek is dry, the distribution line could be installed using open trench methods. <ul style="list-style-type: none">• Utilize industry standard BMPs such as silt curtains, straw wattles, and silt fences during construction.• Use the shortest practicable alignment to minimize disturbance if constructing in the dry creek bed.
Project proponent and contractor will be responsible for compliance with Section 402 of the Clean Water Act, the CGP for stormwater discharges associated with construction activities, and the SWPPP. <ul style="list-style-type: none">• The CGP and SWPPP require BMPs to minimize erosion and sedimentation from the construction activities to the maximum extent practicable, and to prevent spills and leaks of hazardous substances.• Industry standard BMPs will be utilized and retained until construction is complete, all disturbed areas have been reclaimed and stabilized with at least 70% of the preconstruction native vegetation, and a NOT has been submitted to the USEPA to terminate coverage under the CGP.
The maximum length of open trenches will be limited to 1,000 feet at one time and all trenches will be backfilled the same day they are excavated.
No above ground structures will be constructed in the floodplain that could interfere with the above ground movement of floodwaters.
All equipment will be cleaned prior to entering construction sites to prevent potential introduction and spread of invasive species, as described in all construction contracts.
Topsoil will be saved and stockpiled separately from subsoil. Stockpile areas for these materials will be established within the construction footprint.
Good housekeeping practices will be required under the CGP to minimize impacts to surface waters and wetlands due to vehicles and equipment. At a minimum, the following BMPs shall be followed: <ul style="list-style-type: none">• All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage

- Vehicles shall be well-maintained and shall be refueled and serviced only in contained areas of the site. If practicable, maintenance and refueling should be done offsite. Any spills shall be cleaned up immediately after discovery and waste properly disposed of.

Fish and Wildlife Species and Habitats

To the extent practicable, construction will avoid sensitive areas such as wetlands, woody draws, and intermittent drainages.

To reduce temporary impacts to suitable habitats, the disturbance will be located in or near previously disturbed areas along established roads or driveways where practicable.

Threatened and Endangered Species

If threatened or endangered species are identified and encountered during construction, all construction activities in the immediate area will be stopped until USBR can consult with the USFWS to determine appropriate steps to avoid affecting the species.

MWWC is responsible for compliance with the Migratory Bird Treaty Act. If work would occur during the grassland ground-nesting migratory bird season (May 1 – July 15), any project area containing suitable habitat would be mowed or cleared prior to May 1. Preconstruction nesting surveys are recommended if mowing or clearing is not possible. If work would occur during the raptor nesting season (Feb 1-July 15), woody vegetation to be removed would be cleared for occupancy prior to construction.

MWWC is responsible for compliance with the Bald and Golden Eagle Protection Act. Construction within 660 feet of visible (330-feet if visual screen exists) nesting bald eagles will be avoided from February 1- July 15. Construction within 0.5 mile of visible (660-feet if visual screen exists) nesting golden eagles will be avoided February 1 – July 15.

Northern long-eared bat: Tree removal will only occur during the NLEB inactive period (November 1st through April 14th). If trees need to be removed during the active season of the NLEB (April 15th to October 31st), a qualified biologist will conduct a species presence/absence survey of the suitable habitat trees within the Project Area and submit the report to USBR for concurrence. A suitable tree is defined as any tree with diameter at breast height greater than 3-inches and containing sloughing bark, snags, or crevices.

Whooping crane: If a whooping crane is identified within one mile of the Project Area, all work would cease until the bird leaves the Project Area and USFWS would be contacted. The spring whooping crane migration period is from April 1st to May 15th, and the fall migration season is September 10th to October 31st.

Monarch butterfly, Suckley's cuckoo bumblebee, and western regal fritillary: Re-seeding of the disturbed construction right-of-way will occur after construction is complete. Re-seeding of milkweed, the monarch butterfly's host plant, is not included in the recommended seed mix in the project manual and general notes. Re-seeding of milkweed is not required.

Construction Practices

Comply with all appropriate Federal, State, Local, and Tribal laws.

MWWC and the contractor are responsible for compliance with the CGP.

Follow the BMPs for construction, restoration, and maintenance listed within the construction specifications and the stormwater pollution prevention plan.

Maintain instream flow during stream crossing construction.

Use the shortest practicable alignment to minimize disturbance in crossing streams.

Erosion control measures will be employed as detailed in the SWPPP:

- Care will be exercised to preserve existing trees along the streambank.
- Stabilization, erosion controls, restoration, and re-vegetation of all streambeds and embankments will be carried out as soon as a stream crossing is completed.

BMPs will be maintained until at least 70% of the pre-construction vegetation is established.
All construction waste materials and excess or unneeded fill associated with construction will be disposed of on uplands, non-wetland areas, or permitted landfills or rubble sites.
Standard construction industry dust abatement measures will be taken to minimize fugitive dust emissions during construction activities. Any complaints that may arise will be dealt with in a timely and effective manner.
Under the CGP, BMPs will be implemented to reduce and prevent erosion, such as the utilization silt fence, straw wattles, vehicle tracking control, mulching, temporary seedings, and vegetative buffer strips, with erosion control blanket for any disturbed slopes greater than 5% if the trench is wider than six feet.
Disturbed areas will be re-seeded using seed mixes appropriate for the Project Area. On specific parcels where landowners have requested replacement of trees, trees shall be replaced early in the next planting season at locations designated by the Engineer with the landowner's approval. Trees on these parcels shall be replaced on a 2:1 basis. Any newly planted trees or shrubs that die shall be removed and replaced as directed, with such replacements being maintained for a period of 1 year from the date of replacement. Refer to the Right of Way Tables in the Drawings for specific parcels where tree removal /replacement is required.
If established survey benchmarks must be removed or should any monuments be dislodged or damaged during construction, the National Geodetic Survey (Attn: N/CG 162, Rockville, Maryland 20852) will be contacted and survey benchmarks shall be reestablished.
In grasslands, forested areas, wetlands, and riparian areas, allow vegetation to reestablish post construction. Topsoil in the areas not reseeded shall be lightly compacted and leveled to avoid settlement after completion of construction and reclamation of the site. Topsoil in disturbed areas and areas traveled by construction traffic shall also be scarified, leveled, raked, and smoothed.
Point source air emissions may require an air quality permit; contact the USEPA to determine the need for permitting.
Historic Properties and Culturally Sensitive Areas
All ensuing activities will comply with the National Historic Preservation Act (NHPA), as amended, and the Archaeological Resource Protection Act (ARPA) [16 U.S.C. 470aa-470mm; Public Law 96-95 (1979)]. Under ARPA, historic properties, which may include rock art sites, historic buildings or structures, or historic or prehistoric artifacts, are protected. Unauthorized collecting or digging, vandalism, or other methods of destruction to historic properties are not permitted.
The Tribes will be consulted concerning shareable information on the locations of unmarked burials or cemeteries. All such burials or cemeteries will be avoided to the extent practicable. If a burial or cemetery cannot be avoided or is encountered during construction, USBR will comply with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq. [Nov. 16, 1990]) if graves are discovered on Federal or trust lands or within CRST boundaries.
The Tribes will be consulted regarding any shareable information regarding traditional cultural properties that could be affected by construction. Under the National Park Service National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties (TCP), a TCP is a historic property that derives its significance from the role it plays in a community's historically rooted beliefs, customs, and practices. USBR will consult with the appropriate THPO(s) to avoid impacts to TCPs and accommodate access to the sites (Executive Order 13007).
In the event cultural resources, traditional cultural properties, human remains, or unanticipated effects on historic properties are encountered during construction, all ground disturbance activity

within the area will be stopped, USBR, CRST THPO, and all other appropriate authorities will be notified, and all applicable stipulations of the NHPA will be followed pursuant to 36 CFR § 800.13. Activities in the area will resume only when compliance has been completed and appropriate measures implemented.

A CRST-Certified Traditional Cultural Specialist Monitor must be present during project construction pursuant to CRST Tribal Resolution No. 199-2011-CR.

Paleontological Resources

USBR and/or CRST will contact a qualified paleontologist to assist with identifying areas that may contain paleontological resources. If a sensitive resource is identified in proximity to the Project Area, the resource will be avoided, and the nearby ground disturbance monitored by qualified personnel. The monitoring will consist of an examination of the exposed area, including the spoil or storage piles at key times.

USBR, the CRST, and the appropriate Federal Agency (land manager), will need to be notified if paleontological resources are identified during construction on federal lands.

If paleontological resources are discovered during construction activities, construction will be halted until the USBR's Dakotas Area Office archeologist is notified and appropriate consultations are completed. A professional paleontologist will be contacted to determine the significance of the find and any mitigation measures, as authorized by the Paleontological Resources Preservation Act of 2009, will be implemented prior to the project moving forward in the vicinity of the find.

USBR will make every effort to protect a paleontological resources site from further effects, including looting, erosion, or other human or natural damage.



— BUREAU OF —
RECLAMATION

DKAO-EA-2025-001 Environmental Assessment

Northwest Eagle Butte Drought Resiliency Project

Mni Wašté Water Company
Eagle Butte, South Dakota



Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

DKAO-EA-2025-001 Environmental Assessment

Northwest Eagle Butte Drought Resiliency Project

**Mni Wašté Water Company
Eagle Butte, South Dakota**

Prepared by

**Banner Associates
Environmental Department
Leslie Murphy, Environmental Department Head**

Certification

In accordance with 516 DM 1 Section 1.5 (e)(4) and Section 1.5 (f)(6) for EAs, I certify that the breadth and depth of analysis in this environmental assessment have been tailored to ensure compliance with the mandated page limits. Reclamation has considered all factors required by NEPA and has made a good-faith effort to prioritize the most important considerations within NEPA's congressionally mandated page limits and timeframes. This prioritization reflects Reclamation's expert judgment. Any considerations addressed briefly or left unaddressed were deemed, in Reclamation's judgment, to be of comparatively lesser substantive nature and did not meaningfully inform the consideration of environmental effects or the resulting decision on how to proceed.

Furthermore, Reclamation's effort is substantially complete and in Reclamation's expert opinion, it has thoroughly considered the factors mandated by NEPA and the analysis contained therein is adequate to inform and reasonably explain Reclamation's decision regarding the proposed Federal action.

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Responsible Official

Date

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Appendices

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List Of Acronyms

APE – Area of Potential Effect	MBTA – Migratory Bird Treaty Act	SARC – South Dakota Archaeological Resource Center
BIA – Bureau of Indian Affairs	MWWC – Mni Wašté Water Company	SD – South Dakota
BMPs – Best Management Practices	NEPA – National Environmental Policy Act of 1969, as amended	SDDANR – South Dakota Department of Agriculture and Natural Resources
CFR – Code of Federal Regulations	NHPA – National Historic Preservation Act of 1966, as amended	SDGFP – South Dakota Department of Game, Fish and Parks
CGP – Construction General Permit	NLCD – National Land Cover Database	SWPPP – Stormwater Pollution Prevention Plan
CRST – Cheyenne River Sioux Tribe	NLEB – Northern Long-eared Bat	TCP – Traditional Cultural Properties
CRGRID – Cultural Resources Geographic Research Information Display	NPDES – National Pollutant Discharge Elimination System	THPO – Tribal Historic Preservation Office
CWA – Clean Water Act	NRCS – Natural Resources Conservation Service	USACE – United States Army Corps of Engineers
EA – Environmental Assessment	NRHP – National Register of Historic Places	USBR – United States Department of Interior - Bureau of Reclamation
EIS – Environmental Impact Statement	NWP – Nationwide Permit	USDA – United States Department of Agriculture
EO – Executive Order	NWS – National Weather Service	USDOI – United States Department of Interior
ESA – Endangered Species Act of 1973	O&M – Operation and Maintenance	USDM – United States Drought Monitor
fmsl – Feet Mean Sea Level	OWUS – Other Waters of the United States	USEPA – United States Environmental Protection Agency
FONSI – Finding of No Significant Impact	Pd – <i>Pseudogymnoascus destructans</i>	USFWS – U.S. Department of the Interior, U.S. Fish and Wildlife Service
GPA – Game Production Area	PRPA – Paleontological Resource Preservation Act	USGS – United States Geological Survey
IF – Isolated Finds	Reservation – The Cheyenne River Reservation	
IHS – Indian Health Service	ROW – Right of Way	
IPaC – Information for Planning and Consultation		
ITAs – Indian Trust Assets		

Executive Summary

The Mni Wašté Water Company (MWWC) is a tribally chartered entity that currently serves treated drinking water to approximately 14,000 members of the Cheyenne River Reservation (Reservation) within Dewey and Ziebach Counties in South Dakota. The MWWC is proposing to construct water distribution pipelines and individual metered service connections to deliver quality and reliable drinking water to additional residents near Eagle Butte, South Dakota. Residents in the project area currently get water from either private wells or by hauling water from up to 10 miles away. The groundwater wells in the region are deep and of poor quality, and do not provide sufficient quantity to serve the needs of the members. The MWWC estimates the project will provide reliable drinking water to 37 residences on the Reservation, improving drought resiliency. The funding for the proposed project would be provided by a WaterSMART grant through the United States Department of Interior – Bureau of Reclamation.

A summary of potential impacts as a result of the Proposed Action is shown in Table 8. Impacts on the human and natural environment would be mitigated by following the Environmental Commitments in Table 10.

Chapter 1: Introduction

The Mni Wašté Water Company (MWWC) is a tribally chartered, not-for-profit corporation of the Cheyenne River Sioux Tribe (CRST). MWWC owns and operates portions of the water distribution system serving all of Dewey and Ziebach counties and a portion of Perkins County in South Dakota. The Tri-County Water Association (Tri-County) is a non-profit corporation organized and operating under the laws of the State of South Dakota. Tri-County owns portions of the water distribution system serving these same counties. Tri-County leases those portions of the distribution system that it owns to MWWC for the company to operate. MWWC owns the distribution lines in the system that have been constructed and will own the new lines currently planned for construction (Fischer 2017). The MWWC brings reliable, quality drinking water to 14,000 members within Dewey and Ziebach counties on the Cheyenne River Reservation (Reservation) in South Dakota.

The Proposed Action will install an additional 61,250 feet (12.6 miles) of water pipeline within the Reservation. The MWWC estimates the Proposed Action will provide reliable drinking water to 37 unserved residences on the Reservation. The funding for the Proposed Action would be provided by a WaterSMART grant through the United States Bureau of Reclamation (USBR). Through the WaterSMART grant program, the USBR works cooperatively with states, tribes, and local entities to increase water supply through investments to modernize existing infrastructure and improve resiliency due to conditions such as drought (USBR 2025).

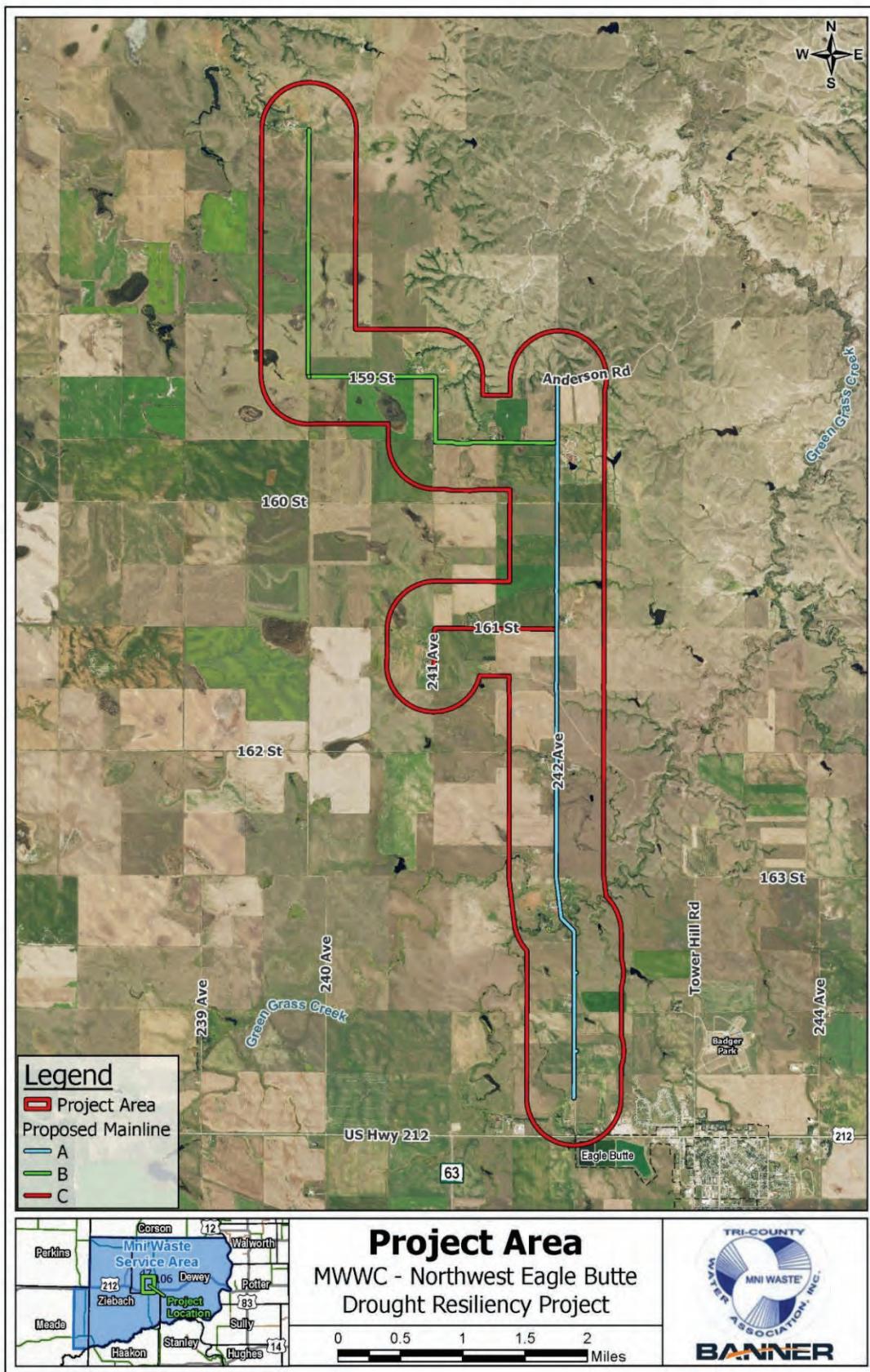
The USBR is the lead federal agency for this project. Banner Associates has prepared this Environmental Assessment (EA) on behalf of the MWWC for the proposed upgrades associated with the Proposed Action under the supervision of the USBR. An EA is a National Environmental Policy Act (NEPA) review that evaluates the environmental impacts of a federal action. The purpose of an EA is to ensure that the environmental impacts of a project are considered before proceeding. In accordance with NEPA section 107(f), 42 U.S.C. 4336a(f), this EA has been prepared following procedures that are established for bureaus to allow applicants, or contractors directed by applicants, to prepare environmental impact statements and environmental assessments under bureau supervision when the bureau is the Federal lead agency (Federal Register 46.107).

Project Area

The Project Area is located on the Reservation within Dewey County in northcentral South Dakota and includes the proposed pipeline route and a one-mile buffer from the proposed pipeline route in all directions (see Figure 1). The Project Area lies within the Missouri Plateau region and River Breaks regions of the Northwestern Great Plains Ecoregion. The Northwestern Great Plains is a semi-arid rolling plain of shale, siltstone, and sandstone (USGS 2003). The Project Area lies within the following sections, townships, and ranges:

- Sections 1, 12, 13 – Township 12 North – Range 23 East
- Sections 6, 7, 18 – Township 12 North – Range 24 East
- Sections 3, 4, 9-16, 22-27, 35, 36 – Township 13 North – Range 23 East
- Sections 33, 34 – Township 14 North, Range 23 East

Figure 1: Project Area



Land ownership within the Project Area includes a mixture of Tribal trust and allotted lands administered by the Bureau of Indian Affairs (BIA) and fee patent private lands. Land within the Project Area consists primarily of residential buildings, farming, and cattle ranching. A commercial business, Jensen Rock & Sand Inc., which offers concrete, asphalt, construction, and aggregate services, is located in the southeastern corner of the Project Area on the west end of the city of Eagle Butte. Land use on the Reservation consists mainly of conservation of grasslands, farming, and cattle ranching. Precipitation averages 18.28 inches annually in Eagle Butte. The average annual minimum temperature for Dupree, SD, located approximately 15 miles west of the Project Area and the site of the nearest National Weather Service (NWS) monitoring station, is 32.8 degrees Fahrenheit (°F), while the average annual maximum temperature is 58.5 °F. The overall average annual temperature is 45.7 °F (WRCC 2025).

The construction grading limits or construction right-of-way for the proposed pipeline distribution system and service lines would be located within the Project Area and would require a width of 50 feet, generally 25-feet on each side of the pipeline centerline. Ground disturbance activities would be confined to the construction grading limits. A permanent easement of 15 feet on either side of the as-installed pipeline is typically acquired for operation and maintenance (O&M) and replacement, as well as access to the pipeline from existing roadways.

Geographic Scope of Reasonably Foreseeable Effects

For the reasonably foreseeable effects of the Proposed Action, the USBR is evaluating the Project Area, including the one-mile buffer in all directions from the proposed pipeline route, and operation and maintenance activities associated with the Proposed Action.

When considering whether the reasonably foreseeable effects of the Proposed Action would be significant, the USBR considers adverse environmental effects and compares them to the potentially affected environment and evaluates the degree of the anticipated effects of the action. In considering the degree of the effects, the USBR considers the following criteria, as appropriate to the Proposed Action:

- 1) Both short- and long-term effects;
- 2) Both beneficial and adverse effects;
- 3) Effects on public health and safety;
- 4) Economic effects; and
- 5) Effects on the quality of life of the American people.

The footprint of the Proposed Action is primarily located within existing transportation corridors and on privately-owned or tribally-owned properties. The pipeline would provide potable water to the current residents in the Project Area. The Proposed Action could facilitate additional economic development within the Reservation, allowing for new residential housing and commercial development and providing beneficial effects on the economy and quality of life within the Reservation. Future water line repairs would be made on an as needed basis and be dependent upon failure or structural integrity.

Overall, the reasonably foreseeable adverse effects of the Proposed Action would be local and short-term. The Proposed Action would have beneficial effects by providing a safe and reliable water supply for the residents of northwestern Eagle Butte, improving public health, safety, and drought resiliency.

Implementation of the Proposed Action would have either no or negligible reasonably foreseeable effects on Wildlife and Fisheries, Threatened and Endangered Species, Cultural Resources, Paleontological Resources,

Air Quality, Socioeconomics, and Indian Trust Assets. No effects are anticipated for these resources, given that past, present, and reasonably foreseeable future developments are unlikely to result in measurable impacts. Reasonably foreseeable effects to Surface Waters and Land and Vegetation Resources are discussed in their respective sections below.

National Environmental Policy Act

To comply with NEPA and related environmental laws and regulations, federal agencies must provide an in-depth evaluation of the environmental impacts of federal actions, including actions by the federal agency itself, through issuance of a federal permit to private parties, or where federal financial assistance is provided for a project. On July 3, 2025, the United States Department of Interior (USDOI) issued an interim final rule that partially rescinded and updated its implementation of the National Environmental Policy Act of 1969 (NEPA), as amended. These changes are codified at 43 CFR Part 46. USDOI's existing NEPA regulations were originally issued as a supplement; the USDOI continues to maintain a handbook separate from the CFR to outline procedural requirements.

This EA documents the proposed federal action, the alternative actions considered, the expected impacts of those actions, and the steps required for compliance with environmental laws and regulations. The USBR is responsible for fulfilling the NEPA requirements for this Proposed Action and related environmental regulatory requirements.

This EA may lead to a Finding of No Significant Impact (FONSI) if impacts are found to be insignificant or, if significant environmental impacts are identified, the USBR may proceed with the preparation of an environmental impact statement (EIS).

Background

The Tri-County / Mni Wašté Water Association was formed in 1974. A Memorandum of Agreement was entered into between the CRST and Tri-County on September 15, 1994. The agreement formalized the cooperative effort between the CRST and Tri-County to undertake a needs assessment study to address water usage and the requirements of the water users. The agreement declared that the shared goal of the CRST and Tri-County was to ensure and provide a quality water supply, at the lowest cost possible, to water users located within the boundaries of the Reservation and surrounding areas and communities. The CRST, Tri-County, and USBR entered into a Cooperative Agreement (No. 5-FC-60-07000) for the purpose of preparing the *Water Needs Assessment Study*. The *Water Needs Assessment Study* was completed in November 1996. In November of 1999, a technical report was completed providing detailed engineering analyses and opinions of the probable costs for upgrading and expanding the water treatment and distribution capabilities.

In 2004, the Cheyenne River Housing Authority requested an update to the 1999 technical report to evaluate a new intake site, raw water and service transmission piping, and update the population projections and opinions on probable costs. A Task Force was formed to provide input and direction to the update. The Task Force consisted of representatives from the CRST, Tri-County, and Indian Health Services (IHS). The 2004 update to the technical report noted that Tri-County was a major supplier of water for domestic, livestock watering, institutional, industrial, and commercial uses in the area. However, Tri-County was not able to fully meet the needs of the Reservation. New and expanding healthcare facilities were planned for the Eagle Butte

community and there was interest in other industrial and private development opportunities. Several housing projects were put on hold due to Tri-County's inability to meet the new water demands. In addition, the population of the Reservation had grown at a rate of 2.2% annually over the previous ten years. With population growth and potential economic development, the water system infrastructure needed to be upsized and improved to provide more reliable water storage and distribution for the Reservation (Banner 2005).

The updated technical report revised the population projections and livestock watering practices. The Task Force requested that livestock watering rates be revised upward from previous projections to more accurately reflect actual practices in the service area. The CRST believed that the census figures underestimated the population on the Reservation. The United States Census Bureau typically finds the populations living on reservations are undercounted (USCB 2022). The CRST requested the population data be reassessed for the updated technical report.

In 2005, Mni Wašté's drinking water intake structure along the Cheyenne River became obstructed with silt. This affected the quality and quantity of the Reservation's drinking water source. From 2005 to 2019, the CRST issued a moratorium on new water taps. Over 900 families were on a wait list for new housing, which could not be built until the moratorium was lifted. The moratorium also affected economic development, including new business construction (ALNY 2020).

The United States Army Corps of Engineers (USACE) worked with the United States Department of Agriculture (USDA), the IHS, the South Dakota Department of Environment and Natural Resources (now the Department of Agriculture and Natural Resources (SDDANR)), and the Cheyenne River Housing Authority to relocate the intake downstream towards the Missouri River. Once that was completed, MWWC started efforts to upgrade its treatment plant near the new intake location (ALNY 2020).

The upgraded water treatment plant and intake structure now have the capacity to meet the drinking water needs of the Reservation. However, the distribution lines are not large enough to deliver all the necessary water. In addition, there are areas of the Reservation that have never been served by the MWWC system. The limitations and lack of service in these areas represent a drought vulnerability to the CRST.

The initial planning to address these distribution issues began in the mid-1990's with a cooperative agreement between the CRST, Tri-County, and USBR.

Purpose and Need for the Proposed Action

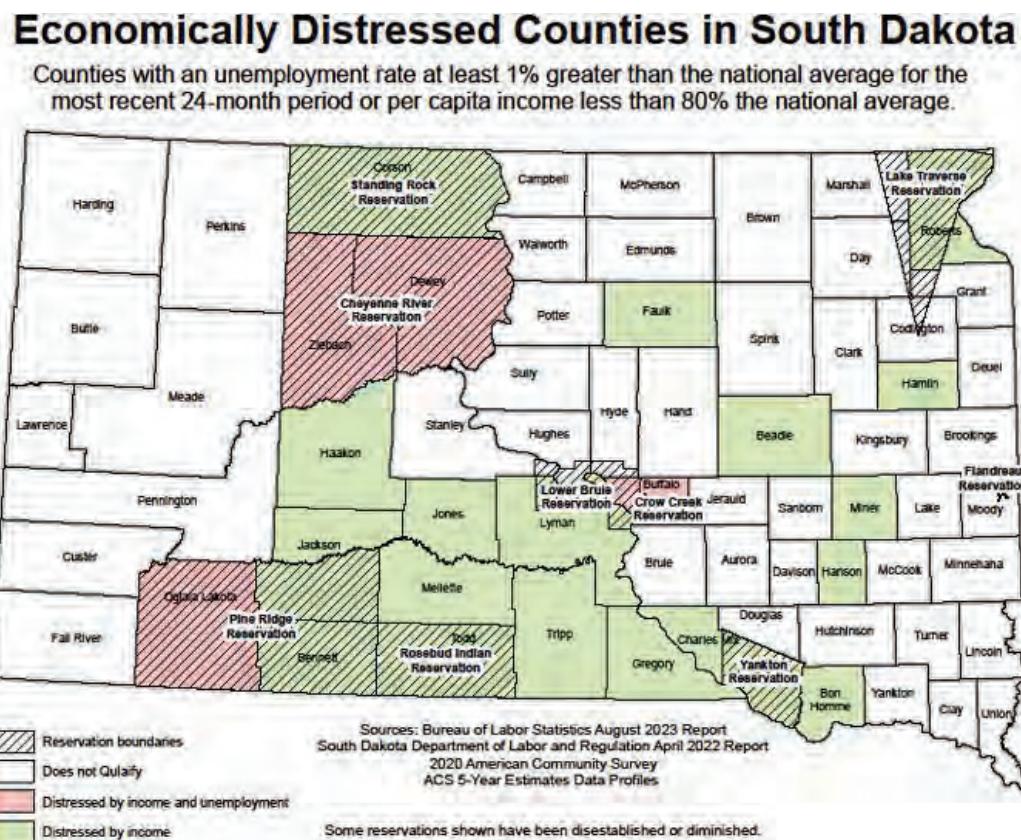
The USBR manages, develops, and protects water and related resources in an economically sound manner in the interest of the American public. One of their primary priorities is to focus USBR's financial and technical resources on areas in the West where water conflicts either currently exist or are likely to occur in the coming years (USBR 2024). USBR's Drought Response Program supports this priority by providing funding for a proactive drought approach. In 2024, the MWWC was awarded a \$2.8 million WaterSMART Drought Resiliency grant to install 12.6 miles of pipe northwest of Eagle Butte.

The purpose of the Proposed Action would be to provide clean drinking water to a total of 37 residences that are currently unserved or underserved by the MWWC system. Currently in the Project Area, individual customers haul water from up to 10 miles away or utilize wells with poor water quality as their water supply. Anecdotal reports indicate the wells have been subject to seasonal fluctuations and are not able to consistently meet the needs of the residents. Requests for new connections to the MWWC have been denied because of a

lack of water supply and/or pressure. Due to the water plant operating at its maximum capacity of 1.2 million gallons per day, the area faces a moratorium on new housing, limited fire response times, and major setbacks to much-needed business development on the reservation (USDA 2014).

The entire Reservation is distressed by low income and unemployment (See Figure 2). The current lack of access to adequate drinking water imparts considerable hardship for the residents in the Project Area and limits the opportunities for economic development. In addition, the lack of adequate water in the Project Area represents a drought vulnerability. This situation is likely to only worsen with time.

Figure 2: Economically Distressed Counties in South Dakota



From SDDANR's Nondiscrimination Policy, available at:
<https://danr.sd.gov/ContactUs/docs/DANR%20Nondiscrimination%20Policy.pdf>

The Project Area also lacks access to a reliable domestic water supply due to its remote location. According to the 2020 U.S. Census, the population of Dewey County is 2.3 people per square mile (USCB 2024b). As a result, the typical connection fees and construction costs are expensive. The per capita income in Dewey County is \$21,940 and the median household income is \$57,928, which indicates these connection and construction costs would be an extreme financial burden for this community.

The public health, environmental, and economic needs of the residents in the Project Area are currently not being met by the MWWC. There is a need for continued expansion of the MWWC based on both water quality and quantity concerns.

Chapter 2: Proposed Action and Alternatives Considered

Proposed Action Alternative

The Proposed Action will install an additional 64,810 (12.3 miles) of water pipeline to provide reliable drinking water to 37 unserved residences on the Reservation. Installed pipe and appurtenances will be trenched and backfilled with some locations being directionally bored dependent on the topography encountered. The Proposed Action is planned to start in Spring 2026 and is anticipated to be completed by Fall 2026. The Proposed Action includes the following:

Material installation:

- Approximately 9,120 linear feet of 6" diameter buried PVC pipe;
- Approximately 27,550 linear feet of 4" diameter buried PVC pipe;
- Approximately 26,951 linear feet of 2" diameter buried PVC pipe;
- Approximately 120 linear feet of 12" diameter horizontal directional drilled PVC encasement pipe;
- Approximately 190 linear feet of 10" diameter horizontal directional drilled PVC encasement pipe;
- Approximately 880 linear feet of 6" diameter horizontal directional drilled PVC encasement pipe;
- Approximately 65,520 linear feet of tracer wire and associated locating and testing system;
- Miscellaneous appurtenances including isolation gate valves, automatic air release valves, direct bury gate valves, blow-off assemblies, service taps, curb stops, and meter pits;
- Temporary and permanent erosion control, fencing, reclamation and seeding;

Activities part of the Proposed Action:

- Traffic control and haul road maintenance during construction;
- Pipeline cleaning, hydrostatic pressure testing, flushing, disinfection and commissioning;
- Required clean-up and other miscellaneous work;
- Use of typical trenching, backfilling, transportation, and other construction equipment including small engines such as generators and hand operated power tools; and,
- Maintenance, repair, and replacement activities include upkeep of the installed pipe and appurtenances and storage facilities and distribution lines and other routine activities.

No Action Alternative

Under the No Action Alternative, the Proposed Action would not be constructed, and the existing facilities would continue as currently operated and maintained. There would be no immediate environmental impacts resulting from the no-action alternative, as no construction-related activities would take place. The identified residences would continue to be unserved or underserved by the MWWC system.

Other Alternatives Considered

Utilization or Expansion of Existing Wells

The people that would be served by the Proposed Action haul water or utilize poor quality wells as their water supply. The expanded use of wells was considered as an alternative to the proposed pipeline. Residential wells are not required to submit samples for testing, so the individual water quality is not known. However, residents living in the Project Area and surrounding area have complained of poor water quality (Banner 1996). Some wells in this area are approximately 100 feet deep, but many throughout the region are over 2,000 feet deep. In the event of well emergencies, there are currently no water supply alternatives. Expansion of well use would exacerbate the limited availability of accessible water and would not address the existing water quality issues.

Alternative Routes

As the design of the Proposed Action has progressed, other locations for the pipeline placement have been considered and rejected due to easements and constructability. However, these alternatives would not significantly alter the scope and nature of the Proposed Action.

Chapter 3: Affected Environment and Environmental Consequences

Introduction

This section describes the existing conditions and potential environmental consequences associated with implementing the Proposed Action and the No Action Alternative. The affected environment includes a description of resources in the Project Area, including potentially affected communities, land, water, and air-sheds that might be affected by the Proposed Action. Environmental consequences may be direct (resulting from construction, operation, or maintenance) or indirect (subsequent to a direct impact but not directly resulting from the Proposed Action), positive (beneficial) or negative (adverse), and long term (permanent, long-lasting) or short term (temporary). A summary of the temporary and permanent impacts that could occur from the Proposed Action are presented in Table 8. A comparison of the Proposed Action and No Action Alternatives is presented in Table 9. Environmental commitments would be implemented to reduce, minimize, or eliminate impacts and are discussed for each resource and summarized in Table 10.

The impact on each environmental resource is determined by whether the resource is present and how both the Proposed Action and No Action Alternative interact with the specific environmental resource. The boundary of the affected area extends to where impacts can be reasonably and meaningfully measured. Direct impacts generally occur within the Project Area. However, some impacts may occur on a broader scale, encompassing areas beyond the Project Area. Direct and indirect impacts are disclosed as environmental impacts of each resource.

Evaluation of potentially affected resources and environmental impacts associated with implementation of Proposed Action activities are focused on the following resources: Surface Waters, Wildlife and Fisheries, Threatened and Endangered Species, Land and Vegetation Resources, Cultural Resources, Paleontological Resources, Air Quality, Socioeconomics, and Indian Trust Assets.

Surface Waters

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act (CWA) of 1977, provides the authority to the United States Environmental Protection Agency (USEPA) and the USACE to establish water quality standards, control discharges into surface waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404). Section 10 of the Rivers and Harbors Act of 1899 requires permits from the USACE for any work or structures in, over, or under navigable waters of the United States. Within the Reservation boundary, the Missouri River is considered a navigable waterway, however, the Missouri River is not within the Project Area.

Executive Order (EO) 11990 issued on May 24, 1977, requires each Federal agency to provide leadership and guidance to minimize the loss and degradation of wetlands. Each agency must avoid funding new construction within wetlands unless there are no practical alternatives to construction (Section 2 (a) of EO 11990) and must provide public review of any proposals for construction within wetlands (Section 2 (b) of EO 11990).

Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the United States and authorizes the USACE to issue permits for such activity. The USACE has established Nationwide Permit (NWP) 58 under the authorities of Section 404 of the CWA, which can be used to authorize most utility water line activities that could result in the discharge of fill material into waters of the United States. NWP 58 requires a preconstruction notification to the USACE before commencing the activity if a Section 10 permit is required or if the discharge will result in the loss of greater than 0.10 acre of waters of the United States, as defined by Title 40 of the Code of Federal Regulations, Part 120 (40 CFR Part 120) (USACE 2021).

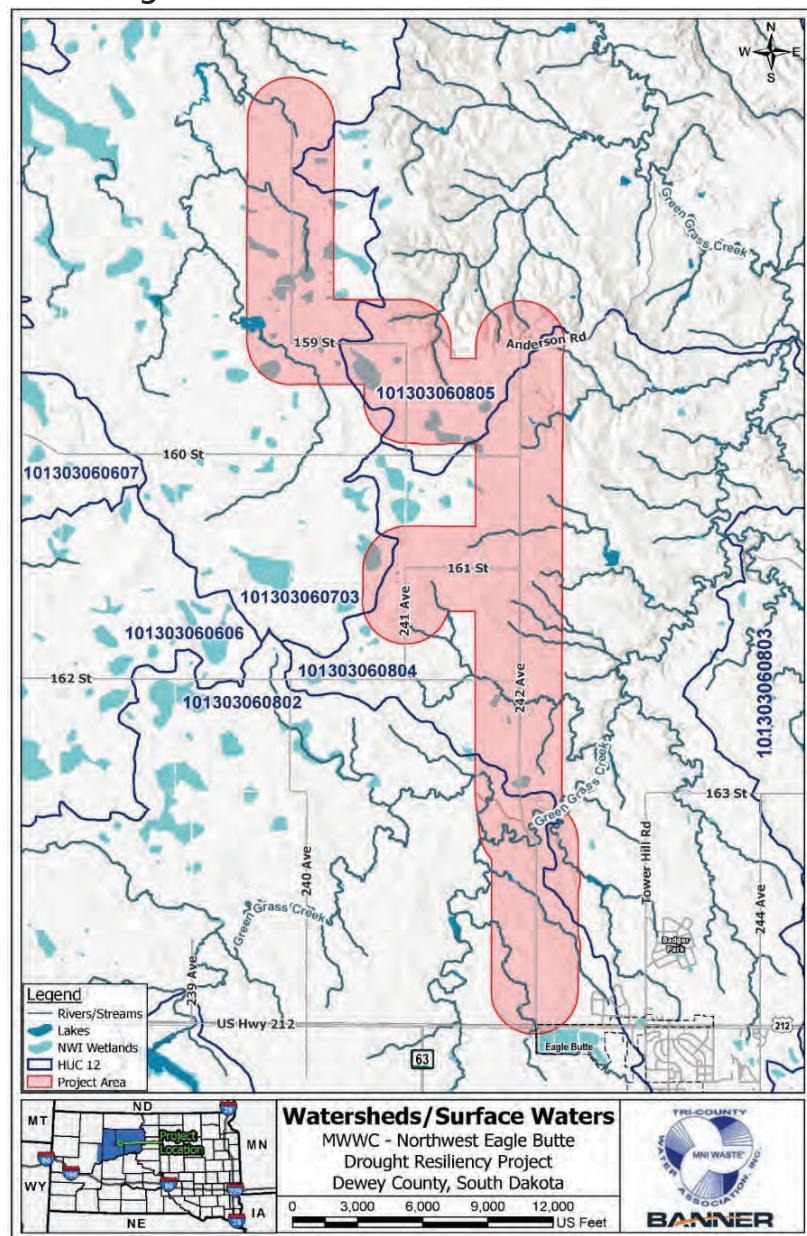
Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES) permitting program. This program requires permits for the point source discharge of pollutants into waters of the United States. The goal of this program is to minimize the discharge of pollutants to the maximum extent practicable and to protect and improve water quality. The stormwater runoff associated with construction activities constitutes a point source of pollutants if a project will disturb 1.0 or more acres. The USEPA has issued the NPDES Construction General Permit (CGP) for Stormwater Discharges from Construction Activities, which can be used to authorize most utility water line activities under the USEPA's jurisdiction. Since the Proposed Action is on tribal land, the USEPA is the NPDES authority, and the CGP would be required for any construction activities on the CRST that would disturb 1.0 or more acres.

Affected Environment

The major rivers within the Reservation are the Missouri River, Cheyenne River, and Moreau River. The Missouri River forms the eastern boundary of the Reservation and is the sole source of the raw water for the MWWC. The Cheyenne River is a tributary of the Missouri River and forms the southern boundary of the Reservation. The Moreau River runs west to east through the Reservation to its confluence with the Missouri River. Due to the distance and topography, these rivers will not be affected by the Proposed Action.

Green Grass Creek is a tributary of the Moreau River and flows from the southern portion of the Reservation north to its confluence with the Moreau River near the community of Green Grass, SD. The proposed pipeline route would cross Green Grass Creek about 1.3 miles north of the city of North Eagle Butte, SD. There are numerous wetlands and tributaries occurring in several watersheds throughout the Project Area (Figure 3: Watersheds and Surface Waters).

Figure 3: Watersheds and Surface Waters



Under Section 101(a)(2) of the CWA, Congress stated the objectives of the act and established a national goal to protect fish, shellfish, and wildlife propagation, and to provide for recreation in and on the water wherever attainable. The USEPA has developed water quality regulations at 40 CFR Part 131 to implement Section 101(a)(2) of the CWA, requiring states and authorized tribes to designate beneficial uses of their water bodies and establish water quality standards to protect those beneficial uses.

The CRST has not obtained USEPA authorization to set its own water quality standards under the CWA. Therefore, the USEPA directly implements these standards for the CRST. Per Section 101(a)(2) of the CWA, the USEPA designates aquatic life propagation and primary contact recreation uses for waters of the United States unless it has been demonstrated those uses cannot be attained. Additionally, CRST has requested protection of Green Grass Creek for recreational, cultural, and spiritual activities (USEPA 2021).

The Sackett v. EPA (2023) ruling redefined “adjacent wetlands” under the CWA to require a continuous surface connection with jurisdictional waters for federal protection. A desktop wetland delineation with a field verification was completed in 2024 within the wetland delineation survey area, consisting of a narrowed corridor within the Project Area. The wetland delineation survey area ranged from 100-feet to 300-feet wide depending upon the certainty of the pipeline location. Approximately 30.791 acres of wetlands and 0.311 acres of other waters of the United States (OWUS) features were identified within the wetland delineation survey area.

Environmental Impacts of the No Action Alternative

Under the No Action Alternative, the Proposed Action would not be constructed and the existing MWWC facilities would continue to be operated and maintained. There would be no environmental impacts to surface waters.

Environmental Impacts of the Proposed Action Alternative

Water Quality

Construction of the service lines and meter connections would result in disturbance to soils and vegetation along the route, which would have the potential to release sediment to surface waters. Utility work may include vegetation clearing, grubbing, stripping and stockpiling topsoil. Linear utility trenches would be excavated to have a minimum of 6.5 feet of cover over installed pipelines. The maximum length of open trench would be limited to 1,000 feet at one time, and all trenches would be backfilled the same day they are excavated. Generally, heavy equipment, including scrapers and dozers, would be used to strip and remove vegetation (clearing and grubbing) from the soil surface. This equipment has the potential for spills or leaks of fuel or other substances.

Topsoil will be saved and stockpiled separately from subsoil. Stockpile areas for the materials would be established within the construction footprint in the feature area or pipeline corridor (defined as a 50-foot-wide corridor centered on the proposed pipeline centerline). Ground disturbance would be short-term and temporary during construction. A stormwater pollution prevention plan (SWPPP) would be developed. The SWPPP details the best management practices (BMPs) that would be installed to minimize erosion and sedimentation to the maximum extent practicable, as required by the CGP. Sedimentation control structures would be installed throughout construction footprints prior to construction. Straw wattles, erosion control blankets, silt fences, or a combination of methods would also be used to control erosion as needed and modified as identified. These BMPs would be utilized and maintained until construction has ceased, any disturbed area has been reclaimed and stabilized with at least 70% of the preconstruction native vegetation,

and a Notice of Termination (NOT) has been submitted to the USEPA to terminate coverage under the CGP.

A desktop wetland delineation and field verification were completed within the narrowed wetland delineation survey area lying within the Project Area. The proposed construction activities would result in approximately 3.785-acres of temporary wetland impact. Specific BMPs would be implemented at all wetlands and stream crossings. If construction through a wetland basin occurs, the pre-construction contours would be restored, resulting in temporary impacts, and trenches would be sufficiently compacted to prevent any drainage along the trench or through bottom seepage. Areas with jurisdictional wetlands, as defined in the CWA, USACE, and USEPA regulations, would follow requirements as outlined in NWP 58 or other applicable CWA permits. The Proposed Action is anticipated to have no permanent impacts to wetlands. If unavoidable permanent impacts to jurisdictional wetlands do occur under unforeseen circumstances or through amended project plans, the USBR and MWWC would develop a compensatory wetland mitigation plan and concurrently implement the plan after review and approval by the USACE, as authorized by the Clean Water Act.

Green Grass Creek, an OWUS feature, would be crossed for the installation of the proposed distribution system. For the creek crossing, the pipeline would be bored under Green Grass Creek, resulting in no impact to Green Grass Creek. However, if the creek is dry at the time of construction, the contractor may opt for open trenching of Green Grass Creek, resulting in approximately 0.005 acre of temporary impact. Open cut trenching would be utilized to install the remaining distribution pipe, with affected areas returned to pre-construction elevations after installation was complete. Industry standard BMPs, such as silt curtains, straw wattles, and silt fences, would be utilized during construction through Green Grass Creek. The shortest practicable alignment would be used to minimize disturbance if construction occurs in the dry creek bed.

The Proposed Action has the potential to contribute to water quality degradation through construction disturbances, sedimentation, and potential fuel or harmful leaks or unintended spills from construction equipment. With the implementation of industry standard Environmental Commitments listed in Table 10, any direct, indirect, or reasonably foreseeable effects to water quality or quantity would be temporary and preventable.

All equipment would be cleaned prior to entering construction sites to prevent potential introduction and spread of aquatic invasive species, as described in all construction contracts.

Water Quantity

Missouri River water is used to supply tribal water systems, residents of cities and towns, and rural water districts or associations. Approximately 2.9 million people are served by public water supply systems that withdraw water from the Missouri River. Most of the smaller public water supply systems are located on the reservoirs and upper reaches of the Missouri River and serve about 349,000 persons (USACE 2018). The Proposed Action to provide service to 37 residences would incrementally contribute to water depletions from Lake Oahe. However, due to the large storage capacity of Lake Oahe, combined with the very small annual depletion, the adverse impacts as a result of the Proposed Action would be negligible. The Proposed Action would provide beneficial impacts on public health and safety for the residents served and improve the drought resiliency of the Reservation. The Proposed Action would also provide beneficial economic impacts and improvements to the quality of life for the residents.

Reasonably Foreseeable Effects

The Proposed Action, when considered with past, present, and reasonably foreseeable future actions, would not result in significant wetland impacts. Future development resulting from a quality, reliable water source may occur in or immediately adjacent to the Project Area, may result in conversion of wetland areas to

impermeable surfaces (residential housing, streets, etc.). No other known wetland impact or loss is anticipated, and any unknown future projects would be required to meet federal and state regulatory permitting requirements, including mitigation requirements, therefore limiting their contribution to adverse effects.

Wildlife and Fisheries

The Project Area lies within a prairie ecosystem; a stretch of flat grassland with moderate temperatures, moderate rainfall and few trees (National Geographic 2025). In South Dakota, the prairie ecosystem is generally found in the west central portion of the state, from the Missouri River south to Nebraska, north to North Dakota, and west to Wyoming. The Project Area primarily consists of grasslands, wetlands, some row crop farming, and low urban development. These conditions allow for an abundance of terrestrial wildlife species to be present. Species that rely on aquatic habitats are limited to wetland areas and Green Grass Creek. Green Grass Creek has surface connectivity to the Moreau River, a tributary to the Missouri River.

Affected Environment

Birds, mammals, reptiles, amphibians, fish, and habitats that are expected to be present within the Project Area are discussed below.

Birds

Common bird types expected to occur in the Project Area include upland game birds, shorebirds, grassland birds, raptors, migratory birds, and birds of conservation concern. Migratory Birds are protected under the Migratory Bird Treaty Act (MBTA). The MBTA prohibits take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the United States Fish and Wildlife Service (USFWS 2025a).

Migratory birds that are expected to occur within the Project Area primarily include species that use the central flyway. The central flyway is a migration corridor located over the central portion of North America that connects birds from wintering grounds and breeding grounds. Birds will migrate from north to south during the fall/winter seasons and south to north during the late winter/spring seasons. Migratory species may either breed or migrate through the Project Area primarily during fall, winter, and spring seasons. Migratory birds consist of waterfowl, shorebirds, raptors, and grassland bird species.

Game Birds – Upland and Waterfowl Several upland species are expected to occur within the Project Area. Upland game species consist of birds that do not migrate and prefer grassland habitats year-round. Common upland species in South Dakota include wild turkey (*Meleagris gallopavo*), sharp-tailed grouse (*Tympanuchus phasianellus*), greater prairie-chicken (*Tympanuchus cupido*), and ring-necked pheasant (*Phasianus colchicus*) (Missouri River Tourism 2024). Gray partridge (*Perdix perdix*), northern bobwhite quail (*Colinus virginianus*), and sage grouse (*Centrocercus urophasianus*) may occur in the Project Area, but are uncommon.

Waterfowl species that are expected to migrate through the Project Area include northern pintail (*Anas acuta*), mallard (*Anas platyrhynchos*), wigeon (*Mareca americana*), blue-winged teal (*Spatula discors*), green-winged teal (*Anas crecca*), northern shoveler (*Spatula clypeata*), gadwall (*Mareca strepera*), lesser scaup (*Aythya affinis*), greater scaup (*Aythya marila*), wood duck (*Aix sponsa*), bufflehead (*Bucephala albeola*), canvasback (*Aythya valisineria*), redhead (*Aythya americana*), Canada goose (*Branta canadensis*), snow goose (*Anser caerulescens*), white-fronted goose (*Anser albifrons*), and sandhill crane (*Grus canadensis*).

Shorebirds Shorebirds require specific habitat that occurs between upland and wetland areas. These birds often feed near wetlands, mudflats, and intertidal areas (Wing Threads 2024), and could be expected to occur in wetland areas or along Green Grass Creek in the Project Area. In South Dakota, shorebirds are migratory, stopping over in South Dakota during their migrations between breeding and wintering grounds. Shorebirds that may occur within the Project Area include the semipalmated plover (*Charadrius semipalmatus*), killdeer (*Charadrius vociferus*), great blue heron (*Ardea herodias*), American avocet (*Recurvirostra americana*), greater yellowlegs (*Tringa melanoleuca*), lesser yellowlegs (*Tringa flavipes*), spotted sandpiper (*Actitis macularius*), willet (*Tringa semipalmata*), ruddy turnstone (*Arenaria interpres*), dunlin (*Calidris alpina*), least sandpiper (*Calidris minutilla*), sanderling (*Calidris alba*), long-billed dowitcher (*Limnodromus scolopaceus*), Wilson's snipe (*Gallinago delicata*), and Wilson's phalarope (*Phalaropus tricolor*) (Birdwatching HQ 2024).

Grassland Birds Most grassland birds are migratory, stopping over in South Dakota during their migrations between breeding and wintering grounds. Grassland birds that may occur within the Project Area include the eastern kingbird (*Tyrannus tyrannus*), western kingbird (*Tyrannus verticalis*), horned lark (*Eremophila alpestris*), American crow (*Corvus brachyrhynchos*), common yellowthroat (*Geothlypis trichas*), western meadowlark (*Sturnella neglecta*), bobolink (*Dolichonyx oryzivorus*), chestnut-collared long spur (*Calocitta ornata*), and brown-headed cowbird (*Molothrus ater*). A variety of bird species, including swallows and sparrows, occur in prairie ecosystems and rely on grasslands for habitat.

Raptors Most raptors are migratory, stopping over in South Dakota during their migrations between breeding and wintering grounds. Raptors that may occur within the Project Area include the red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni*), golden eagle (*Aquila chrysaetos*), bald eagle (*Haliaeetus leucocephalus*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), burrowing owl (*Athene cunicularia*), great horned owl (*Bubo virginianus*), snowy owl (*Bubo scandiacus*), and short-eared owl (*Asio flammeus*).

The Bald and Golden Eagle Protection Act, enacted in 1940, provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or manner, any bald eagle ... [or any golden eagle], alive or dead, or any part (including feathers) nest, or egg” (USFWS 2025b). No bald or golden eagle nests were observed within the Project Area during a fall 2024 field survey.

Birds of Conservation Concern Four migratory bird species were identified by the USFWS in the Information for Planning and Consultation (IPaC) as birds of conservation concern (BCC) likely to be present or breed within the Project Area: the black tern (*Chlidonias niger surinamenensis*), California gull (*Larus californicus*), ferruginous hawk (*Buteo regalis*), and lark bunting (*Calamospiza melanocorys*) (USFWS 2024a). Refer to Table 1 for the species of conservation concern and the month that species may be expected to be present in the Project Area.

Table 1: Species of Conservation Concern and Probability of Presence

Species	Month
Black Tern (<i>Chlidonias niger surinamenensis</i>)	July
California Gull (<i>Larus californicus</i>)	August

Species	Month
Ferruginous Hawk (<i>Buteo regalis</i>)	August
Lark Bunting (<i>Calamospiza melanocorys</i>)	June

Mammals

Large mammals known to exist in prairie ecosystems and expected to occur in the Project Area include the pronghorn (*Antilocapra americana*), white-tailed deer (*Odocoileus virginianus*), mule deer (*Odocoileus hemionus*), and elk (*Cervus canadensis*). Furbearers include beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), mink (*Neovison vison*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), weasel species (genus *Mustela*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), American badger (*Taxidea taxus*), and mountain lion (*Puma concolor*).

Small mammals found in prairie ecosystems and likely within the Project Area include the white-tailed jackrabbit (*Lepus townsendii*), snowshoe hare (*Lepus americanus*), porcupine (*Erethizon dorsatum*), thirteen-lined ground squirrel (*Ictidomys tridecemlineatus*), northern pocket gopher (*Thomomys talpoides*), black-tailed prairie dog (*Cynomys ludovicianus*), and swift fox (*Vulpes velox*). A variety of other small mammal species including shrews, voles, and mice also occur in prairie ecosystems and could be expected to occur in the Project Area.

Reptiles and Amphibians

Prairie ecosystems offer plentiful wetlands and riparian habitats which support a variety of reptiles and amphibians such as toads, frogs, turtles, and snakes. Common species expected to occur in Dewey County and the Project Area include the Woodhouse's toad (*Anaxyrus woodhousii*), northern leopard frog (*Lithobates pipiens*), smooth softshell turtle (*Apalone mutica*), North American racer (*Coluber constrictor*), plains hog-nosed snake (*Heterodon nasicus*), milksnake (*Lampropeltis triangulum*), gophersnake (*Pituophis catenifer*), plains garter snake (*Thamnophis radix*), prairie rattlesnake (*Crotalus viridis*), and bullsnake (*Pituophis catenifer sayi*) (ARSD 2024).

Fish

Green Grass Creek is located in the Project Area and has surface connectivity to the Moreau River, which is a tributary to the Missouri River. Fish species found in the Moreau and Missouri Rivers may occur within the Project Area depending on water levels in Green Grass Creek. No documentation is available for species occurring in Green Grass Creek, however, species that have been identified in the Moreau River include the western silvery minnow (*Hybognathus argyritis*), plains minnow (*Hybognathus placitus*), flathead chub (*Platygobio gracilis*), common carp (*Cyprinus carpio*), emerald shiner (*Notropis atherinoides*), white bass (*Morone chrysops*), black crappie (*Pomoxis nigromaculatus*), largemouth bass (*Micropterus salmoides*), and yellow perch (*Perca flavescens*) (SDSU 1997).

Environmental Impacts of the No Action Alternative

Under the No Action Alternative, the Proposed Action would not be constructed; no impacts to wildlife and fisheries or their habitats would occur.

Environmental Impacts of the Proposed Action Alternative

Birds

The Proposed Action would not have any permanent impact to the prairie ecosystem or grassland habitats.

Construction of the water service line would avoid to the extent practicable sensitive areas such as wetlands, woody draws, and intermittent drainages. Impacts to bird species would largely be negligible and temporary. Construction activities may cause avoidance of the Project Area, however, after construction is finished, it is anticipated that bird species would resume utilization of the Project Area.

Species may be sensitive to landscape leveling impacts due to the reduction or conversion of suitable habitat. Due to the underground nature of water distribution line construction, the majority of the disturbance resulting from the Proposed Action would be temporary. To reduce temporary impacts to suitable habitats, the Proposed Action would be located in or near previously disturbed areas along established roads or driveways where practicable. Construction impacts would be temporary and bird species dispersed during construction would return upon completion of construction. No permanent conversion of grassland or wetland habitat would occur as a result of the Proposed Action.

Construction activities may result in direct impacts to active nests and could lead to nest abandonment due to increased noise, vibrations, and human presence. However, any impacts would be short-term and temporary during construction of the Proposed Action. The Proposed Action is not anticipated to result in the take of migratory birds. Eagle nests were not observed in the Project Area; conversion of raptor or eagle habitat would not occur under the Proposed Action.

Mammals

Environmental impacts to mammals resulting from the Proposed Action would be temporary. Mammals would be expected to disperse during construction activities and would likely return after construction is completed. The Proposed Action would not result in permanent destruction of habitat suitable for mammals potentially present in the Project Area. Permanent impacts to mammal species populations are not anticipated due to the Proposed Action.

Reptiles and Amphibians

Wetlands and creek bottoms provide habitat for amphibians within the Project Area. Environmental impacts to amphibians would be minimal as disturbances to water quality and aquatic environments are to be limited to the maximum extent practicable. Impacts to these aquatic habitats may occur from habitat degradation from temporary ground disturbances during construction. The Proposed Action would minimize impacts to wetlands during construction to the maximum extent practicable and utilize industry standard BMPs to reduce erosion and sedimentation. BMPs would be used during construction to prevent erosion and sedimentation and after construction to stabilize the site until at least 70% of the pre-construction vegetation is established.

Environmental impacts to reptiles and snakes would be minimal and would result from temporary surface disturbances of suitable habitats. Displacement or movements of individuals into adjacent habitats may result due to exposure to human activity and construction equipment. After construction, the habitats would be restored and would once again become available to these species.

Fisheries

Direct impacts to fisheries would be limited to the maximum extent practicable. Green Grass Creek is the only suitable fishery habitat within the Project Area that may be affected. Temporary environmental impacts are anticipated for construction activities occurring near Green Grass Creek due to water service lines being directionally bored under the creek. However, if construction would commence later in the summer or fall when the creek is dry, the distribution line could be installed using open trench methods. No impacts to the fishery are anticipated. The Proposed Action would avoid disturbance to Green Grass Creek through

directionally boring under the creek or constructing when there is no flow, and utilize industry standard BMPs such as silt curtains, straw wattles, and silt fences during construction to protect water quality to the maximum extent practicable.

Fish and Wildlife Resources Agency Coordination Summary

Two responses were received on April 14, 2025, from the South Dakota Game, Fish and Parks (SDGFP). The initial response was automatically generated by SDGFP's Environmental Review Tool and found no environmental conflicts for the Proposed Action. The initial response is considered final and serves as documentation for environmental clearance from SDGFP. The second letter response from SDGFP was received stating that SDGFP had conducted a search of the SD Natural Heritage Database (NHD) for the referenced project. The NHD monitors species at risk, specifically those species that are legally designated as threatened, endangered, or rare. The SDGFP did not find any occurrences of endangered, threatened, or rare species in the immediate project area and, based on the information provided, SDGFP anticipated no significant impact to fish and wildlife resources. Refer to Appendix D for Scoping Letters and Responses.

Threatened and Endangered Species Summary

This section constitutes the Biological Assessment for the Proposed Action as required under Section 7(c) of the Endangered Species Act of 1973, as amended, in compliance with regulations found at *50 CFR Part 402 Interagency Cooperation – Endangered Species Act of 1973*, as amended.

The IPaC website was consulted in June 2025 and generated a list of endangered, threatened, or proposed species, as well as proposed or designated critical habitat within the Project Area. The Project Area utilized for Section 7 analysis is consistent with the Project Area defined throughout this EA. There is no designated critical habitat within the Project Area (USFWS 2024a). Refer to Table 2 for the species returned in the IPaC-generated species list.

Table 2: Federally Listed, Proposed, and Candidate Resources Species within the Project Area

Species	Status	Effect Determination	Habitat
Black-footed Ferret (<i>Mustela nigripes</i>)	Experimental Population, Non-essential (EXPN)	N/A	No Habitat Present
Northern Long-Eared Bat (<i>Myotis septentrionalis</i>)	Endangered	No Effect	Habitat Present
Piping Plover (<i>Charadrius melanotos</i>)	Threatened	No Effect	No Habitat Present
Rufa Red Knot (<i>Calidris canutus rufa</i>)	Threatened	No Effect	No Habitat Present
Whooping Crane (<i>Grus americana</i>)	Endangered	No Effect	No Habitat Present
Monarch Butterfly (<i>Danaus plexippus</i>)	Proposed Threatened	Not Likely to Jeopardize	Habitat Present

Species	Status	Effect Determination	Habitat
Suckley's Cuckoo Bumble Bee (<i>Bombus suckleyi</i>)	Proposed Endangered	Not Likely to Jeopardize	Habitat Present
Western Regal Fritillary (<i>Argynnis idalia occidentalis</i>)	Proposed Threatened	Not Likely to Jeopardize	No Habitat Present

Source: (USFWS 2024a)

Affected Environment by Species

Black-footed Ferret

The black-footed ferret is a medium-sized carnivore in the mustelid family, averaging eighteen to twenty-four inches long with a black face mask, black feet, and a black-tipped tail.

Population Range-wide

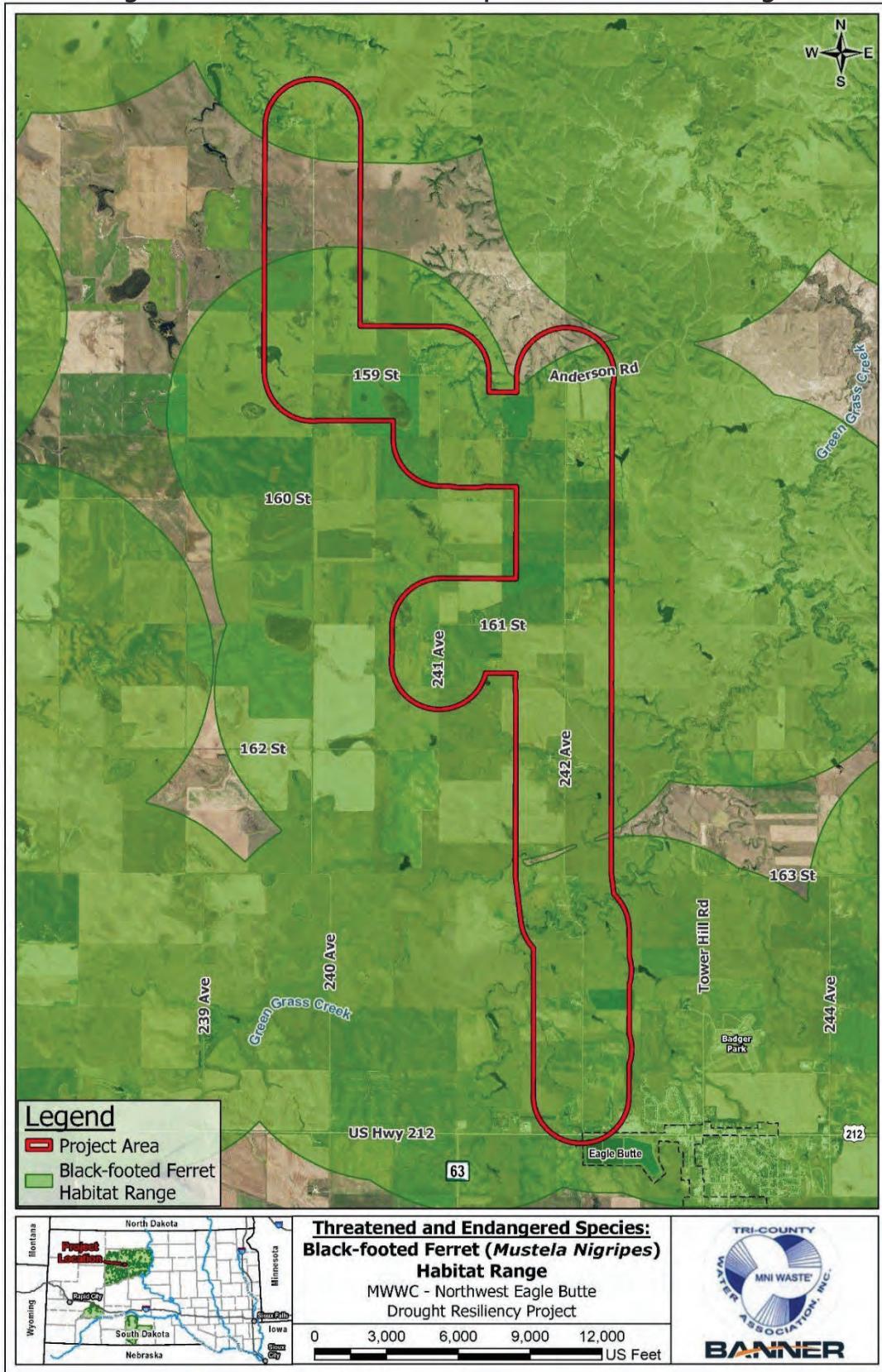
The black-footed ferret was listed as endangered in 1967 (Federal Register 88:69045-69073). In the late 1800s, there may have been 500,000 to 1 million black-footed ferrets and by the end of the late 1950s, black-footed ferrets were presumed extinct throughout their range due to landscape alterations from agricultural expansion and prairie dog eradication. In 1964, a small population of ferrets was discovered in Mellette County, South Dakota, and was used in captive breeding efforts that were ultimately unsuccessful, and that wild population died out in 1974. In 1979, what was thought to be the last ferret died in captivity. But in 1981, ferrets were rediscovered near Meeteetse, Wyoming, which launched the Black-footed Ferret Recovery Program. On August 21, 1991, (56 FR 41473), portions of Arizona, Colorado, Montana, South Dakota, and Utah were designated as non-essential experimental populations, which accounts for the locations where most reintroduced black-footed ferrets have been released. Currently, known ferret populations are all a result of reintroduction efforts, and the species is found across the Great Plains, inhabiting the intermountain prairies and grasslands (USFWS 2024b).



Source: <https://www.fws.gov/species/black-footed-ferret-mustela-nigripes>

Project Area Within the Project Area, no known occurrences of the black-footed ferret exist. Ferrets do not dig their own burrows and instead modify existing burrows created by prairie dogs (USFWS 2024b). No prairie dog towns were observed within the Project Area during a fall 2024 field survey; no suitable habitat is known to exist in the Project Area. Refer to Figure 4 for experimental population habitat range of the black-footed ferret.

Figure 4: Black-Footed Ferret Experimental Habitat Range



Northern Long-eared Bat

Northern long-eared bats (NLEB) are a medium-sized bat, with very long ears. Their length is 3.0 – 3.7 inches with a wingspan of 9 – 10 inches. The fur color is medium to dark brown on the back with a tawny to pale brown on their underside.

Population Range-wide

The northern long-eared bat was listed as threatened in 2015 (*Federal Register* 80:17974-18033) with a 4(d) rule in 2016 (*Federal Register* 81:1900-1922). On November 30, 2022, the species was reclassified as endangered across its range (*Federal Register* 87:73488). The range of the northern long-eared bat includes much of the eastern and north-central United States and all of South Dakota. Refer to Figure 5 for the known range of the NLEB. The NLEB spends winters hibernating in caves and mines. In summer, the NLEB roosts underneath bark of live and dead trees, rock crevices, caves, mines, barns, and sheds. Breeding of the species begins in late summer or early fall. After copulation, females undergo delayed fertilization where they store the sperm through hibernation and fertilize the egg with the stored sperm in early spring (USFWS 2022a).

The dramatic decline of the NLEB is mostly due to white-nose syndrome. White-nose syndrome is caused by the fungus *Pseudogymnoascus destructans* (Pd). Pd thrives in cold damp places where bats hibernate for the winter. Pd grows on bats while they are inactive and causes damage to the skin and soft tissues. The name white-nose syndrome comes from the fungus which appears like white fuzz on the nose or other hairless parts of the bats, including their wings (WSRT 2024). There are many unknowns regarding white-nose syndrome, however it is expected that the disease will continue to spread throughout the United States.

Project Area

The NLEB has documented distributions across the entire state of South Dakota. The USFWS identified NLEB habitat intersecting with the north half of the Project Area; no known hibernacula are present within the Project Area. Suitable NLEB habitat in the Project Area was identified during an on-site assessment and was comprised of forested creek bottoms and suitable tree habitat. A suitable tree is defined as any tree with diameter at breast height greater than 3-inches and containing sloughing bark, snags, or crevices. Refer to Appendix A for the NLEB Habitat Assessment that identified suitable habitat for the NLEB in the Project Area.

Stressors and Response

Removal of suitable occupied roosting habitat may cause mortality or stress bats into choosing other less suitable areas. Disturbance may also result from noise from construction and related activities near suitable roosting areas or potential hibernacula.

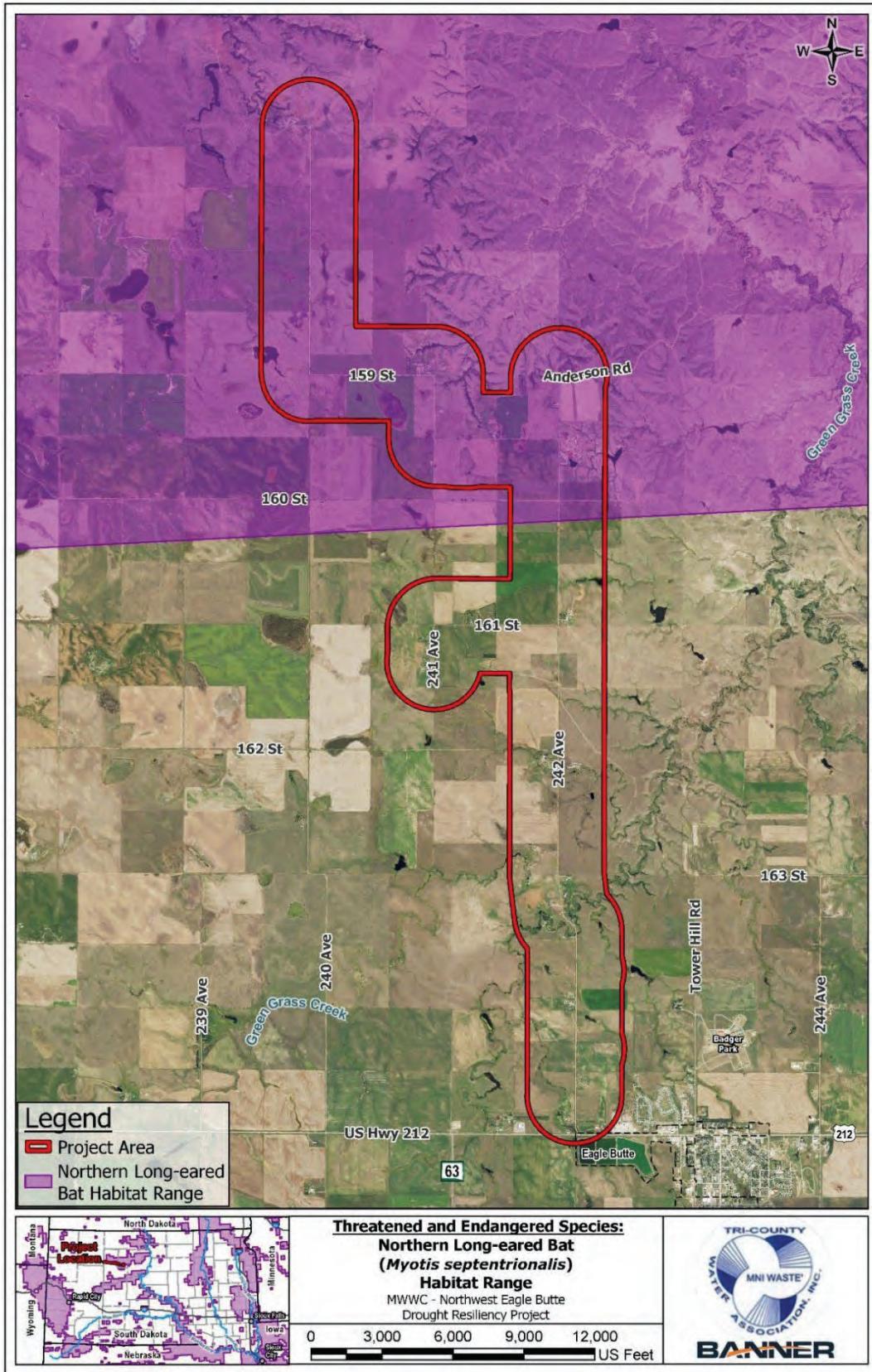
Removal of suitable NLEB habitat may occur under the Proposed Action and, if possible, would take place during the NLEB inactive period (November 1st through April 14th). If tree removal is necessary during the NLEB active season (April 15th to October 31st), a qualified biologist would conduct a species presence/absence survey of the suitable habitat within the Project Area and submit a report to USBR for concurrence.



Source:

<https://www.fws.gov/wyoming/Species/NLEBat.php>

Figure 5: Northern Long-Eared Bat Habitat Range



Piping Plover

Piping plovers are about 7 inches in length and have a sand-colored upper body and white underside. Breeding birds have a single black breastband, a black bar across the forehead, bright orange legs and bill, and a black tip on the bill. In the winter, piping plovers lose the black band, legs become a pale yellow, and the bill is mostly black.

Population Range-Wide

Three sub-populations of piping plover have been identified: an interior Great Plains population, Atlantic Coast population, and a Great Lakes population. The piping plover was listed as threatened in 1985 (*Federal Register* 50:50726-50734). The breeding range includes Alberta, Saskatchewan, Manitoba, Montana, North Dakota, Minnesota, South Dakota, Nebraska, and Iowa. Wintering locations include the Atlantic Coast from North Carolina south to Florida and on the Gulf of Mexico from Florida to Texas; northern Cuba, Puerto Rico, Bahamas, Greater Antilles, eastern Mexico, and the Yucatan Peninsula. The piping plover numbers have declined due to dams and channelization, reducing suitable habitat. The USFWS designated critical habitat for the Great Plains breeding population in 2002 (*Federal Register* 67:57637-57717).

Human recreation disturbance and the destruction, modification, and loss of habitat have been identified as threats to piping plovers in both their breeding and wintering ranges. Considerable efforts in breeding population surveys over the past decades have yet to produce a reliable estimation of the abundance of the Northern Great Plains population (USFWS 2020a). According to the most recent five-year review (USFWS 2024e), habitat within Lake Oahe and Lake Sakakawea, the primary Missouri River reservoir habitats used for nesting, appear to generally be of the lowest quality habitats used by piping plovers and these reservoirs generally have low reproductive output (Swift et al. 2021).

Designated Critical Habitat

Within the Reservation, designated critical habitat for piping plovers includes the shorelines of the Moreau River, Cheyenne River, and Missouri River. Critical characteristics of suitable nesting habitat include sparsely vegetated beaches and shorelines, islands of base sand and gravel incorporated with nearby shallow wet sand areas suitable for insect foraging. Critical habitat does not include developed areas such as buildings, boat ramps, bank stabilizations, agricultural areas, or steep banks. No designated critical habitat for the piping plover exists in the Project Area.

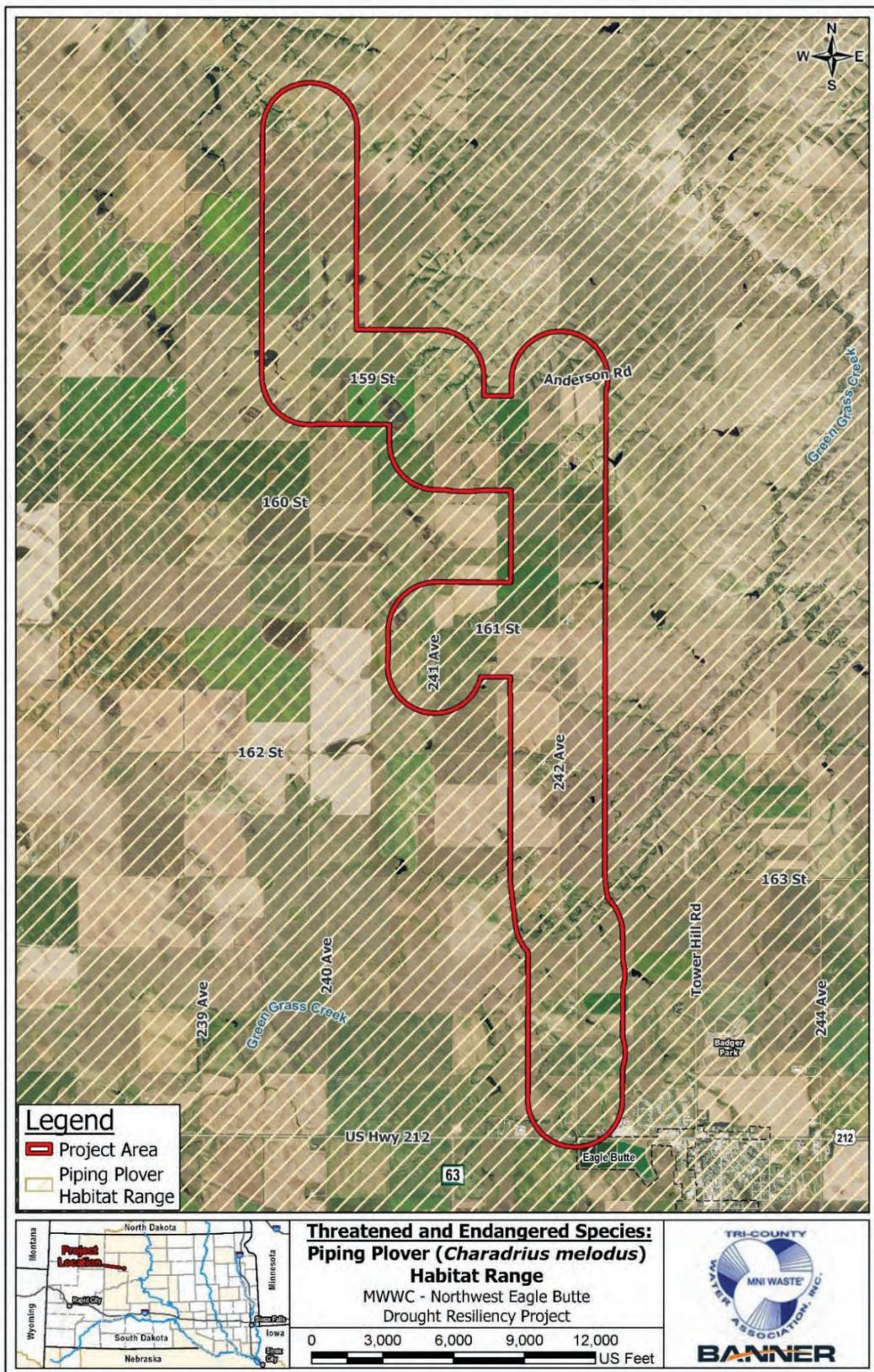
Project Area

Piping plover nesting and foraging habitat in South Dakota consists of barren sand and gravel bars and shorelines of the Missouri River and lakes throughout the state. The piping plover occurs in South Dakota from early April to mid-July, with peak breeding season from May to mid-July. Refer to Figure 6 for the location of the USFWS identified piping plover habitat range. Although the Project Area lies within the suitable habitat range for the piping plover, no suitable habitat exists within the Project Area.



Source: <https://www.fws.gov/midwest/endangered/pipingplover/pipingpl.html>

Figure 6: Piping Plover Habitat Range



Rufa Red Knot

Rufa red knots are typically 9 to 11 inches in length. During the breeding seasons, mottled gray, black, and white feathers turn into stripes on their head and face with a cinnamon-brown underside and face. The legs and bill are black. The bill is straight tapering to the tip. During the non-breeding season, rufa red knots are white and gray.



Population Range-wide

The rufa red knot was listed as threatened in 2015 (Federal Register 79:73706-73748). The red knot migrates between its breeding grounds in the Canadian Arctic and several wintering regions, including the southeast United States, the northeast Gulf of Mexico, northern Brazil, and Tierra del Fuego at the southern tip of South America. During both the northbound and southbound migrations, red knots use key staging and stopover areas to rest and feed. Long-distance migrant shorebirds are highly dependent on the continued existence of quality habitat at a few key staging areas. These areas serve as steppingstones between wintering and breeding areas. Many of the key migration staging areas are along the coasts but there are records that show small numbers (fewer than 10) of red knots migrating together in the interior states as well. The main threats to the rufa red knot include rising sea levels, coastal development, changes in arctic ecosystems, and decreased food availability, all of which persist and, in some cases, are becoming more severe.

Aerial surveys completed in May 2021 show a marked decrease in numbers of individuals within Delaware Bay (New Jersey and Delaware), a known spring stopover location for the Southern wintering population. In fact, Delaware Bay is known to support 50 to 80 percent of all rufa red knots during May and June (USFWS 2021). It is unknown whether this decrease is due to environmental factors or if the number represents an overall decrease in population.

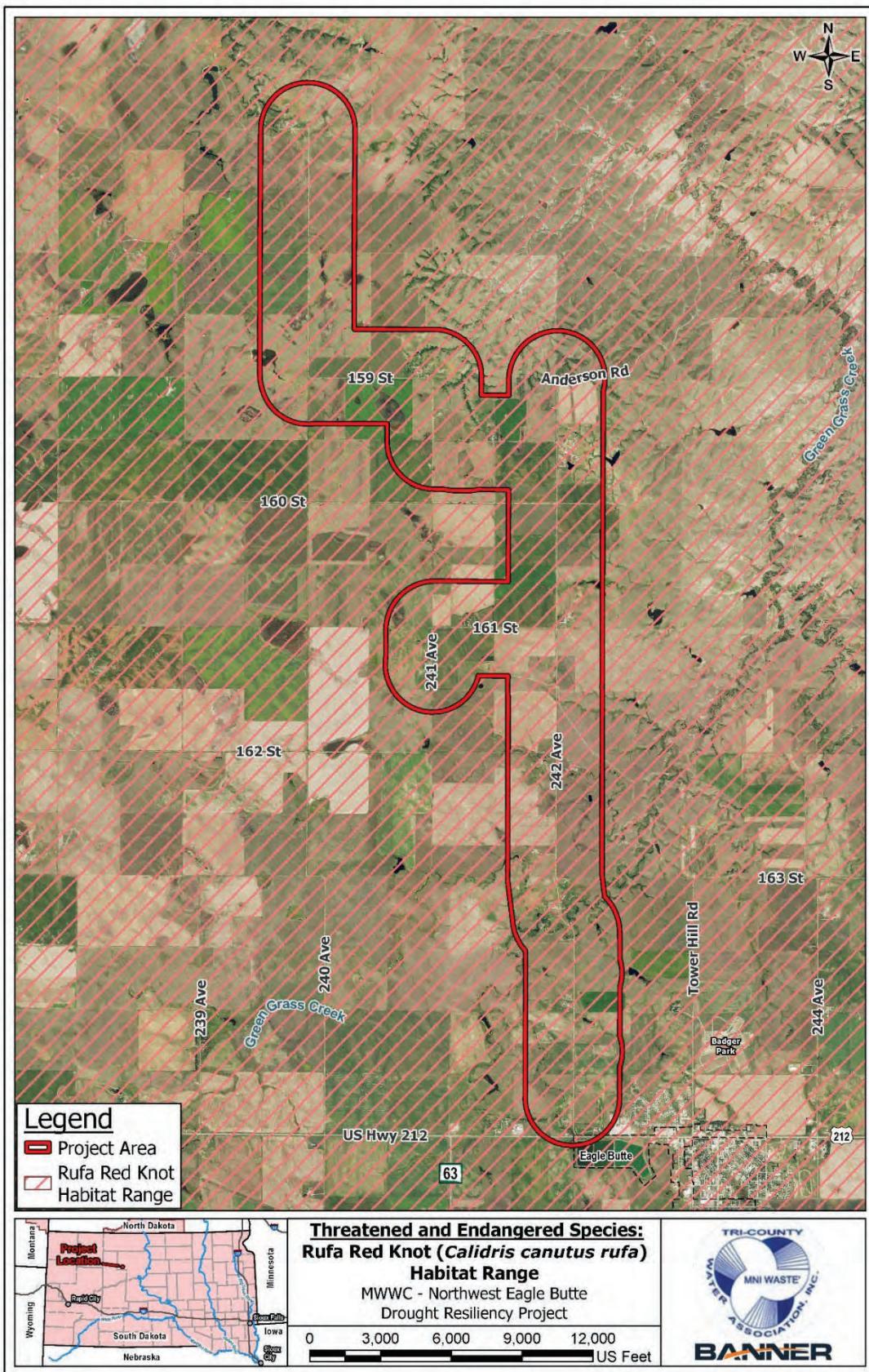
Project Area

While little is known about interior migrating red knots, they are believed to be rare migrants through South Dakota, occasionally utilizing wetlands as stopover habitat. Migration through South Dakota occurs twice a year, once in the spring and once in the fall. Wetlands within the Project Area are typically associated with intermittent streams, drainage systems, and prairie pothole habitats. Although suitable stopover habitat may exist in the Project Area, no suitable breeding habitat for the rufa red knot exists within the Project Area. Refer to Figure 7 for the habitat range for the rufa red knot.

Stressors and Response

Stressors include the avoidance or flushing from suitable stopover temporary or seasonal wetland habitats due to noise and activity from construction and operations. There is a potential for spills or releases of contaminants from large construction equipment. The project has avoided wetlands to the extent practicable, and a spill response plan has been included in the project plans.

Figure 7: Rufa Red Knot Habitat Range



Whooping Crane

Whooping cranes reach approximately 5 feet tall and have a wingspan that can reach 7½ feet. Whooping cranes are almost entirely white with black wingtips and have a red patch on the head that extends from the cheek along the bill. The eyes are yellow, and the legs are black.

Population Range-wide

The whooping crane was listed as endangered in 1967 (*Federal Register* 32:4001). Whooping crane recovery efforts have made great strides over the years, with new populations being established in Florida and Wisconsin. The birds that migrate through South Dakota are part of the Aransas-Wood Buffalo population. Approximately 536 whooping cranes were estimated during the January 2023 survey near Corpus Christi TX (USFWS 2022b).



Source:
<https://www.fws.gov/midwest/whooping-crane>

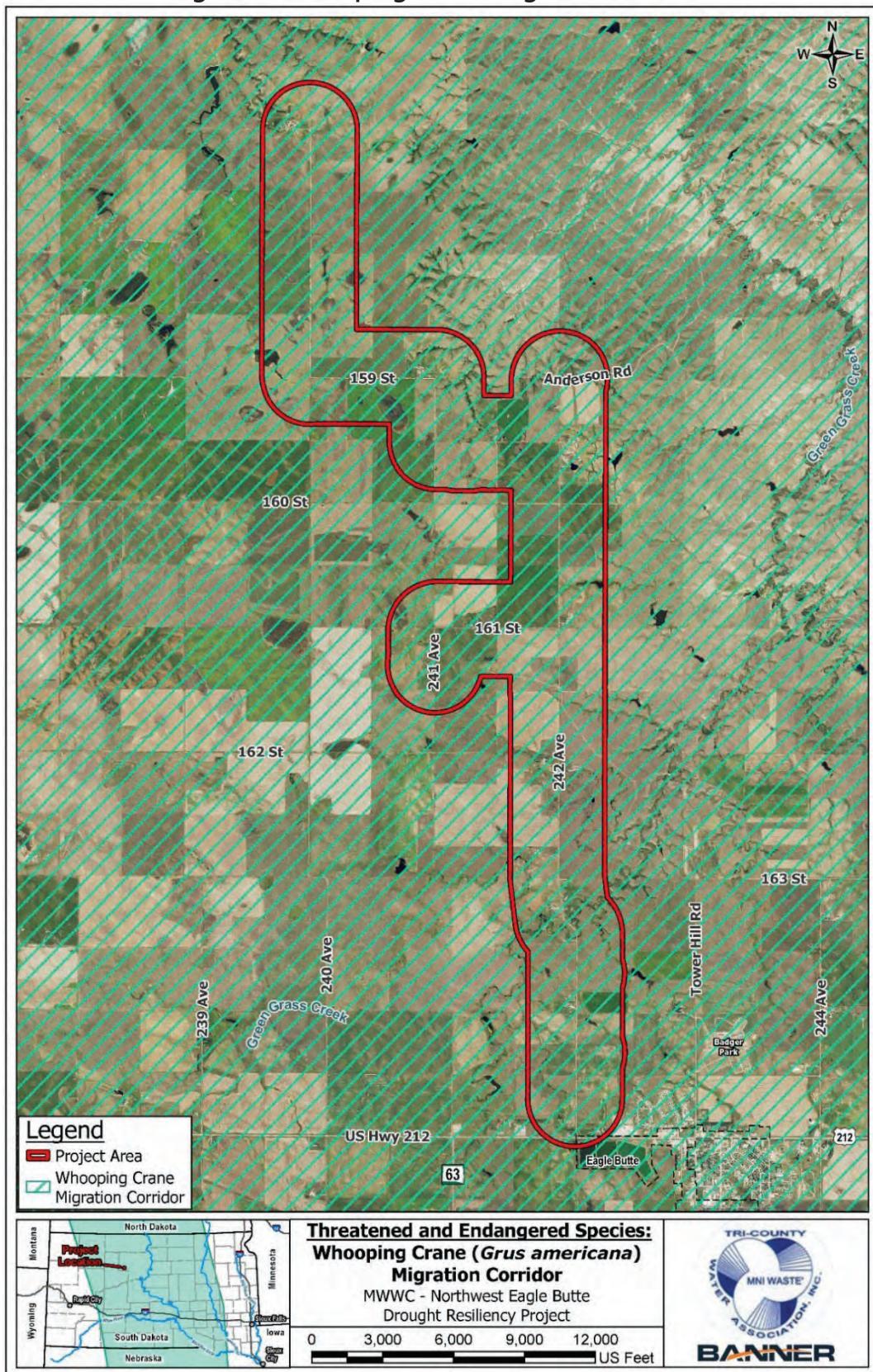
Project Area

The whooping crane frequently migrates with sandhill cranes by passing through South Dakota each spring and fall while migrating between its breeding territory in northern Canada and wintering grounds on the Gulf of America. No whooping crane sightings have been documented to occur within the Project Area (Cornel Lab 2025). Whooping cranes prefer freshwater marshes, wet prairies, shallow portions of rivers and reservoirs, grain and stubble fields, shallow lakes, and wastewater lagoons for feeding, loafing, and roosting. According to the Campbell County Wind Farm 2 Whooping Crane Monitoring Plan, the spring migration season occurs from approximately April 1 to May 15, and the fall migration season is September 10 to October 31 (Campbell County Wind Farm 2024). Birds can appear in all parts of South Dakota, although most sightings are in the western part of the state and along the Missouri River drainage. Refer to Figure 8 for the location of the whooping crane migration corridor.

Stressors and Response

Stressors include disturbances from human presence during construction that could result in migrating whooping cranes moving to less suitable habitats or avoiding suitable stopover habitats. The Proposed Action will result in increased noise and higher activity levels in the Project Area. If a whooping crane is sighted within 0.5-mile of the construction right-of-way corridor, construction activities would immediately cease until the individual(s) have left the area. There is a potential for spills or releases of contaminants from large construction equipment. The project has avoided wetlands to the extent practicable, and a spill response plan has been included in the project plans.

Figure 8: Whooping Crane Migration Corridor



Monarch Butterfly

The monarch is a species of butterfly in the order Lepidoptera; it is among the most recognizable and iconic pollinator species of North America easily identified by their distinct patterned black and orange wings. Adults have a wingspan of 3 to 4 inches and weigh, on average, half a gram. A typical adult will live approximately 2 to 5 weeks, with the exception of overwintering adults who can live 6 to 9 months after entering into diapause. The population of monarchs within the Dakotas are migratory, utilizing the available habitat during the warm summer months. Adult monarchs feed on the nectar of a variety of flowing plants, but they only lay their eggs on milkweed species. Monarch butterflies require healthy and abundant milkweed plants for both laying eggs on and as a food source for caterpillars (USFWS 2024c). Larval monarchs feed on milkweed plants and sequester toxic cardenolides as a defense against predators (USFWS 2020b).



Source:

<https://www.fws.gov/media/monarch-butterfly-swamp-milkweed>

The USFWS proposes to list the monarch butterfly as a threatened species with protective regulations under section 4(d) of the ESA. Finalizing this rule as proposed would add this species to the List of Endangered and Threatened Wildlife and extend the ESA's protections to the species. There is also a proposal to designate critical habitat for the monarch butterfly under the ESA. In total, approximately 4,395 acres (1,778 hectares) in Alameda, Marin, Monterey, San Luis Obispo, Santa Barbara, Santa Cruz, and Ventura Counties, California, fall within the boundaries of the proposed critical habitat designation (USFWS 2024c). No critical habitat is proposed for listing within the Project Area.

Population Range-wide

There are two main populations of migratory monarchs in North America. One breeds west of the Rocky Mountains and overwinters in California. The second, the population to which the monarchs found in South Dakota belong, breed east of the Rocky Mountains and overwinter in Mexico (USFWS 2024c). The primary drivers affecting the health of the two North American migratory populations are changes in breeding, migratory, and overwintering habitat (due to conversion of grasslands to agriculture, urban development, widespread use of herbicides, logging/thinning at overwintering sites in Mexico, unsuitable management of overwintering groves in California, and drought), and continued exposure to insecticides (USFWS 2020b).

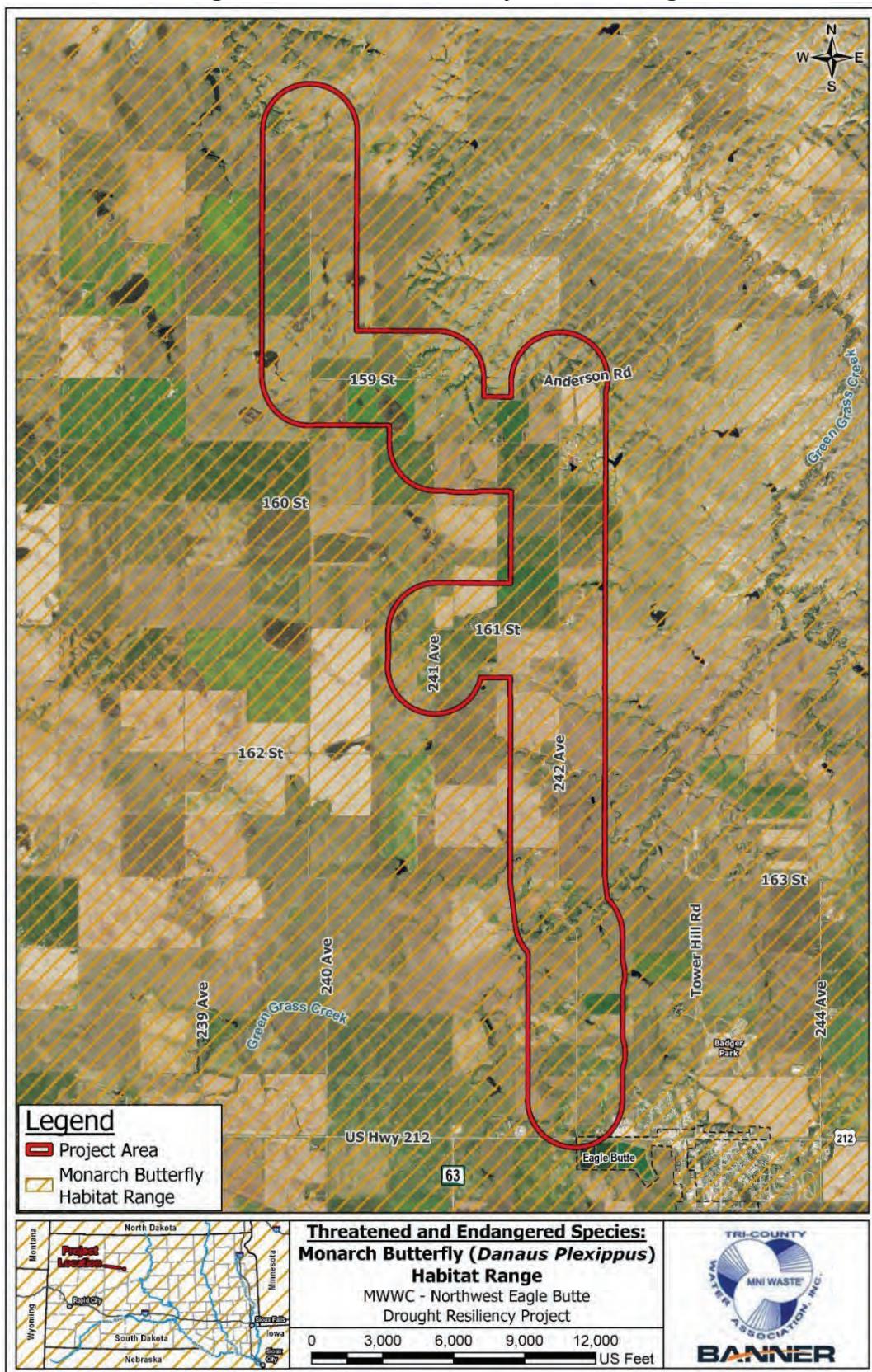
Project Area

Monarchs generally occur in South Dakota from mid-May through September. The Project Area likely contains milkweed, which is suitable larval habitat for monarchs. Milkweed can grow in a variety of areas including grasslands, cropland edges, and road-side ditches. The presence of monarchs in the Project Area has not been confirmed but is likely during spring, summer, and early fall months due to the widespread range of the species. Refer to Figure 9 for the known range of the monarch butterfly.

Stressors and Response

Potential stressors include crushing or flushing of adult or larval monarchs during construction. Herbicide use may be used to control noxious weeds immediately after construction and during re-seeding efforts, but long-term herbicide application is not anticipated. The Proposed Action will not cause a permanent conversion of grasslands containing nectar providing flowering plants and milkweed.

Figure 9: Monarch Butterfly Habitat Range



Suckley's Cuckoo Bumble Bee

The Suckley's cuckoo bumble bee is mostly yellow, with a black spot or band between the wings, sometimes with a black triangular notch behind and between the wings. Males are 0.5 to 0.6 inches and females are 0.7 to 0.9 inches in length. Color patterns in males are extremely variable (USFWS 2024d).

Population Range-wide

The Suckley's cuckoo bumble bee depends on other bumble bee hosts for its survival and raising of young. It has been found within various habitat types including prairies, grasslands, meadows, woodlands, and agricultural and urban areas. No designation of critical habitat has been determined for Suckley's cuckoo bumble bee. The bee has a broad historical distribution across North America and has been documented in Arizona, California, Colorado, Idaho, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming, and 11 Canadian territories and provinces. They require a diversity of native floral resources (pollen and nectar) for nutrition (USFWS 2024d). Suckley's cuckoo bumble bee is associated with a wide variety of habitats including prairies, grasslands, meadows, and woodlands as well as urban and agricultural areas (COSEWIC, 2019, p. 26; Martin et al., 2023, p. 22; Montana Natural Heritage Program, 2023, p. 3). The conversion of natural habitat to agricultural and urban areas is the primary cause of bumble bee habitat loss (Goulson et al., 2015, p. 2). Other factors contributing to the loss or degradation of forested habitat include increased parcelization and fragmentation of land; deterioration of forests from introduced pests and pathogens; and unsustainable land management practices in some areas (Mola et al., 2021).

Project Area

Due to the wide range of habitats the bee may occupy, suitable habitat may exist in the Project Area. However, this species is considered extremely rare in South Dakota due to a lack of verified sightings in recent decades with the last documented sighting occurring in 1969. The last confirmed sighting in the United States was in 2016 in Oregon (USFWS 2024d). Refer to Figure 10 for the historical range of the Suckley's cuckoo bumble bee.

Stressors and Response

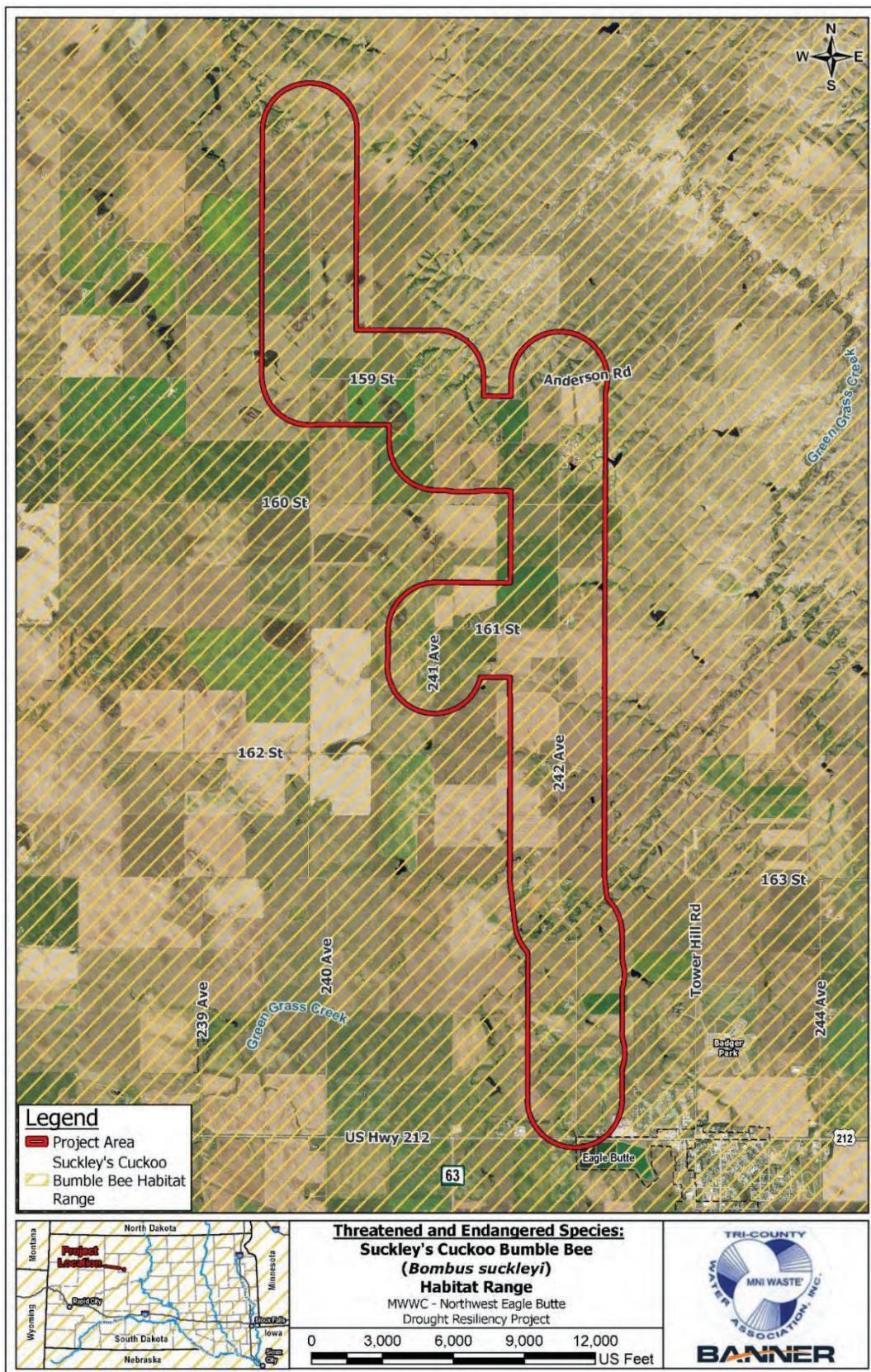
Potential stressors include the disturbance and flushing of adult bumble bees during construction. The conversion of natural habitat to agricultural and urban areas is the primary cause of bumble bee habitat loss (Goulson et al., 2015, p. 2). The Proposed Action will not result in the permanent conversion of grasslands, meadows, woodlands, urban environments, or agricultural areas. Herbicide use may be used to control noxious weeds after construction and during re-seeding efforts, but long-term herbicide application is not anticipated. Vegetated areas temporarily disturbed by construction (except cropland) would be revegetated with species appropriate to ecological conditions of the surrounding area, and in a manner that prevents erosion and noxious weed invasion.



Suckley's Cuckoo Bumble Bee, Kim Mann

<https://www.fws.gov/media/suckleys-cuckoo-bumble-bee-flower>

Figure 10: Suckley's Cuckoo Bumble Bee Habitat Range



Western Regal Fritillary

The western regal fritillary is a brush-footed butterfly with large, distinctively marked wings and is similar to the monarch butterfly in size. The western regal fritillary has six legs and vibrant orange wings with black marks that fade into a cobalt blue on the outer part of the wings with white spots along the border. Regal fritillary butterflies live in tall-grass prairie and other open and sunny locations such as damp meadows, marshes, wet fields, and mountain pastures. Regal fritillary habitat has been identified as large grassland areas with prairie remnants or lightly grazed pasture lands containing prairie vegetation where topography often includes hills and valleys. Regal fritillary butterflies depend on three main habitat components: violet host plants for larvae, nectar plants for adults, and native warm-season bunch grasses that provide protective sites for all life stages (USDA 2024).



Source:

<https://www.butterfliesandmoths.org/species/Speyeria-idalia>

Population Range-wide

The regal fritillary occurs only in local colonies of remnant prairie in Pennsylvania and Virginia in the east, from southern Wisconsin west to Montana, and south to northeast Oklahoma in the west (USDA 2024). Fragmentation of prairie grasslands across the species' overall range is largely the result of conversion to other land uses for the western subspecies and woody encroachment for the eastern subspecies (*Federal Register* 89:63888). According to the USFWS, the western subspecies is generally considered to have a declining population trend, largely a result of land conversion to agriculture and development (Selby 2007). Habitat in the Great Plains states is generally described as pristine tallgrass prairies in Kansas, Oklahoma, and north Texas (Dole 2004), and virgin prairies in North and South Dakota (Royer and Marrone 1992). The fritillary needs large, intact, diverse grasslands at a landscape scale and depends upon a shifting mosaic of large, well-connected grasslands with violets for larvae; nectar sources for adults; and warm season, native bunchgrasses for shelter at all life stages. The regal fritillary cannot survive in altered landscapes, including row crop fields, nonnative pastures, developed areas surrounding prairie remnants, or forests.

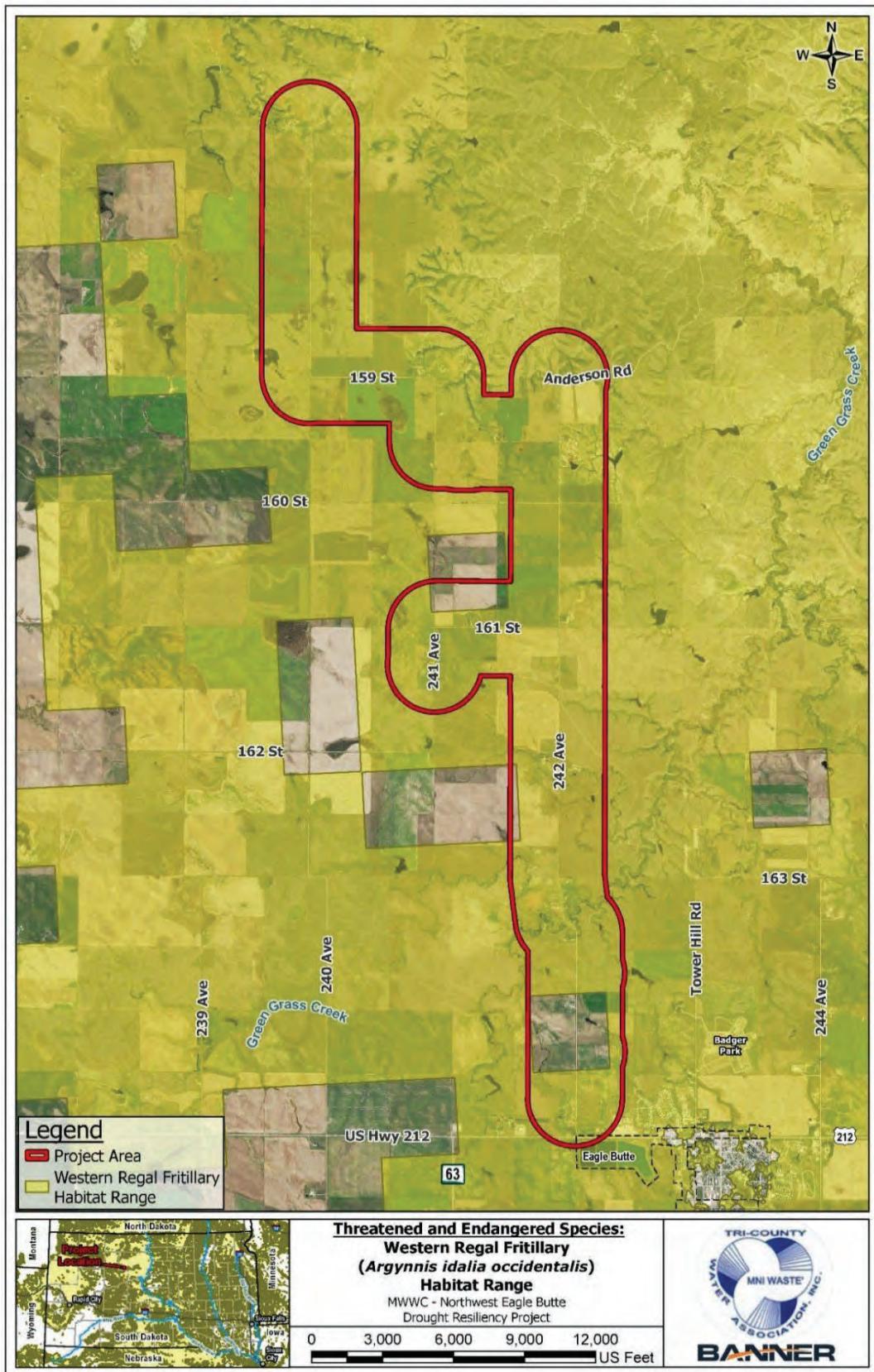
Project Area

Most recently, in 2007, the western subspecies of regal fritillaries is persisting in and around the Fort Pierre National Grasslands in central South Dakota (USDA 2007). The Project Area is located approximately 70 miles to the northwest of the Fort Pierre National Grasslands. Although no known occurrences of the regal fritillary within the Project Area have been confirmed, prairie habitat is present, and the known habitat of the regal fritillary intersects with the Project Area. Refer to Figure 11 for the habitat range of the regal fritillary.

Stressors and Response

Potential stressors include the disturbance of prairie habitats during construction causing the regal fritillary to leave the area. No permanent conversion of grasslands would occur under the Proposed Action. Herbicide use may be used to control noxious weeds after construction and during re-seeding efforts, but long-term herbicide application is not anticipated. Vegetated areas temporarily disturbed by construction (except cropland) would be revegetated with species appropriate to ecological conditions of the surrounding area, and in a manner that prevents erosion and noxious weed invasion.

Figure 11: Western Regal Fritillary Habitat Range



Environmental Effects of the No Action Alternative

No effects to threatened, endangered, candidate, or proposed species and to designated and proposed critical habitats would occur under the No Action Alternative.

Environmental Effects of the Proposed Action Alternative

The term “effects of the action” refers to the direct and indirect effects of a Proposed Action on listed species and designated critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline (50 CFR §402.2). This environmental assessment has analyzed the Project Area, species life history, habitat information, and a population range-wide analysis for each of the federally listed species.

Three conclusions as described in the ESA regulations are possible regarding analyses for effects for listed species:

1. No Effect - means there will be no effects, positive or negative, to listed or proposed resources. Generally, this means no listed resources will be exposed to the Proposed Action and its environmental consequences. Concurrence from the Service is not required.
2. May Affect, but Not Likely to Adversely Affect - means that all effects are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the effect and should never reach the scale where take occurs. Discountable effects are extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.
3. May Affect, Likely to Adversely Affect - means that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure. The Endangered Species Act (ESA) requires the federal action agency to request initiation of formal consultation with the Service when this determination is made. A written request for formal consultation should accompany the biological assessment/biological evaluation.

Determination of Effects by Species

Under the ESA, the federal agency undertaking, authorizing, or funding a Proposed Action is responsible for determining whether that action may affect listed species or critical habitat. This determination is crucial as it triggers the need for consultation with the USFWS. The USBR conducts this determination by assessing the potential direct and indirect effects of the action on listed species or critical habitat noted above. If the Proposed Action may affect any listed species or critical habitat, then USBR must begin a formal consultation with USFWS.

A response was received from the USFWS on April 2, 2025, noting that they have received the project request and if an additional response is not received in two weeks the USFWS does not have any comments to provide during the NEPA process. The USBR has determined that the project will have No Effect to listed threatened and endangered species and is Not Likely to Jeopardize proposed species. There is no requirement under the implementing regulations of the ESA (50 CFR part 402) for action agencies to receive USFWS concurrence with “no effect” determinations, therefore the responsibility for “no effect” determinations with the other species remain with the project proponent. Refer to Appendix B for USFWS Scoping Letters and Response.

If any threatened or endangered species are identified and encountered during construction, all construction

activities in the immediate area will be stopped until USBR can consult with the USFWS to determine appropriate steps to avoid affecting the species.

Black-footed Ferret

The black-footed ferret has not been documented within the Reservation. According to the IPaC, the black-footed ferret population in South Dakota is designated as a nonessential experimental population that has been introduced to facilitate conservation efforts. Section 10(j) of the ESA requires determining whether an experimental population is "essential to the continued existence" of the species. This determination is based on the best available information. An essential population is treated as threatened and receives the full protection of the ESA, while nonessential populations have reduced regulatory restrictions.

The SD population has been designated as nonessential. There is no suitable habitat (prairie dog towns) within the Project Area. The Proposed Action will have "No Effect" on the black-footed ferret.

Northern Long-eared Bat

In 2024, a qualified biologist with Banner Associates conducted a field survey in the Project Area for trees that may provide suitable habitat for the NLEB. Groups of trees and single trees meeting the definition of suitable habitat were observed.

Removal of suitable NLEB habitat may occur under the Proposed Action and, if possible, would take place during the NLEB inactive period (November 1st through April 14th). If tree removal is necessary during the NLEB active season (April 15th to October 31st), a qualified biologist would conduct a species presence/absence survey of the suitable habitat within the Project Area and submit a report to USBR for concurrence.

Although suitable habitat for the NLEB exists in the Project Area, the implementation of either the tree removal timeframe outside of the active season of the bat (April 15th to October 31st) or the presence/absence survey of suitable habitat trees during the active season results in a "No Effect" determination for the NLEB.

Piping Plover

No designated critical habitat exists within the Project Area. No suitable habitat exists within the Project Area. The Proposed Action will have "No Effect" on the piping plover.

Rufa Red Knot

Although wetlands within the Project Area may provide potential stopover habitat for the rufa red knot, sightings of the species are rare in South Dakota, and no recorded observations have occurred within the Project Area. Due to suitable breeding habitat not occurring within the Project Area and lack of confirmed sightings in the Project Area, the Proposed Action will have "No Effect" on the rufa red knot.

Whooping Crane

The Project Area is located within the whooping crane migration corridor and may provide suitable stopover habitat. No recorded observations of whooping cranes have occurred within the Project Area, and suitable nesting habitat is not present. The project plans include a cease-work commitment if a whooping crane is sighted within 1 mile of the construction right-of-way corridor. Based on the implementation of this avoidance measure, the Proposed Action will have "No Effect" on the whooping crane.

Monarch Butterfly

Given the widespread distribution of the monarch, the species and suitable habitat for the species are likely present in the Project Area. However, given the temporary nature of habitat disturbance during construction of the Proposed Action and the commitment to reseed the disturbed construction right-of-way corridor, the Proposed Action is “Not Likely to Jeopardize” the monarch butterfly.

Suckley’s Cuckoo Bumble Bee

Due to the wide range of habitats the bee may occupy, suitable habitat may exist in the project area. However, due to the lack of observations of this bee species for over 50 years in South Dakota, the temporary disturbance of suitable habitat, non-conversion of suitable habitat, and reseeding of the disturbed construction right-of-way corridor, the Proposed Action is “Not Likely to Jeopardize” the Suckley’s cuckoo bumble bee.

Western Regal Fritillary

The Species Status Assessment Report for the regal fritillary notes that, according to Davis et al. (2007), the species tends to be more closely associated with large block habitats rather than linear habitats, such as road ditches or railroad rights-of-way. The Proposed Action is situated within fragmented and disturbed roadway rights-of-way that do not offer suitable habitat for the regal fritillary. Based upon a lack of preferred habitat and the commitment to reseed the disturbed construction right-of-way corridor, the Proposed Action is “Not Likely to Jeopardize” the western regal fritillary.

Land and Vegetation Resources

Land and vegetation resources that are analyzed under this section include the surface and subsurface resources within the Project Area including land use, ecoregions, geology, geography, topography, soils, precipitation and drought, and common vegetation types. Each of these resources is analyzed and assessed for environmental impacts as a result of the Proposed Action.

Affected Environment

Land Use

Data for land use analysis for the affected environment in the Project Area was gathered from the National Land Cover Database (NLCD). The existing land use in the Project Area consists primarily of grassland/herbaceous vegetation with scattered aquatic resources, rural residences, and some commercial development. The main arterial road is County Road 20/242nd Avenue, with additional intersecting county roads and driveways present throughout the Project Area. Roads, commercial development, and rural residence land use areas are shown in Figure 12. Other land use classifications present in the Project Area include barren land, cultivated croplands, pasture/hay land, shrub/scrub, woody wetlands, emergent herbaceous wetlands, deciduous forest, evergreen forest, and mixed forest. No zoning, master plans, or comprehensive land use plans were identified for Dewey County, South Dakota.

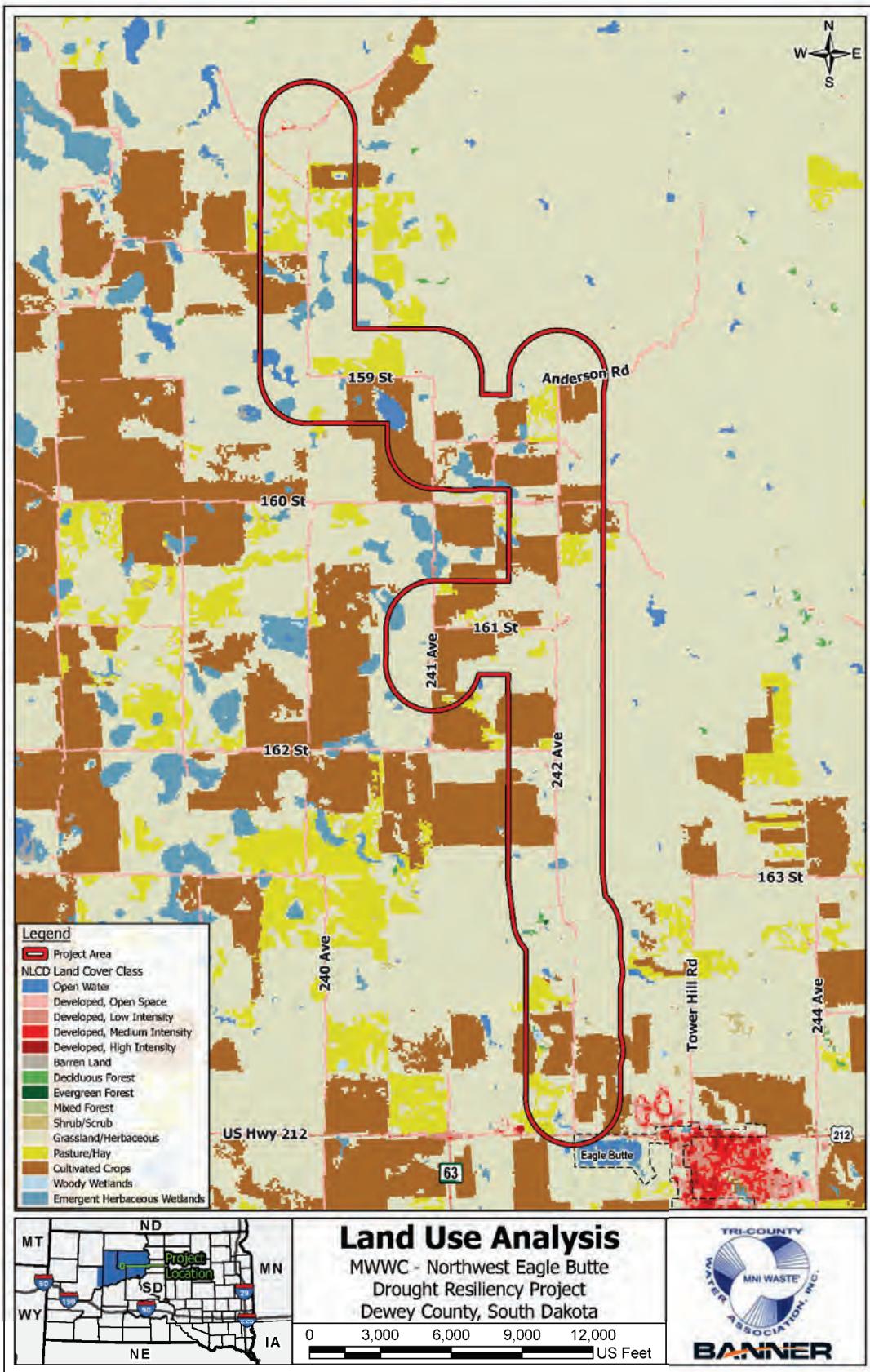
The land use classes that are present in the Project Area are defined as (NLCD 2024):

1. Open Water - areas of open water, generally with less than 25% cover of vegetation or soil.
2. Developed, Open Space - areas with a mixture of some constructed materials, but mostly vegetation in the form of common lawn grass species. Impervious surfaces account for less than 20% of total

cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.

3. Developed, Low Intensity - areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20% to 49% of the total cover. These areas most commonly include single-family housing units.
4. Developed, Medium Intensity - areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50% to 79% of the total cover. These areas most commonly include single-family housing units.
5. Developed High Intensity - highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses and commercial/industrial. Impervious surfaces account for 80% to 100% of the total cover.
6. Barren Land (Rock/Sand/Clay) - areas of bedrock, desert pavement, scarp, talus, slides, volcanic material, glacial debris, sand dunes, strip mines, gravel pits and other accumulations of earthen material. Generally, vegetation accounts for less than 15% of total cover.
7. Deciduous Forest - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species shed foliage simultaneously in response to seasonal change.
8. Evergreen Forest - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species maintain their leaves all year. Canopy is never without green foliage.
9. Mixed Forest - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. Neither deciduous nor evergreen species are greater than 75% of total tree cover.
10. Shrub/Scrub - areas dominated by shrubs; less than 5 meters tall with shrub canopy typically greater than 20% of total vegetation. This class includes true shrubs, young trees in an early successional stage or trees stunted from environmental conditions.
11. Grassland/Herbaceous - areas dominated by graminoid or herbaceous vegetation, generally greater than 80% of total vegetation. These areas are not subject to intensive management such as tilling but can be utilized for grazing.
12. Pasture/Hay - areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20% of total vegetation.
13. Cultivated Crops - areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20% of total vegetation. This class also includes all land being actively tilled.
14. Woody Wetlands - areas where forest or shrubland vegetation accounts for greater than 20% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.
15. Emergent Herbaceous Wetlands - areas where perennial herbaceous vegetation accounts for greater than 80% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.

Figure 12: Land Use Analysis



Easements and Public Lands

Waterfowl Production Areas (WPA's) are areas owned in fee title by the USFWS to protect habitat for wildlife and are open to public hunting. The USFWS holds both grassland and wetland conservation easements to aim to protect habitat for birds, fish and other wildlife by limiting residential, industrial or commercial development (USFWS 2025c). USFWS conservation easements are tied to private land and are legal agreements between landowners and the USFWS that compensate landowners to permanently keep their land as grass or wetlands. Within the Project Area, there are no WPAs or USFWS conservation easements.

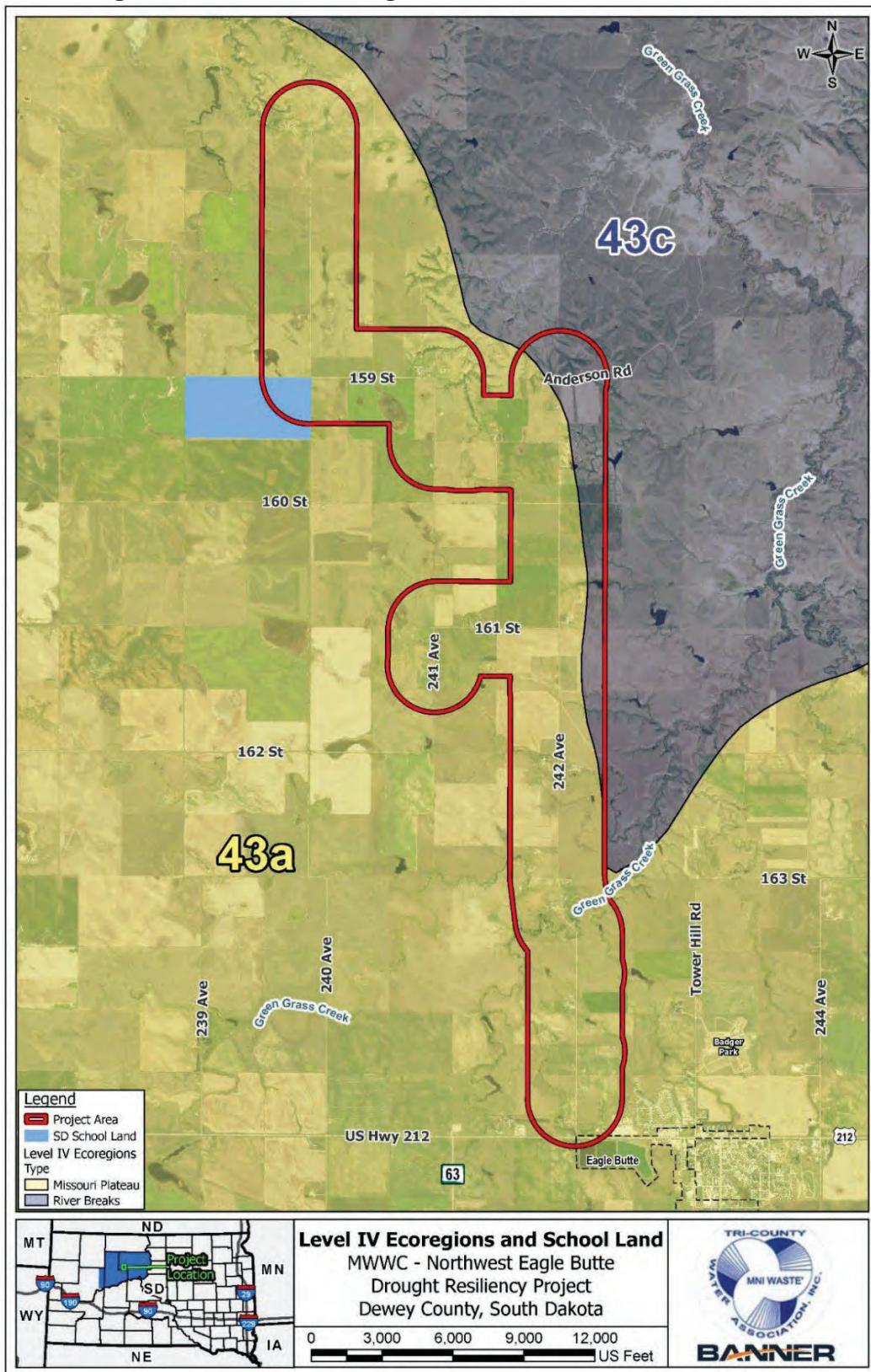
Game Production Areas (GPAs) are public lands managed by SDGFP. These lands are open to the public for a variety of outdoor activities, primarily used for hunting and fishing. There are no GPAs within the Project Area.

School and Public Lands in South Dakota are trust lands granted to the State and are managed to produce income for the support of the State's schools, universities, and other endowed institutions (SDSPL 2025). School and Public Lands are present within the Project Area in the north half of Section 16, Township 13 North, Range 23 East. See Figure 13.

Ecoregions

The Northwestern Great Plains Level III ecoregion encompasses the Missouri Plateau section of the Great Plains. It is a semiarid rolling plain of shale, siltstone, and sandstone punctuated by occasional buttes and badlands. Native grasslands persist in areas of steep or broken topography, but they have been largely replaced by spring wheat and alfalfa over most of the ecoregion (USGS 2003). The Project Area is located within two Level IV ecoregions: the Missouri Plateau (43a) and River Breaks (43c) of the Northwestern Great Plains ecoregion. The main Level IV ecoregion in the Project Area is the Missouri Plateau located west of the Missouri River, which is an open landscape that was largely unaffected by glaciation, retaining its original soils and complex stream drainage pattern (USGS 2003). The other Level IV ecoregion is the River Breaks ecoregion. The River Breaks ecoregion is formed of broken terraces and uplands that descend to the Missouri River and its major tributaries, forming in soft and easily erodible strata, such as Pierre shale (USGS 2003). Most of Dewey County is comprised of these two ecoregions in addition to the Subhumid Pierre Shale Plains and Moreau Prairie Level IV Ecoregions. Refer to Figure 13 for the location of the Level IV Ecoregions (mapped as 43a and 43c) within the Project Area.

Figure 13: Level IV Ecoregions and School and Public Lands



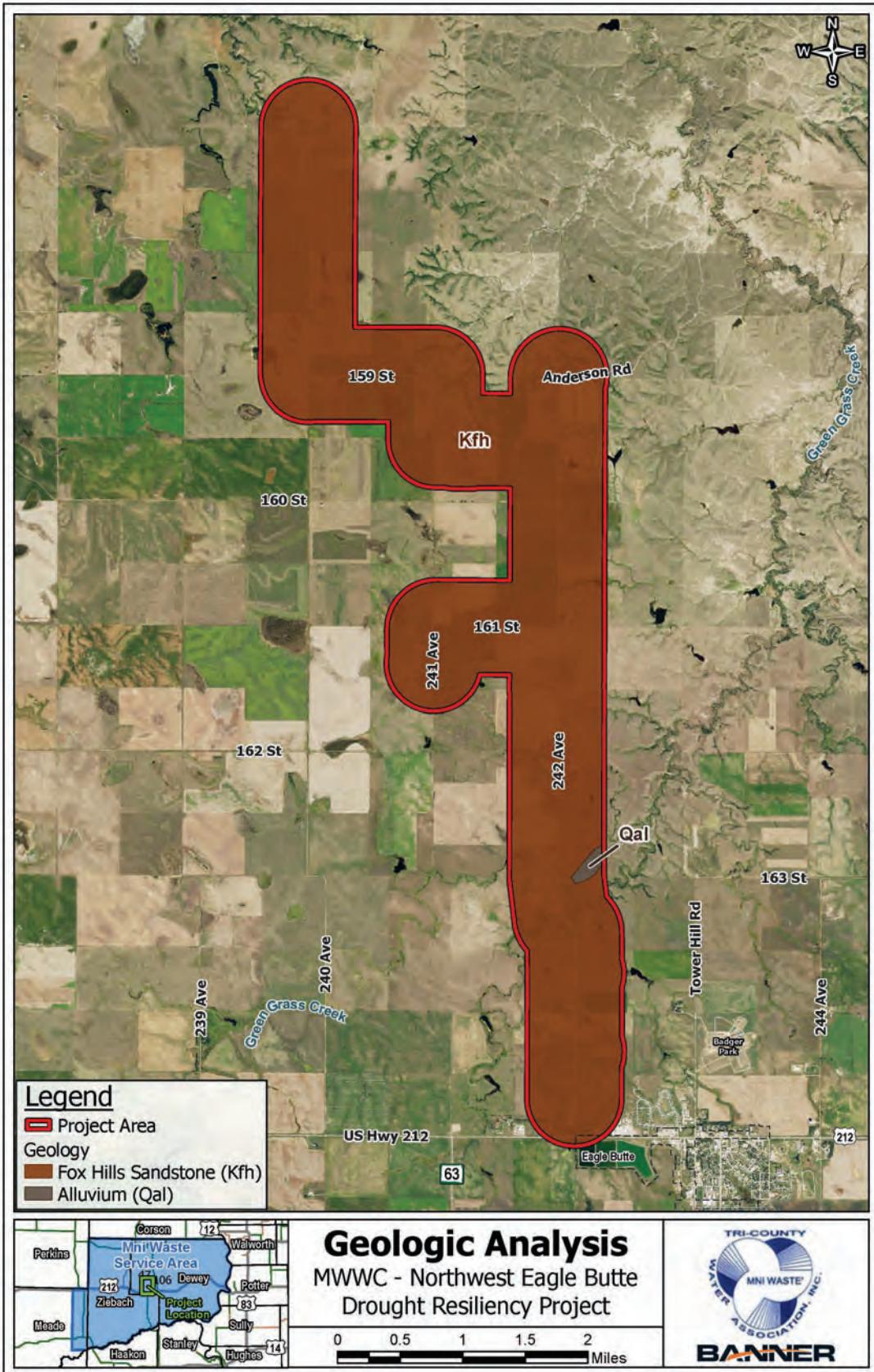
Geology

Geological resources consist of surface and subsurface materials and their properties. Principal geologic factors influencing the ability to support structural development are seismic properties (i.e., potential for subsurface shifting, faulting, or crustal disturbance), soil stability, and topography.

Geometric and geophysical methods have identified faults located several hundred meters below the surface within a 2,000 square kilometer area west of Pierre, South Dakota (USGS 1994). Additionally, seismic-reflection data indicates that several of the faults directly overlie faults in Precambrian basement that have cumulative vertical displacements (USGS 1994). The geologic map of South Dakota defines the two geologic areas including bedrock types and thicknesses within the Project Area (SDDANR 2004). See Figure 14.

1. Fox Hills Sandstone (Kfh – Upper Cretaceous) - Bluish-green to green, white to dark-gray, and yellow to tan, carbonaceous and iron-stained, cross-bedded, very fine- to coarse-grained, glauconitic sandstone and siltstone. Interbedded with gray and green to brown shale and silty shale. Thickness 25-400 ft (8-122 m). Over 99% of the Project Area is comprised of Fox Hills Sandstone.
2. Alluvium (Qal – Quaternary) - Clay- to boulder-sized clasts with locally abundant organic material. Thickness up to 75 ft (23 m).

Figure 14: Geologic Analysis



Topography

Topography, in general, is the change in elevation of a land area's surface. An area's topography is influenced by many factors, including human disturbance to the earth's surface, underlying geologic formations, seismic activity, climatic conditions, and erosion. A discussion of topography typically encompasses a description of surface elevations, slope, and distinct physiographic features (e.g., mountains, terraces, and rolling terrain). According to the USDA's Natural Resource Conservation Service (NRCS) Web Soil Survey, approximate elevations within the Project Area range from 970 feet mean sea level (fmsl) to 3940 fmsl, with an approximate slope ranging from 0% to 40% throughout the Project Area (NRCS 2024). Along the proposed line route, the slope is no greater than 10%, except for the creek bed of Green Grass Creek, which has a slope of 15%.

Soils

Soil is the thin layer of material that covers the earth's surface and is produced by the gradual weathering of rock to produce sediments. Soils are comprised of five components including minerals, organic matter, living organisms, gas, and water. The compositions are further divided into classes such as clay, silt, and sand. Prime farmland or farmland of statewide importance is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops (USDA 2015). Farmland of statewide importance includes tracts of land that have been designated for agriculture by State law. This includes areas of soil types that meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods (Federal Register 43 FR 4031). Farmland of statewide importance and prime farmland if irrigated is present within the Project Area. Soils found within the Project Area can be seen in the Soil Analysis Figure Series in Appendix C. The list of soil types and their respective acreages within the Project Area can be found in Table 3 (NRCS 2024).

Table 3 : Soil Types and Acreages

Symbol	Composition and Percent Slope	Acres	Percent of the Project Area
AbA	Rhoades silt loam, 0 to 2 percent slopes	138.7	2.4%
BdA	Belfield-Daglum silt loams, 0 to 2 percent slopes	86.8	1.5%
CbE	Cabba-Lantry complex, 15 to 25 percent slopes	119.6	2.1%
CbF	Cabba-Lantry complex, 25 to 40 percent slopes	215.1	3.7%
DaA	Daglum silt loam, 0 to 2 percent slopes	209.2	3.6%
GnA	Glenross fine sandy loam, 0 to 3 percent slopes	1.8	0.0%
Hc	Heil soils	242.7	4.2%
LmD	Lantry-Morton silt loams, 6 to 15 percent slopes	455.2	7.9%
Lp	Lohler and Havrelon soils	110.1	1.9%
MbD	Moreau-Wayden silty clays, 9 to 25 percent slopes	53.9	0.9%
McB*	Morton silt loam, 2 to 6 percent slopes	2,023.7	35.1%
MdA*	Morton-Belfield complex, 0 to 2 percent slopes	351.2	6.1%
MdB*	Morton-Belfield complex, 2 to 6 percent slopes	390.9	6.8%
MfA*	Morton-Farland silt loams, 0 to 2 percent slopes	184.5	3.2%
MgB*	Morton-Lantry silt loams, 2 to 9 percent slopes	858.6	14.9%
Na	Lohler, channeled-Rhoades complex	61.2	1.1%
RgC	Regent silty clay loam, 6 to 9 percent slopes	37.4	0.6%
RmB	Regent-Moreau complex, 2 to 9 percent slopes	24.3	0.4%
RpB*	Regent-Ridgeview silty clay loams, 2 to 6 percent slopes	44.1	0.8%
SbE	Sansarc-Opal clays, 9 to 25 percent slopes	4.8	0.1%
SdC	Schamber gravelly sandy loam, 3 to 15 percent slopes	8.1	0.1%
W	Water	51.0	0.9%
WaF	Wayden-Moreau silty clays, 25 to 40 percent slopes	85.2	1.5%
Total		5,757.9	100.00%

* Farmland of Statewide Importance

** Prime Farmland if Irrigated

Precipitation and Temperature

During the last 50 years, the amount of rain falling during the wettest four days of the year has increased about 15 percent in the Great Plains (USEPA 2016). As the atmosphere warms, evaporation rates increase. This can result in higher humidity and average rainfall, and a rise in the frequency of heavy rainstorms in some areas, while contributing to drought conditions in others (USEPA 2016). The nearest National Weather Service (NWS) station is in Dupree, South Dakota, approximately 15 miles west of the Project Area. The NWS Dupree Station reported 15.67 inches of total precipitation in 2024. This is 2.16 inches below the normal annual average value of 17.83 inches from 2000 to 2024 (NWS 2025). Refer to Table 4 for the NWS data from the Dupree Station from 2000 to 2024.

Table 4: NWS Data from the Dupree Station 2000 to 2024

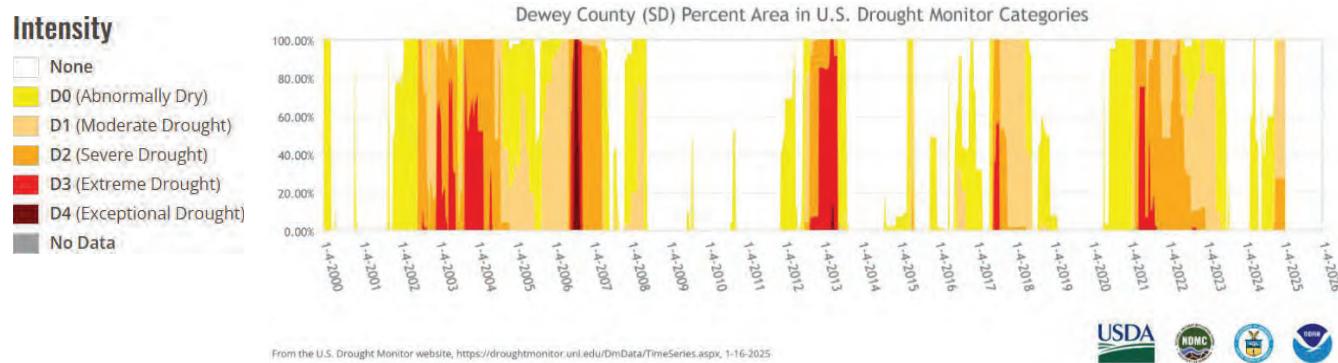
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2000	0.65	0.69	2.48	4.60	3.87	3.06	1.73	0.15	0.39	0.97	1.21	0.37	20.17
2001	0.12	1.11	0.14	2.05	1.76	2.27	3.34	0.13	0.73	0.76	0.17	0.03	12.61
2002	0.23	0.00	0.40	0.84	0.72	1.86	1.25	0.78	1.32	0.70	0.00	0.24	8.34
2003	0.82	0.54	0.93	1.71	2.22	1.77	1.44	0.69	1.29	0.79	0.91	0.21	13.32
2004	0.53	0.23	0.88	1.11	2.84	1.90	3.59	1.27	3.80	3.36	0.08	0.16	19.75
2005	0.12	0.42	0.57	1.92	3.74	3.59	3.59	1.38	0.43	0.48	0.33	0.64	17.21
2006	0.36	0.18	1.20	1.54	0.66	1.32	0.28	2.25	2.97	0.19	0.32	0.01	11.28
2007	0.22	0.60	2.00	2.12	3.72	4.14	2.66	2.30	0.31	1.13	0.08	0.18	19.46
2008	0.13	0.41	0.66	0.00	4.43	7.31	4.50	1.06	0.86	1.60	1.50	0.59	23.05
2009	0.35	1.43	1.93	1.92	2.17	3.13	3.19	1.71	0.67	2.29	0.00	0.67	19.46
2010	0.06	0.86	0.79	2.03	5.99	8.00	2.25	0.75	3.60	0.53	0.44	0.90	26.20
2011	1.36	1.37	1.44	2.62	5.08	4.90	3.15	2.20	0.47	1.31	0.08	0.08	24.06
2012	0.40	0.51	0.38	2.68	1.88	2.82	3.73	0.53	0.15	0.26	0.32	0.43	14.09
2013	0.20	0.13	0.36	1.04	4.98	2.24	2.53	2.15	1.43	6.61	0.03	0.45	22.15
2014	0.22	0.37	0.94	1.94	1.48	6.81	1.23	7.47	0.90	0.62	0.25	0.37	22.60
2015	0.12	0.13	0.20	0.78	7.20	3.50	1.45	2.01	0.65	1.45	0.22	0.98	18.69
2016	0.24	0.58	1.18	4.37	1.44	4.15	1.44	1.10	0.50	1.64	0.60	1.85	19.09
2017	0.60	0.55	0.30	1.03	1.90	2.90	0.45	6.65	0.67	0.25	0.15	0.35	15.80
2018	0.05	0.71	1.25	1.00	2.46	6.25	1.72	0.16	1.55	0.90	0.37	1.00	17.42
2019	0.46	1.25	0.60	4.00	6.62	3.68	5.50	1.43	2.03	1.94	1.02	0.86	29.39
2020	0.26	0.85	0.63	0.99	3.83	1.21	2.88	1.75	0.35	1.10	0.01	0.16	14.02
2021	0.14	0.01	0.20	0.20	5.18	0.19	2.09	1.55	0.70	3.17	0.00	0.09	13.52
2022	0.00	0.12	0.36	2.00	3.85	2.11	1.05	0.94	0.71	0.40	0.40	1.26	13.20
2023	0.14	0.40	1.37	1.05	3.05	6.13	0.60	5.65	0.93	0.59	0.06	0.35	20.32
2024	0.27	0.13	0.74	3.40	0.64	3.20	3.63	1.61	0.58	0.12	0.75	0.60	15.67
Average	0.32	0.54	0.88	1.96	3.27	3.54	2.37	1.91	1.12	1.33	0.37	0.51	17.83

Drought allows for an increase in evapotranspiration, which makes more water available in the air for precipitation. But drought also contributes to drying over some land areas, leaving less moisture in the soil. As a result, regions of the world, including western North America, have experienced an increase in some type of drought since the 1950s (USEPA 2025b).

The US Drought Monitor (USDM) has provided weekly weather data online since January 4, 2000. This data can be used to gauge the occurrence and severity of drought conditions. According to the USDM, Dewey County has experienced abnormal dryness or drought each year since 2000 (USDM 2025). Graph 1 displays data on a scale of no drought, D0 (Abnormally Dry), D1 (Moderate Drought), D2 (Severe Drought), D3 (Extreme Drought), and D4 (Exceptional Drought). While drought has occurred in Dewey County, the period of record for this station is too short to assess long-term climate trends or explore recent observations compared to historical patterns. With decades of additional data, future drought indicators should better illustrate long-term trends (USEPA 2025b). However, drought has been an inescapable fact of life for the

CRST, and the community will undoubtedly continue to face drought effects into the future.

Graph 1: Dewey County Drought Occurrences



Unusually hot or cold temperatures can result in prolonged extreme weather events like summer heat waves or winter cold spells (USEPA 2025c). According to the EPA, warmer air tends to have more water vapor, so more water can be potentially released in a storm (USEPA 2016). The NWS Dupree Station reported a maximum annual temperature of 105 degrees Fahrenheit in 2024. This is 3 degrees above the average annual maximum temperature of 102 degrees Fahrenheit from 2000 to 2024 (NWS 2025). Twenty-one of the last twenty-four years have been equal to or exceeded the average annual maximum temperature for the Dupree Station. Table 5 denotes in orange the years where the annual maximum temperature exceeds the annual average from 2000 to 2024. The change in the number of days with unusually hot and cold temperatures at individual weather stations is an indicator of climactic changes (USEPA 2025c).

Table 5: Maximum Temperatures for the Dupree Weather Station

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Maximum Annual
2000	46	64	71	75	89	90	100	103	99	82	54	42	103
2001	52	43	60	90	91	103	101	103	101	85	71	54	103
2002	62	66	58	80	89	109	106	102	101	76	66	60	109
2003	60	50	77	89	88	92	106	105	98	88	69	53	106
2004	45	53	71	84	87	99	102	98	99	80	66	60	102
2005	63	69	73	84	83	94	102	103	102	94	72	51	103
2006	55	61	62	82	97	99	113	100	89	85	74	60	113
2007	59	47	81	82	91	98	108	103	102	87	68	60	108
2008	53	50	69	87	79	86	96	99	92	76	69	44	99
2009	53	57	69	87	89	93	94	94	89	80	76	41	94
2010	44	31	74	74	88	91	97	103	85	87	71	43	103
2011	41	52	59	68	78	91	103	99	93	89	70	59	103
2012	63	48	82	89	90	99	104	107	102	81	64	62	107
2013	49	56	72	81	93	89	104	103	101	86	58	53	104
2014	52	49	67	79	90	88	96	97	93	85	67	61	97

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Maximum Annual
2015	62	72	82	84	88	98	101	104	102	91	73	58	104
2016	46	69	77	81	88	104	108	105	96	87	79	41	108
2017	45	71	71	80	93	101	106	101	100	84	75	59	106
2018	51	42	56	81	94	100	101	106	97	76	64	57	106
2019	51	50	55	86	86	94	94	93	93	80	65	46	94
2020	47	59	73	83	85	96	100	102	94	84	79	64	102
2021	53	58	73	85	87	102	110	107	99	92	71	67	110
2022	53	60	77	73	87	102	112	104	105	85	78	47	112
2023	48	61	47	90	89	98	103	98	104	89	70	63	104
2024	64	68	69	86	87	95	105	104	102	90	65	61	105
Mean	52	56	69	82	88	96	103	102	98	85	69	55	102

Vegetative Cover

Vegetative cover within the Project Area primarily consists of grassland and herbaceous species commonly found in prairie ecosystems. Vegetative cover within the Project Area has been disturbed by human activities including modifications in transportation right-of-ways (ROW), tilling of cropland, grazing activities, and planting of ornamental species found in manicured lawns or in developed areas. Other vegetated areas include moderately forested areas and wetland or riparian areas.

Most of the grassland and herbaceous vegetative cover is rangeland utilized for grazing cattle. Dominant grass species in this habitat-type include western wheatgrass (*Pascopyrum smithii*), green needlegrass (*Stipa viridula*), smooth brome (*Bromus inermis*), bluestem (*Andropogon L.*), sideoat grama (*Bouteloua curtipendula*), blue grama (*Bouteloua gracilis*), and sand dropseed (*Sporobolus cryptandrus*). Other species commonly present associated with grasslands in this ecoregion include yucca (*Yucca glauca*), western snowberry (*Symporicarpos occidentalis*), silver sagebrush (*Artemisia cana*), plains prickly pear (*Opuntia polyacantha*), common chokecherry (*Prunus virginiana*), wild plum (*Prunus americana*), prairie willow (*Salix humilis*), pincushion cactus (*Pediocactus sp.*), chokecherry (*Prunus virginiana L.*), globemallow (*Sphaeralcea A. St. Hil*), American vetch (*Vicia americana Muhl. ex Willd.*), fringed sagewort (*Artemisia frigida*), wild parsley (*Musineon Raf.*), plains onion (*Allium per dulce S.V. Fraser*), and evening primrose (*Oenothera caespitosa*). Transportation ROW within the Project Area have been disturbed for human use and consist of similar grass and herbaceous species listed above.

Deciduous and coniferous tree species occur in roadside ditches, drainages, woody draws, and near rural residences in the Project Area. Deciduous tree species observed in the Project Area during the 2024 field survey included eastern cottonwood (*Populus deltoides*), bur oak (*Quercus macrocarpa*), green ash (*Fraxinus pennsylvanica*), basswood (*Tilia americana*), silver maple (*Acer saccharinum*), and red maple (*Acer rubrum*). Coniferous species observed included ponderosa pine (*Pinus ponderosa*), blue spruce (*Picea pungens*), and eastern red cedar (*Juniperus virginiana*).

Wetlands and riparian areas contain dominant plant species such as cordgrasses, sedges, cattails, rushes, and other freshwater emergent species. Wetlands are found throughout the Project Area and consist of slope, riverine, and depressional types. Riparian areas are found along creeks and border larger wetlands within the

Project Area. Vegetation in riparian areas include species such as wheatgrasses, needlegrasses, brome, coniferous and deciduous tree species.

Tilled cropland and ornamental species in manicured lawns were identified within the Project Area. Species typically planted in tilled cropland include corn, soybeans, milo, millet, and sunflower. Manicured lawns in the Project Area include areas surrounding residences and a cemetery. Common species include Kentucky bluegrass (*Poa pratensis*), buffalo grass (*Bouteloua dactyloides*), and Dutch white clover (*Trifolium repens*).

Environmental Impacts of the No Action Alternative

Continued dependence on individual wells could draw down groundwater, further exacerbating the Reservation's vulnerability to impacts from future droughts and affect the viability of local agriculture.

Environmental Impacts of the Proposed Action Alternative

Land Use

The land use analysis evaluates the impacts of the Proposed Action and its impact on the existing land use as well as its adopted land use plans and policies. The impacts of the Proposed Action would be negligible within the Project Area due to future uses aligning with the current land use and cover. No conversion of land use or cover would occur due to the installation of the water distribution lines. Impacts would be temporary, and ground disturbed during construction would be returned to its existing land use and cover as described in the land use analysis. The proposed construction activities would be installed adjacent to or within existing transportation ROW and near residences where practical to provide water services. Under the CGP, BMPs would be implemented to reduce and prevent erosion, such as the utilization silt fence, straw wattles, vehicle tracking control, mulching, temporary seedings, and vegetative buffer strips, with erosion control blanket for any disturbed slopes greater than 5% if the trench is wider than six feet.

Easements and Public Land

No easements exist within the Project Area and no conversion of use would occur for School and Public Lands due to the Proposed Action. No impacts are anticipated to easements or public lands. Procedures for conducting construction on School and Public Lands would be completed as final routes are decided during the design process.

Ecoregions, Geology, Topography, and Soils

No environmental impacts are anticipated for ecoregions, geology, and topography in the Project Area. Negligible minor impacts on soil are anticipated due to disturbance during construction activities. Due to the nature of the Proposed Action, it is anticipated that soil extracted during trenching activities for the water service line would be replaced in the trench after installation, resulting in negligible changes to the existing topography. Topsoil would be salvaged and replanted with approved seed mixes in a timely manner.

The Proposed Action would have temporary impacts to soils, prime farmland, or important farmland in the Project Area. These temporary impacts would occur during construction but are not anticipated to have long-term adverse impacts on farmland. A response was received from NRCS on April 9, 2025, stating the project as outlined will have no impact on prime or important farmland. Refer to Appendix D for the Scoping Letters Responses.

Vegetative Cover

Minor temporary environmental impacts will occur to vegetative cover within the construction right-of-way within the Project Area. Implementation of the Proposed Action will disturb and remove vegetation in the construction right-of-way during construction activities. Disturbed areas (excluding row-crop agricultural land) would be re-seeded using seed mixes as recommended in the project manual and general notes for the Project Area. The South Dakota Department of Transportation (SDDOT) ROW and pasture seed mix (SDDOT Type A or engineer-approved equivalent) includes western wheatgrass (*Pascopyrum smithii*), green needlegrass (*Nassella viridula*), sideoats grama (*Bouteloua curtipendula*), blue grama (*Bouteloua gracilis*), and Canada wildrye (*Elymus canadensis*). For residential lawn areas, the seed mix (SDDOT Type D or engineer-approved equivalent) includes Kentucky bluegrass (*Poa pratensis*), alkaligrass (*Puccinellia*), Chewing's fescue (*Festuca ovina*), creeping red fescue (*Festuca rubra*), and perennial ryegrass (*Lolium perenne L.*). Grading and appropriate or adapted native species will be used to vegetate wetland banks to aid in soil stabilization. Within the construction right-of-way, trees will be avoided to the extent practicable. In areas where tree removal cannot be avoided, trees will be replanted in accordance with the project specifications and landowner preferences. In agricultural areas or other areas with pre-existing bare soil that will not be reseeded, topsoil shall be lightly compacted and leveled to avoid settlement after completion of construction. Topsoil in disturbed areas and areas traveled by construction traffic shall also be scarified, leveled, raked, and smoothed to the original contours. It is anticipated that row crops may be disturbed if construction commences during the growing season.

Reasonably Foreseeable Effects

The Proposed Action would support existing and forecasted future development needs, providing water to an unserved and underserved population on the Reservation. Present and future development in and around the Project Area is controlled by federal and tribal regulations. Future development in the area would comply with the tribe's management measures, minimizing effects to the environment. CRST is completing this work with the expectation of increasing opportunities for economic development and growth on the Reservation. CRST has had to limit this growth in the past due to inadequate water supply services.

Within the Project Area agricultural and ranching operations would continue. The water distribution system will provide services that could support future economic development for jobs, agricultural, and industrial growth, and other businesses that might develop within the Project Area.

The Proposed Action, when considered with past, present, and reasonably foreseeable future projects, would not result in significant effects to vegetation or land resources. Future development resulting from a quality, reliable water source may occur in or immediately adjacent to the Project Area, resulting in conversion of vegetated areas to impermeable surfaces (residential housing, streets, etc.), however, this conversion is not anticipated to be significant.

Cultural Resources

Affected Environment

USBR is the lead federal agency for this undertaking and is responsible for compliance with the National Historic Preservation Act (36 CFR Part 800.16[y]). Section 106 of the NHPA requires USBR to consider effects to historic properties when planning and implementing actions such as those identified in this EA. Two types of cultural resources are analyzed in this EA: historic properties and Native American traditional cultural properties.

For the purposes of cultural resources analysis, the Area of Potential Effect (APE) for the Proposed Action consists of a 30-m (100-ft) construction corridor centered around the proposed pipeline route. The corridor is on the Lantry NE and Lantry SE, 7.5-minute series, United States Geological Survey (USGS) Quadrangle map in the Black Hills Principal Meridian. The Level III survey was completed utilizing systematic intensive (100%) pedestrian inspection of the ground surface using compass- and GPS-controlled parallel transects no more than 7 m (23-ft) apart.

A report, Cultural Resource Inventory for the Northwest Eagle Butte Drought Resiliency Project, Cheyenne River Sioux Reservation, Dewey County, South Dakota, was submitted in compliance with the provisions of the National Historic Preservation Act of 1966, as amended (NHPA) (Public Law 89-665; 54 U.S.C 300101) and its Section 106 implementing regulations (36 CFR 800) and CRST Ordinance 57, Tribal Resolution No. 199-2011-CR.

A literature search and site file review occurred pursuant to CRST Ordinance 57, CRST Executive Resolution No. 199-2011-CR, and Section 106 of 36 CFR 800. This background search included a 1-mile buffer around the 100-ft corridors and utilized the South Dakota Archaeological Resource Center (SARC) site and survey records (online SARC ARMS database); South Dakota Cultural Resources Geographic Research Information Display (CRGRID – state register); National Register of Historic Places; and relevant cultural resource management reports. The site file review identified 12 previous cultural resource inventories within 1-mile of the corridor and one in the APE. These studies inventories identified three historic buildings or structures and two isolated finds within 1-mile of the APE and none within (Espinoza 2025).

During the Level III survey, all cultural manifestations older than 50 years and all traditional cultural properties regardless of age were recorded.

Historic Properties

When archaeological materials were encountered in the field, the survey was halted and an intensive examination was conducted to determine if the artifact was isolated, or part of a larger site. Archaeological sites were determined by the type, quantity, context, and integrity of the cultural remains noted at any particular location according to the qualifications set out by the South Dakota Guidelines for Complying with Federal and State Preservation Laws – State Historic Preservation Office – South Dakota State Historical Society 2023 (SHPO-SDSHA 2023). A site was defined as a location of purposeful prehistoric or historic human activity. An activity is considered to have been purposeful if it resulted in a deposit of cultural materials beyond the level of one or a few accidentally lost artifacts (termed Isolated Finds or IFs).

One prehistoric isolated find (IF), a single secondary Knife River Flint flake, was located within the APE.

Native American Traditional Cultural Properties

A traditional cultural property (TCP) can be defined generally as one that is [potentially] eligible for inclusion in the National Register of Historic Places (NRHP) 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 maintaining the continuing cultural identity of the community (Parker and King 1998). Eleven tribes, the Apache Tribe of Oklahoma, Cheyenne River Sioux, Cheyene and Arapaho of Oklahoma, Crow Creek Sioux, Fort Belknap Indian Community, Lower Brule Sioux, Oglala Lakota Nation, Rosebud Sioux, Santee Sioux, Sisseton-Wahpeton Oyate, and Standing Rock Sioux were all sent scoping letters and a map of the Project Area. No tribe identified any sacred sites based on the initial information provided. Lack of identification early in the planning process does not guarantee that such sites do not exist. USBR will continue to conduct tribal

consultations as the Proposed Action moves forward for completion.

During the Level III survey, TCPs or sacred sites were to be documented both through field observations and in consultation with the Cheyenne River Sioux Tribe Cultural Preservation Office. An effort was made to identify TCPs in the field that may include features such as rock cairns, stone circles, rock art, effigies, and intaglios or other stone alignments.

No TCPs were identified.

Environmental Effects of the No Action Alternative

Under the No Action Alternative, the Proposed Action would not be constructed; there would be no effect to historic properties or TCPs.

Environmental Effects of the Proposed Action Alternative

Historic Properties

The potential for direct effects on cultural resources from development, including ancillary facilities, is directly related to the amount of land disturbance and the location of a project. Also considered are the indirect effects, such as effects on the cultural landscape from erosion of disturbed land surfaces and increased human accessibility to possible site locations. Increases in human access can result in looting, vandalism, and trampling of cultural resources, and they could result from the establishment of corridors or facilities in otherwise intact and inaccessible areas.

Visual degradation of the setting associated with significant cultural resources, including rock art sites, could result from development. This could affect significant cultural resources for which visual integrity is a component of their significance, such as sacred sites and landscapes and historic trails. Noise degradation of settings associated with significant cultural resources and sacred landscapes also could result from the presence of development; this could affect the pristine nature and peacefulness of a culturally significant location.

One IF was located during the Level III investigation. The IF does not meet state or tribal standards for an archaeological site or federal standards for a *historic property*. The IF is recommended not eligible for inclusion in the NRHP.

Native American Traditional Cultural Properties

Issues identified in terms of TCPs and Native American sacred sites include changes in access or physical effects on properties and sacred sites. Project effects on these issues are described in terms of the presence of TCPs, sacred sites, or access to sites.

No TCPs were identified during the Level III investigation; no effects to TCPs are anticipated. In the event cultural resources or traditional cultural properties are encountered during construction, all ground disturbance activity within the area will be stopped, USBR and appropriate authorities will be notified, and all applicable stipulations of the NHPA will be followed. Activities in the area will resume only when compliance has been completed and appropriate measures implemented.

Paleontological Resources

Affected Environment

The fossil record of life in South Dakota extends back to the Cambrian Period, over five hundred million years ago. The oldest exposed rocks containing fossils in South Dakota are composed of the Deadwood Formation in the Black Hills that consist of marine fossils, such as brachiopods (clam-like animals) and trilobites from the late Cambrian period. Skolithos burrows are also found in the Deadwood formation, suggesting the presence of marine worm-like animals (Sarnoski 2015).

During the latter part of the Precambrian Era into the early Paleozoic Era, around 541 million years ago, South Dakota was severely eroded, creating a flat plain interrupted by ridges of resistant rocks. The western part of South Dakota was covered by a warm, shallow sea during the Paleozoic Era. During this time, there were also periods when the sea would retreat from the western part of the state, as continental seas advanced from and retreated to the main oceans. It is known that seas covered the state during the Paleozoic because the types of rocks – mostly limestone, dolomite, shale, siltstone and evaporates – and fossils indicate marine environments (SDGS 1999). During the Late Mississippian Period, around 330 million years ago, the Black Hills began forming sinkholes and caves in the upper part of the limestone surface. Most of the fossils are remains of invertebrate animals such as gastropods, bivalves (clams), brachiopods, corals, stromatoporoids (sponge-like animals), trilobites, and echinoderms (PRI 2015).

The Reservation is situated within the Hell Creek Formation, which was formed during the Cretaceous period approximately sixty-six million years ago. This formation consists of mudstones, sandstones, clay, and shale deposits. The Hell Creek Formation is known to specifically contain lignite deposits, which is a soft coal that was formed from naturally compressed peat; soil formed from plant matter (USGS 1950). The Hell Creek Formation is located approximately 13 miles west and northwest of the Project Area and has preserved different species of plants, invertebrates, fish, reptiles, amphibians, mammals, and, most notably, dinosaurs.

On August 12, 1990, a fossil hunter found a small section of bone sticking out of a cliff face located on the Reservation within the Hell Creek Formation. After seventeen days, six people were able to extract fossilized *tyrannosaurus rex* (T-rex) bones from the soil. The T-rex, Sue, is one of the largest and most complete *tyrannosaurus rex* skeletons ever found, with nearly 90% of the bones recovered. After a five-year legal battle over custody rights to the dinosaur, Sue was sold at a public auction in 1997 for 8.4 million dollars to the Field Museum in Chicago, Illinois (Field Museum 2018).

After the legal dispute surrounding Sue, laws surrounding the ownership of discovered prehistoric fossils found on federal land would be underway. In 2009, the Paleontological Resource Preservation Act (PRPA) (P.L. 111-011 Title VI Subtitle D) was approved and became law as part of the Omnibus Public Land Management Act of 2009 (Hein Online 2021). Under the PRPA of 2009 (16 U.S.C. 470aaa), paleontological resources, which includes any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, are protected and may not be collected from federal land without a permit issued by the Secretary of the Department of Interior. The PRPA does not apply to state, private, or Tribal lands.

Environmental Effects of the No Action Alternative

Under the No Action Alternative, the Proposed Action would not be constructed; there would be no effect on paleontological resources.

Environmental Effects of the Proposed Action

Because the Proposed Action includes ground disturbing activities, there is potential for encountering paleontological materials during construction actions. If needed, the USBR and/or the Tribe would contact a qualified paleontologist to assist with identifying areas that are suspected to contain paleontological resources. If a sensitive resource is identified in proximity to the Project Area, the resource will be avoided, and the nearby ground disturbance monitored by qualified personnel. The monitoring will consist of an examination of the exposed area, including the spoil or storage piles at key times. These times are dependent on the activity, but typically are when bedrock is initially exposed, occasionally during active excavation, and when the maximum exposure is reached and before backfilling has begun. This monitoring and spot-checking must be performed by a permitted paleontologist. The paleontologist has the authority to require a halt in activity at the location while a suspected find is evaluated and reported if necessary.

If unknown paleontological resources were discovered during construction activities, construction would be halted until the USBR's Dakotas Area Office archeologist is notified and appropriate consultations are completed. A professional paleontologist will be contacted to determine the significance of the find and any mitigation measures will be implemented prior to the project moving forward in the vicinity of the find. Unauthorized collecting or digging, vandalism, or other methods of destruction to paleontological resources are not permitted. PRPA does not apply to state, private, or Tribal lands. Therefore, USBR, the Tribe, and the appropriate Federal Agency (land manager), would need to be notified if the project discovers evidence of these types of activities on project lands. Additionally, USBR will make every effort to protect the site from further effects, including looting, erosion, or other human or natural damage.

Air Quality

Affected Environment

The primary regulatory authority for air quality on the Reservation is the USEPA. The ambient air quality in an area can be characterized in terms of whether it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). Criteria pollutants tracked under the USEPA's NAAQS include sulfur dioxide (SO₂), particulate matter (PM), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb), and carbon monoxide (CO).

Areas are designated as "attainment," "non-attainment," "maintenance," or "unclassified" with respect to meeting the established NAAQS for identified pollutants. Regions in compliance with the standards are designated as attainment areas. Areas that do not meet the NAAQS for a pollutant are designated as a non-attainment area for that pollutant. South Dakota does not currently have any non-attainment areas (USEPA 2025).

Environmental Impacts of the No Action Alternative

Under the No Action Alternative, the Project would not be constructed and there would be no impact on air quality in the Project Area.

Environmental Impacts of the Proposed Action

The Proposed Action is not anticipated to have a long-term adverse impact on the air quality in the area. The Proposed Action is likely to have temporary minor impacts to air quality within the state, with impacts resulting from source and fugitive emissions. Point source emissions may require an air quality permit through the USEPA.

Socioeconomics

Socioeconomics, in general, include the basic attributes and resources associated with human activities, including population characteristics, economic assets, and economic activity. Human population is affected by regional birth and death rates as well as net in- or out-migration. Economic activity typically comprises employment, personal income, and industrial growth. Effects on these two fundamental socioeconomic indicators can also influence other components such as housing availability and public services provisions. Socioeconomic status encompasses not only income but also educational attainment, occupational prestige, and subjective perceptions of social status and social class (APA 2024).

Executive Order 13045 addresses concerns that environmental health or safety risks may disproportionately affect children (EPA 1997). It also promotes federal agency policies, programs, activities, and standards to address environmental risks and safety risks to children.

Federal agencies must comply with federal work and public safety laws as well as with agency regulations, policy and guidance. Actions that would affect the health and safety of base employees and contractors, or that would extend to affect the general public would be considered significant. Actions or activities that are not compliant with current laws and regulations would likewise be considered significant. The significance of safety issues can be mitigated by rigorous application of safety standards and practices.

Affected Environment

Population and Projected Changes

Based on U.S. Census Bureau data, the 2024 population of residents living in Dewey County has increased by 21 people since the 2010 Census. The average percentage change in population from April 2020 to July 2024 for Dewey County and seven surrounding counties has shown a 0.66% decrease in population. South Dakota has increased in population overall from April 2020 to July 2024 by 4.3% (USCB 2024a). Refer to Table 6 for population and demographic trends for Dewey County, surrounding counties, and South Dakota.

The predominant minority group in South Dakota and in Dewey County is Native American, represented as “American Indian/Alaskan Native” in the USCB statistics. Dewey County lies within the boundary of the Reservation. The current estimated CRST enrollment is 15,993 members (USDOI 2024). It is important to note that the United States Census Bureau typically finds the populations living on reservations are undercounted (USCB 2022).

Table 6: Population Trends for Dewey County, Surrounding Counties, and South Dakota

Location	Population in 2010	Population in 2020	Population Estimate in 2024	Percent Change April 2020- July 2024
Corson	4,050	3,902	3,747	-3.8%
Dewey	5,301	5,239	5,322	1.5%
Haakon	1,937	1,872	1,834	-2.1%
Potter	2,329	2,472	2,402	-2.9%
Stanley	2,966	2,980	3,015	1.2%
Sully	1,373	1,446	1,468	1.5%
Walworth	5,438	5,315	5,270	-0.9%
Ziebach	2,801	2,413	2,418	0.2%
Average	3,274	3,205	3,184	-0.66%
South Dakota	814,180	886,667	924,669	4.3%

Source: (USCB 2024a)

Economic Conditions

When comparing surrounding counties, the county average, and state averages, the percentage of individuals living below the poverty level in Dewey County is higher. Employment change for Dewey County was also higher than most of the seven surrounding counties and state statistics. Employment change refers to the number of employed people in the economy. The percentage employment change is calculated by subtracting the previous year's employment figure from the next year employment figure, identifying an increase or decrease of employed people because of the economy (USCB 2024a). Dewey County has a lower median household income (\$57,928) when compared to the county average (\$61,242) and the state average (\$72,421). Per capita income was also lower when comparing averages of Dewey County (\$21,940) to the county average (\$34,483) and the state average (\$38,880). Refer to Table 7 for statistics for the calculated averages, county, and state statistics.

When comparing Dewey County to the seven surrounding counties and state statistics, the percentage of individuals living below the poverty level in Dewey County is second highest to Corson County. Employment change for Dewey County was higher than the seven surrounding counties and state statistics. Employment change refers to the number of employed people in the economy. The percentage employment change is calculated by subtracting the previous year's employment figure (2021) from the next year employment figure (2022), identifying an increase or decrease of employed people because of the economy (USCB 2024a). Dewey County has a lower median household income (\$57,928) than five of the seven surrounding counties and the state statistic. Per capita income for Dewey County was second lowest to Corson County and is lower than the state statistics. Refer to Table 7 for statistics of surrounding counties, Dewey County, and South Dakota.

Table 7: County and State Statistics for Economic Conditions

Location	Persons in Poverty (2023)	Employment Change (2021-2022)	Median Household Income (2019-2023)	Per Capita Income (2019-2023)
Corson	33.7%	34.2%	\$43,750	\$20,743
Dewey	26.2%	34.4%	\$57,928	\$21,940
Haakon	10.6%	0.3%	\$59,231	\$35,643

Location	Persons in Poverty (2023)	Employment Change (2021-2022)	Median Household Income (2019-2023)	Per Capita Income (2019-2023)
Potter	9.2%	2.9%	\$71,726	\$37,661
Corson	33.7%	34.2%	\$43,750	\$20,743
Stanley	7.6%	6.3%	\$77,000	\$48,110
Sully	7.6%	3.1%	\$70,250	\$47,550
Walworth	15.8%	-8.8%	\$62,722	\$37,717
Ziebach	46.2%	-38.2%	\$47,333	\$26,500
South Dakota	11.8%	2.7%	\$72,421	\$38,880

Source: (USCB 2024a)

Protection of Children

Protection of Children is analyzed under the Socioeconomics section of this document. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (21 April 1997), requires each federal agency to identify and assess environmental health risks and safety risks that may disproportionately affect children. Agencies must ensure their policies, programs, and activities address disproportional environmental, health or safety risks to children. No risks are present within the Project Area that would cause:

1. Children's bodily systems to not be fully developed.
2. Children to eat, drink, and breathe more in proportion to their body weight.
3. Alteration in children's size and weight to diminish protection from standard safety features.
4. Alteration in children's behavior patterns to make them more susceptible to accidents.

The USBR is required by EO 13045 to ensure its actions do not disproportionately affect children. Currently, thirty-seven households are unserved by the MWWC and rely on hauled water or inadequate wells. This creates a situation where children may not receive the amount and quality of water needed to thrive. The Proposed Action would provide a reliable source of quality drinking water to the residences and improve the children's access to water.

Drought Effects

Drought represents a significant vulnerability for the CRST, affecting both the immediate quality of life and the long-term sustainability of their communities. The scarcity of water can lead to numerous challenges such as reduced agricultural productivity, compromised access to clean drinking water, and heightened risks of wildfires. Additionally, the ecological balance of the region, which is vital to the tribe's cultural heritage, can be severely disrupted by prolonged periods of drought.

The reliance of residents on inadequate wells makes them particularly susceptible to the effects of drought, forcing people to depend on expensive and less sustainable methods of water procurement, such as hauling water. This not only strains economic resources but also poses health risks, especially to children, who are more vulnerable to the effects of water scarcity.

Addressing drought vulnerability requires proactive measures and resilient infrastructure. Implementing the Proposed Action would significantly mitigate these issues by providing a reliable water supply system, ensuring that the residents have access to an adequate and safe water source. The Proposed Action would enhance the

CRST's ability to withstand drought conditions and support their socioeconomic development.

Environmental Impacts of the No Action Alternative

The No Action Alternative would have a net negative impact on socioeconomics, since it would result in the eventual abandonment of service to rural residents. Residents would continue using inadequate wells or hauling water. Not installing the water supply service would hinder economic development and population growth in rural Dewey County. The residents in the Project Area would remain vulnerable to drought.

Environmental Impacts of the Proposed Action Alternative

Negative impacts on socioeconomic conditions resulting from the Proposed Action are not anticipated. Beneficial impacts are anticipated due to the installation of the water supply system. While economic benefits may not be drastic or occur immediately, benefits would be long-term for the life of the MWWC water service. The Proposed Action would provide water to residences on the Reservation. In addition, it will extend distribution lines to more rural areas of the Reservation and improve the drought resiliency. The expansion of the water distribution system will provide services that could support future economic development for jobs, agricultural and industrial growth, and other businesses that might develop within the Project Area. The Proposed Action would furthermore positively affect public services and economic development projects within the Project Area.

The temporary impacts due to the Proposed Action should not disproportionately affect children. The public health and economic benefits of the Proposed Action would far outweigh any temporary effects.

No mitigation is required for socioeconomics or protection of children within the Project Area for the Proposed Action.

Reasonably Foreseeable Actions

MWWC is currently constructing a treated water pipeline along South Dakota Highway 63 and Highway 20 in Dewey County to increase the reliability, efficiency, and capacity of the MWWC system. The construction will allow MWWC to expand service within the Reservation and surrounding areas but will not address the distribution issues for the residents in the Project Area.

As noted throughout this EA, the residents in the Project Area are currently hauling water or using onsite groundwater wells. There have been no past actions to provide treated drinking water to these unserved and underserved residents.

Reasonably foreseeable future actions include those federal and non-federal activities not yet undertaken, but sufficiently likely to occur, that a Responsible Official of ordinary prudence would take such activities into account. Reasonably foreseeable future actions do not include those actions that are highly speculative or indefinite (43 CFR 46.30). Continued residential development, agricultural improvements, and electrical grid developments are all reasonably certain to continue to occur on the Reservation but are subject to approval from other permitting agencies (CRST, BIA, USEPA, etc.). As the distribution system is improved, the CRST expects to continue developing improved housing options.

All MWWC and CRST operation and maintenance activities for current and future facilities are generally associated with the production and delivery of potable drinking water within the Reservation. Maintenance, repair, and replacement activities would typically include upkeep of treatment and storage facilities and distribution lines and other routine activities.

Repair of pipe leaks would be considered routine if work is within prior disturbed areas in existing pipeline easements and/or rights of way. Any repair work outside these areas may require additional site assessments and surveys as outlined in the Environmental Commitments Section of this EA. All Environmental Commitments will be followed during all maintenance and construction activities.

Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States for Indian tribes or individuals (USDOI 1993). USDOI Secretarial Order No. 3335 – Reaffirmation of the Federal Trust Responsibility to Federally Recognized Indian Tribes and Individual Indian Beneficiaries – was issued August 24, 2014, setting forth guiding principles that bureaus and offices will follow to ensure that USDOI fulfills its trust responsibility (USDOI 2014).

ITAs can be based upon physical presence, monetary value, or cultural value. Physical ITAs include the land, natural resources, water, biological organisms, and instream flows associated with trust lands. ITAs that could hold both monetary value and cultural value would be Trust funding, hunting and fishing rights, and water rights. Monetary ITAs can include revenue generation for the use of tribal lands such as grazing and farming, or ITAs may hold a monetary value for land held in trust for allottees. Management of ITAs is a highly complex task, as variations in land ownership form a checkerboard of Tribal and non-Tribal properties – mainly land held in trust by the United States government (trust lands, tribal lands, and allotted lands); and land removed from trust and owned outright by tribal members (tribal fee lands) and by non-tribal individuals (fee lands). Some ITAs may be located outside external Reservation boundaries and may be located on or off tribally owned lands. The Tribe enjoys reserved water rights in the Missouri River Basin as well as related groundwater, in an amount sufficient to fulfill the purposes of the Reservation (CRST 2017).

Affected Environment

The Project Area lies within the exterior boundary of the CRST. CRST-owned lands, along with lands held in trust by the United States, are located within the Project Area. Trust lands are held for the benefit of tribal nations and individual tribal members and are subject to federal oversight. These lands are administered by the BIA, which is responsible for managing land use, development approvals, and resource protection in accordance with federal policies and tribal agreements. As a result of CRST owning land that would potentially be affected by the Proposed Action, it is anticipated that physical ITAs, monetary ITAs, and cultural ITAs occur on these lands and other non-Tribal owned land in the Project Area.

Indian water rights are an ITA associated with implementation of the Proposed Action. CRST water right to the Missouri River stems from the 1908 Supreme Court decision in *Winters v. the United States*, which enunciated the Winters Doctrine. The Winters Doctrine water rights have an appropriation date based on the date the reservation was established. In 2023, MWWC provided its source of drinking water (both tap water and bottled water) from rivers, lakes, streams, ponds, reservoirs, springs, and wells (Tri-County/Mni Waste' Rural Water System 2023). This supply serves more than 3,263 customers an average of 931,000 gallons of water per day (Tri-County/Mni Waste' Rural Water System 2023). The CRST has Winters Doctrine water rights from the Missouri River (Lake Oahe), which is the only reliable quantity of source water in the geographic area.

USACE is responsible for the operation of reservoirs within the Missouri River basin, including Lake Oahe. Under Winter's Doctrine, the USACE recognizes that American Indian Tribes are entitled to water rights in streams running through and along Reservation boundaries. The USACE recognizes tribal water rights to the Missouri River regardless of whether these rights have not been quantified or adjudicated and in effect, if the

CRST adjudicated their water right on Lake Oahe, the USACE would consider it an existing depletion and adjust operations accordingly.

ITAs occur within the Project Area and are identified in the Cultural Report completed by Espinoza Consulting.

Environmental Impacts of the No Action Alternative

Under the No Action Alternative, Tribal trust and allotted lands would not be disturbed and construction of the Proposed Action would not occur. Benefits would not be realized to tribal members and landowners as additional water supplies would not be made available to rural residents, tribal members, and other users of the MWWC. There would be no impact on ITAs.

Environmental Impacts of the Proposed Action

Although the Proposed Action would affect ITAs within the Project Area, the impacts would be for the benefit of the Tribe and rural residents that would be receiving the water service. No taking or conversion of land ownership would be completed as a result of the Proposed Action. Installation of the water service line may require temporary construction easements throughout the construction process. Therefore, impacts on the ITAs would be temporary during construction.

Although the Proposed Action would affect the CRST's Winters Doctrine water rights, it would be for the benefit of the Tribe. The Proposed Action would result in beneficial impacts to the CRST by increasing the potable water supply throughout the Reservation. Winters Doctrine water rights have a priority date of when the reservation was established and not when Winters Doctrine water rights are quantified. The Proposed Action is not anticipated to adversely affect other tribal water rights in the Missouri River Basin.

The Proposed Action would result in beneficial impacts to the CRST by increasing the water supply throughout the Reservation. No ITAs that hold monetary or cultural value would be affected as a result of the Proposed Action. Monetary values such as trust funds or other means of generated revenue would not be affected due to the scope of the Proposed Action and construction process.

Summary Overview of Project Impacts

Table 8 summarizes the potential environmental impacts as a result of implementing the Proposed Action to Surface Waters, Wildlife and Fisheries, Threatened and Endangered Species, Land and Vegetation Resources, Cultural Resources, Paleontological Resources, Air Quality, Socioeconomics, and ITAs. Most impacts resulting from the Proposed Action would be temporary in nature. Any permanent impacts are identified below, and the necessary environmental commitments are provided with respect to the resource.

Table 8: Summary of Potential Impacts of the Proposed Action Alternative

Resource	Temporary Impacts	Permanent Impacts
Surface Waters	<p>Temporary disturbance during construction activities has the potential to cause erosion and sedimentation. BMPs would be installed to prevent impacts to the maximum extent practicable. All temporary impacts would be restored to pre-project use and condition.</p> <p>The distribution line would be directionally bored under Green Grass Creek if the creek is flowing. If the creek is dry, the line would be installed through open trench construction, which would result in 0.005-acre of temporary impact. The shortest practicable alignment would be used to minimize disturbance if constructing in the dry creek.</p> <p>The proposed construction activities would result in approximately 3.785-acres of temporary wetland impact.</p>	None anticipated.
Wildlife and Fisheries	<p>Temporary disturbance to fish and wildlife habitats would occur under the Proposed Action. Construction impacts would be temporary and wildlife species dispersed during construction would be expected to return to the Project Area upon project completion. No permanent conversion of grassland or wetland habitat would occur as a result of the Proposed Action.</p> <p>No impacts are anticipated for construction activities occurring through Green Grass Creek due to water service lines being directionally bored under the creek or constructed during dry period in the creek. Wildlife may be displaced during construction activities due to</p>	If tree removal is needed, removal will be a permanent impact. An insignificant number of trees occur along the construction right-of-way; the number of trees that would need to be removed is small.

Resource	Temporary Impacts	Permanent Impacts
	human disturbance but would be expected to return to the Project Area upon project completion.	
Threatened and Endangered Species	Impacts to vegetation and habitats due to construction would be temporary during construction. No adverse effects to listed or proposed threatened and endangered species populations or habitats are anticipated.	If tree removal is needed, removal will be a permanent impact. An insignificant number of trees occur along the construction right-of-way; the number of trees that would need to be removed is small. Trees identified as suitable habitat for the NLEB would be either removed outside of the active season of the NLEB or surveyed for presence/absence prior to removal if removal would occur within the active season of the NLEB.
Land and Vegetation Resources	Impacts would be temporary, and disturbed ground during construction would be returned to its existing land use	None anticipated.

Resource	Temporary Impacts	Permanent Impacts
	and vegetative cover. Temporary conversion of land use would occur during construction but would be expected to return to pre-project uses after the project is complete.	
Cultural Resources	None anticipated.	None anticipated.
Paleontological Resources	None anticipated.	None anticipated.
Air Quality	Impacts to air quality as a result of heavy equipment emissions would be minimal and temporary during construction.	None anticipated.
Socioeconomics	No temporary effects are anticipated from the Proposed Action.	Positive permanent impacts due to increased water supplies supporting economic development to the local economy and encouragement of population growth in rural Dewey County.
Indian Trust Assets	Temporary impacts to ITAs during construction. Installation of the water service line may require temporary construction easements throughout the construction process.	None anticipated.

Temporary Impacts

Temporary impacts from the Proposed Action primarily originate from construction activities. Temporary disturbance to soils and vegetation would occur as a result of common construction equipment within the Project Area and construction corridor. Once construction is complete, all temporary workspaces will be shaped to the original conditions, contours, and elevations. Reseeding and plantings would occur in the late fall or early spring in areas where vegetation existed prior to construction. Agricultural fields that maintained bare earth would be returned to pre-project conditions. Construction activities will follow the environmental commitments included under the Proposed Action. Refer to Table 10 for Required Environmental Commitments for the Proposed Action.

Permanent Impacts

Permanent impacts include those impacts that would occur from installing the water system infrastructure. The infrastructure will provide beneficial permanent impacts such as a clean and efficient delivery of water and continued service to rural residents along the planned route. The environmental resources that experience this permanent impact include socioeconomic and ITAs. The permanent impact is a beneficial impact by

increasing the water service supply to the unserved and underserved population within the boundary of the Reservation.

Rural residents of Dewey County along the route would benefit from improved water delivery system, improved water quality, and increased water supply. In addition, rural development, public health, and livestock operations currently limited by available groundwater sources and may benefit from the expanded service, resulting in potential economic gains in the area.

Table 9: Summary Impacts Comparison of the No Action and Proposed Action Alternatives

Resource	No Action	Proposed Action
Surface Waters	No impact.	Potential temporary increases in sedimentation from construction related disturbances. Construction BMPs would be implemented to minimize any potential increases.
Wildlife and Fisheries	No impact.	No impact. Temporary disturbance to habitat would occur under the Proposed Action. Construction would be temporary and wildlife species dispersed during construction would return upon completion. No impacts are anticipated for construction activities occurring in Green Grass Creek due to water service lines being directionally bored under the creek or constructed during dry periods.
Threatened and Endangered Species	No effect.	No permanent effect. Construction activities would be temporary, tree removal would occur outside of the active season of the NLEB. An insignificant number of trees will be removed as a result of the Proposed Action.
Land and Vegetation Resources	No impact.	No impact. No permanent conversion of land use or vegetative cover would occur under the Proposed Action. Impacts would be temporary, and disturbed ground during construction would be returned to its existing land use and vegetative cover.
Cultural Resources	No effect.	No effects are anticipated.
Paleontological Resources	No effect.	No effects are anticipated.
Air Quality	No impact.	No impact. Impacts to air quality as a result of heavy equipment emissions would be minimal and temporary during construction.

Resource	No Action	Proposed Action
Socioeconomics	Net negative impact on socioeconomics. The no action alternative would result in the eventual abandonment of service to rural residents.	Positive impact. Increased water supplies support economic development to the local economy or encourage population growth in rural Dewey County.
Indian Trust Assets	No impact.	No ITAs that hold monetary or cultural value would be permanently affected as a result of the Proposed Action. The Proposed Action would result in beneficial impacts to the CRST by increasing the water supply throughout the Reservation.

Chapter 4: Environmental Commitments

Environmental commitments would be implemented to:

1. prevent, minimize, or offset the occurrence of, or potential for, adverse environmental effects, and,
2. ensure compliance with applicable Federal and State regulations designed to protect surface waters, wildlife and fisheries including threatened and endangered species, land and vegetation resources, cultural resources, paleontological resources, air quality, socioeconomics, and Indian Trust Assets.

Environmental commitments applicable to the Proposed Action's construction activities are described in Table 10.

Table 10: Required Environmental Commitments for the Proposed Action

Environmental Commitments
Surface Waters, Wetlands, Floodplains
Construction through wetland basins will occur through open trench methods. Existing basin contours will be restored, and trenches will be sufficiently compacted to prevent any drainage along the trench or through bottom seepage. Green Grass Creek will be directionally bored unless site conditions allow for trenching.
Project proponent and contractor will be responsible for compliance with Section 404 of the Clean Water Act and avoid permanent impacts to jurisdictional wetlands. NWP 58 authorizes

<p>activities "required for the construction, maintenance, repair, and removal of utility lines for water...provided the activity does not result in the loss of greater than ½-acre of waters of the United States." NWP 58 requires pre-construction notification if a Section 10 permit is required, or the discharge will result in greater than 0.10 acre of waters of the United States.</p>
<p>If unavoidable permanent impacts to jurisdictional wetlands are necessary, the USBR and MWWC will develop a compensatory wetland mitigation plan and concurrently implement the plan after review and approval by the USACE.</p>
<p>To minimize water quality impacts, Green Grass Creek will be directionally bored. However, if construction would commence later in the summer or fall when the creek is dry, the distribution line could be installed using open trench methods.</p>
<p>Utilize industry standard BMPs such as silt curtains, straw wattles, and silt fences during construction.</p>
<p>Use the shortest practicable alignment to minimize disturbance if constructing in the dry creek bed.</p>
<p>Project proponent and contractor will be responsible for compliance with Section 402 of the Clean Water Act, the CGP for stormwater discharges associated with construction activities, and the SWPPP.</p>
<p>The CGP and SWPPP require BMPs to minimize erosion and sedimentation from the construction activities to the maximum extent practicable, and to prevent spills and leaks of hazardous substances.</p>
<p>Industry standard BMPs will be utilized and retained until construction is complete, all disturbed areas have been reclaimed and stabilized with at least 70% of the preconstruction native vegetation, and a NOT has been submitted to the USEPA to terminate coverage under the CGP.</p>
<p>The maximum length of open trenches will be limited to 1,000 feet at one time and all trenches will be backfilled the same day they are excavated.</p>
<p>No above ground structures will be constructed in the floodplain that could interfere with the above ground movement of floodwaters.</p>

Environmental Commitments
Surface Waters, Wetlands, Floodplains (Cont'd.)
All equipment will be cleaned prior to entering construction sites to prevent potential introduction and spread of invasive species, as described in all construction contracts.
Topsoil will be saved and stockpiled separately from subsoil. Stockpile areas for these materials will be established within the construction footprint.
Good housekeeping practices will be required under the CGP to minimize impacts to surface waters and wetlands due to vehicles and equipment. At a minimum, the following BMPs shall be followed: All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage Vehicles shall be well-maintained and shall be refueled and serviced only in contained areas of the site. If practicable, maintenance and refueling should be done offsite. Any spills shall be cleaned up immediately after discovery and waste properly disposed of.

Environmental Commitments
Fish and Wildlife Species and Habitats
To the extent practicable, construction will avoid sensitive areas such as wetlands, woody draws, and intermittent drainages.
To reduce temporary impacts to suitable habitats, the disturbance will be located in or near previously disturbed areas along established roads or driveways where practicable.
Threatened and Endangered Species
If threatened or endangered species are identified and encountered during construction, all construction activities in the immediate area will be stopped until USBR can consult with the USFWS to determine appropriate steps to avoid affecting the species.
MWWC is responsible for compliance with the Migratory Bird Treaty Act. If work would occur during the grassland ground-nesting migratory bird season (May 1 – July 15), any project area containing suitable habitat would be mowed or cleared prior to May 1. Preconstruction nesting surveys are recommended if mowing or clearing is not possible. If work would occur during the raptor nesting season (Feb 1-July 15), woody vegetation to be removed would be cleared for occupancy prior to construction.
MWWC is responsible for compliance with the Bald and Golden Eagle Protection Act. Construction within 660 feet of visible (330-feet if visual screen exists) nesting bald eagles will be avoided from February 1- July 15. Construction within 0.5 mile of visible (660-feet if visual screen exists) nesting golden eagles will be avoided February 1 – July 15.
<u>Northern long-eared bat:</u> Tree removal will only occur during the NLEB inactive period (November 1 st through April 14 th). If trees need to be removed during the active season of the NLEB (April 15 th to October 31 st), a qualified biologist will conduct a species presence/absence survey of the suitable habitat trees within the Project Area and submit the

report to USBR for concurrence. A suitable tree is defined as any tree with diameter at breast height greater than 3-inches and containing sloughing bark, snags, or crevices.

Whooping crane: If a whooping crane is identified within one mile of the Project Area, all work would cease until the bird leaves the Project Area and USFWS would be contacted. The spring whooping crane migration period is from April 1st to May 15th, and the fall migration season is September 10th to October 31st.

Monarch butterfly, Suckley's cuckoo bumblebee, and western regal fritillary: Re-seeding of the disturbed construction right-of-way will occur after construction is complete. Re-seeding of milkweed, the monarch butterfly's host plant, is not included in the recommended seed mix in the project manual and general notes. Re-seeding of milkweed is not required.

Environmental Commitments

Construction Practices

Comply with all appropriate Federal, State, Local, and Tribal laws.

MWWC and the contractor are responsible for compliance with the CGP.

Follow the BMPs for construction, restoration, and maintenance listed within the construction specifications and the stormwater pollution prevention plan.

Maintain instream flow during stream crossing construction.

Use the shortest practicable alignment to minimize disturbance in crossing streams.

Erosion control measures will be employed as detailed in the SWPPP:

Care will be exercised to preserve existing trees along the streambank.

Stabilization, erosion controls, restoration, and re-vegetation of all streambeds and embankments will be carried out as soon as a stream crossing is completed. BMPs will be maintained until at least 70% of the pre-construction vegetation is established.

All construction waste materials and excess or unneeded fill associated with construction will be disposed of on uplands, non-wetland areas, or permitted landfills or rubble sites.

Standard construction industry dust abatement measures will be taken to minimize fugitive dust emissions during construction activities. Any complaints that may arise will be dealt with in a timely and effective manner.

Under the CGP, BMPs will be implemented to reduce and prevent erosion, such as the utilization silt fence, straw wattles, vehicle tracking control, mulching, temporary seedings, and vegetative buffer strips, with erosion control blanket for any disturbed slopes greater than 5% if the trench is wider than six feet.

Disturbed areas will be re-seeded using seed mixes appropriate for the Project Area. On specific parcels where landowners have requested replacement of trees, trees shall be replaced early in the next planting season at locations designated by the Engineer with the landowner's approval. Trees on these parcels shall be replaced on a 2:1 basis. Any newly planted trees or shrubs that die shall be removed and replaced as directed, with such replacements being maintained for a period of 1 year from the date of replacement. Refer to

the Right-of-Way Tables in the Drawings for specific parcels where tree removal/replacement is required.
If established survey benchmarks must be removed or should any monuments be dislodged or damaged during construction, the National Geodetic Survey (Attn: N/CG 162, Rockville, Maryland 20852) will be contacted and survey benchmarks shall be reestablished.
In grasslands, forested areas, wetlands, and riparian areas, allow vegetation to reestablish post construction. Topsoil in the areas not reseeded shall be lightly compacted and leveled to avoid settlement after completion of construction and reclamation of the site. Topsoil in disturbed areas and areas traveled by construction traffic shall also be scarified, leveled, raked, and smoothed.
Point source air emissions may require an air quality permit; contact the USEPA to determine the need for permitting.

Environmental Commitments
Historic Properties and Culturally Sensitive Areas
All ensuing activities will comply with the National Historic Preservation Act (NHPA), as amended, and the Archaeological Resource Protection Act (ARPA) [16 U.S.C. 470aa-470mm; Public Law 96-95 (1979)]. Under ARPA, historic properties, which may include rock art sites, historic buildings or structures, or historic or prehistoric artifacts, are protected. Unauthorized collecting or digging, vandalism, or other methods of destruction to historic properties are not permitted.
The Tribes will be consulted concerning shareable information on the locations of unmarked burials or cemeteries. All such burials or cemeteries will be avoided to the extent practicable. If a burial or cemetery cannot be avoided or is encountered during construction, USBR will comply with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et seq. [Nov. 16, 1990]) if graves are discovered on Federal or trust lands or within CRST boundaries.
The Tribes will be consulted regarding any shareable information regarding traditional cultural properties that could be affected by construction. Under the National Park Service National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties (TCP), a TCP is a historic property that derives its significance from the role it plays in a community's historically rooted beliefs, customs, and practices. USBR will consult with the appropriate THPO(s) to avoid impacts to TCPs and accommodate access to the sites (Executive Order 13007).
In the event cultural resources, traditional cultural properties, human remains, or unanticipated effects on historic properties are encountered during construction, all ground disturbance activity within the area will be stopped, USBR, CRST THPO, and all other appropriate authorities will be notified, and all applicable stipulations of the NHPA will be followed pursuant to 36 CFR § 800.13. Activities in the area will resume only when compliance

<p>has been completed and appropriate measures implemented.</p> <p>A CRST-Certified Traditional Cultural Specialist Monitor must be present during project construction pursuant to CRST Tribal Resolution No. 199-2011-CR.</p>

Environmental Commitments
Paleontological Resources
USBR and/or CRST will contact a qualified paleontologist to assist with identifying areas that may contain paleontological resources. If a sensitive resource is identified in proximity to the Project Area, the resource will be avoided, and the nearby ground disturbance monitored by qualified personnel. The monitoring will consist of an examination of the exposed area, including the spoil or storage piles at key times.
USBR, the CRST, and the appropriate Federal Agency (land manager), will need to be notified if paleontological resources are identified during construction on federal lands.
If paleontological resources are discovered during construction activities, construction will be halted until the USBR's Dakotas Area Office archeologist is notified and appropriate consultations are completed. A professional paleontologist will be contacted to determine the significance of the find and any mitigation measures will be implemented prior to the project moving forward in the vicinity of the find.
USBR will make every effort to protect a paleontological resources site from further effects, including looting, erosion, or other human or natural damage.

Chapter 5: Agency Consultation and Coordination

This chapter identifies the names and qualifications of the principal people contributing information to this EA and a list of agencies contacted for comments on the proposed project. In accordance with the regulations for implementing NEPA, the efforts of an interdisciplinary team comprising technicians and experts in various fields were required to accomplish this study.

List of Preparers

A list of individuals with the primary responsibility for conducting this study, preparing the documentation, and providing technical reviews is contained in Table 11.

Table 11: List of Preparers

Affiliation	Name	Title	Project Role
Banner Associates	Leslie Murphy	Environmental Scientist Lead	Project Lead, QAQC
Banner Associates	Kelli Buscher	Environmental Engineer	Drafter, QAQC
Banner Associates	Thomas Docken	Environmental Scientist	Drafter
Banner Associates	Molly Gross	Environmental Scientist	Drafter
USBR	Ashley Persinger	Supervisory Natural Resource Specialist	Compliance Review Editor
USBR	Corinna Hanson	Natural Resource Specialist	Compliance Review Editor
USBR	Sasha Dahl	Natural Resource Specialist	Compliance Review Editor
USBR	Justin Hammer	Natural Resource Specialist	Compliance Review Editor
USBR	Andrea Gue	Natural Resource Specialist	Compliance Review Editor

Agency Coordination

To initiate early communication and coordination, scoping letters were sent to tribal, federal, state, and local agencies and other interested parties on March 28, 2025. The scoping package included a brief description of the Proposed Action and a project location figure. Pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, identification of issues and concerns was requested to ensure that social, economic, and environmental impacts are considered in the development of the project. The scoping process included a 30-day comment period that ended on May 2, 2025. Table 12 contains the list of agencies consulted during the scoping period.

Table 12: List of Agencies Consulted

Name/Title	Agency
Federal Agencies	
Ms. Lori Kimball, Field Office Manager	South Dakota Field Office Bureau of Land Management
Mr. Christopher Swanson, Field Supervisor	U.S. Fish and Wildlife Service

Name/Title	Agency
Janet Carter, Bureau Approving Official	U.S. Geological Survey
Nathan Morey, Supervisor	Department of the Army U.S. Corps of Engineers, South Dakota Regulatory Office
Tony Sunseri, State Conservationist	Natural Resources Conservation Service
Nathan Grueb, State Tribal Liaison	Natural Resources Conservation Service
Behany Ihle, Grasslands Supervisor	Dakota Prairie Grasslands, Supervisor's Office
Lt. Colonel Querten Johnson	South Dakota Army National Guard
Jim Hagen, Secretary of Tourism	South Dakota Department of Tourism
State Agencies	
Kevin Robling, Department Secretary	South Dakota Department of Game, Fish and Parks
Jeff VanMeeteren, Director, Division of Parks & Recreation	South Dakota Department of Game, Fish and Parks
Scott Simpson, Deputy Secretary	South Dakota Department of Game, Fish and Parks
Tom Kirschenmann, Director, Division of Wildlife	South Dakota Department of Game, Fish and Parks
Ryan Wendinger, Habitat Program Administrator, Division of Wildlife	South Dakota Department of Game, Fish and Parks
John Kanta, Regional Terrestrial Resource Supervisor	South Dakota Department of Game, Fish and Parks
Chris McAllister, Regional Program Manager (Region 2)	South Dakota Department of Game, Fish and Parks
Nathan Baker, Regional Terrestrial Resource Supervisor (Region 2)	South Dakota Department of Game, Fish and Parks
Mark Ohm, Regional Supervisor (Region 2)	South Dakota Department of Game, Fish and Parks
Mark Ermer, Regional Program Manager - Fisheries	South Dakota Department of Game, Fish and Parks
Jacob Schwint, Wildlife Conservation Officer, Division of Wildlife	South Dakota Department of Game, Fish and Parks
Edgar Meza, Wildlife Conservation Officer, Division of Wildlife	South Dakota Department of Game, Fish and Parks
Park Manager	Little Moreau Recreation Area

Name/Title	Agency
Stephanie Rissler, SDGFP Commission Chair	South Dakota Department of Game, Fish and Parks
Travis Bies, SDGFP Commission Vice Chair	South Dakota Department of Game, Fish and Parks
Jon Locken, SDGFP Commissioner	South Dakota Department of Game, Fish and Parks
Travis Theel, SDGFP Commissioner	South Dakota Department of Game, Fish and Parks
Bruce Cull, SDGFP Commissioner	South Dakota Department of Game, Fish and Parks
Robert Whitmyre, SDGFP Commissioner	South Dakota Department of Game, Fish and Parks
Hunter Roberts, Department Secretary	South Dakota Department of Agriculture and Natural Resources
Garry Guan, State Historic Preservation Officer	South Dakota State Historical Society, Cultural Heritage Center
Mr. Brock Greenfield, Commissioner	School and Public Lands
Local	
	Dewey County Commission
	Cheyenne River Sioux Tribe Department of Environment and Natural Resources
	City of Eagle Butte
	City of Timber Lake
	Lakota Cultural Center
	Timber Lake & Area Historical Society
	Dewey County Clerk of Court
	South Dakota Wildlife Federation
	Cheyenne River Chamber of Commerce
	High Plains Anglers
	Center of the Nation Sportsmans Club
	Timber Lake & Area Development Inc.
	Four Bands Community Fund
	Prairie Hills Audubon Society

Name/Title	Agency
	Museum of Geology South Dakota School of Mines
	Nature Conservancy
Congressional	
Honorable Mike Rounds, United States Senator	United States Senate
Honorable John Thune, United States Senator	United States Senate
United States Representative Dustin "Dusty" Johnson	United States House of Representatives
Honorable Larry Rhoden, Governor of South Dakota	Governor
Attorney General of South Dakota Marty J. Jackley	Attorney General's Office
Lt. Governor Tonnis H. Venhuizen	Lieutenant Governor
Representative Jana Hunt	Representative for District 28A Counties: Corson, Dewey, Perkins, and Ziebach
Senator Sam S. Marty	Senator for District 28 Counties: Butte, Corson, Dewey, Harding, Perkins, and Ziebach
Tribes	
Matthew Tselee, Chairman	Apache Tribe of Oklahoma
Ryman Lebeau, Chairman	Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota
Steve Vance, THPO	Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota
Reggie Wassana, Governor	Cheyenne and Arapaho Tribes, Oklahoma
Max Bear, THPO	Cheyenne and Arapaho Tribes, Oklahoma
Peter Lenkeek, Chairman	Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota
Merle Marks, THPO	Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota
Jeffery Stiffarm, President	Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
Michael Blackwolf, THPO	Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
Clyde J.R. Estes, Chairman	Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota

Name/Title	Agency
Frank Star Comes Out, President	Oglala Sioux Tribe, South Dakota
Justin Pourier, Acting THPO	Oglala Sioux Tribe, South Dakota
Scott O. Herman, President	Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota
Ione Quigley, THPO	Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota
Alonzo Denney, Chairman	Santee Sioux Nation, Nebraska
Larry Thomas, Acting THPO	Santee Sioux Nation, Nebraska
Garret J. Renville, Chairman	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota
Dianne Desrosiers, THPO	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota
Janet Alkire, Chairperson	Standing Rock Sioux Tribe of North and South Dakota
John Eagle, THPO	Standing Rock Sioux Tribe of North and South Dakota

Five agency responses and no tribal responses were received during the initial scoping period. Scoping comments provided valuable insight and were referenced and incorporated where appropriate in this document. Refer to Appendix D for Scoping Letters and Responses.

- Responses Received:
 - NRCS Letter Response - 04/09/2025
 - SDGFP Environmental Review Report - 04/14/2025
 - SDGFP Email Response - 04/14/2025
 - USFWS Email Response - 04/02/2025
 - SDDANR Email Response - 05/16/2025

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Surveyor: Thomas Docken

General Project Information

Mni Waste Water Company	County Dewey County
N/A	Multiple Sample Sites? <input checked="" type="radio"/> Yes, See Comments
MRM #	<input type="radio"/> No
Structure # N/A	Habitat (trees) within 1000' of bridge? <input type="radio"/> Yes <input checked="" type="radio"/> Survey Complete

Brief Project Description

Phase Services for MWWC Northwest Eagle Butte Resiliency Project will provide improved service and add services to approximately 37 rural customers. The Project consists of installation of approximately 10 miles of pipe (2" to 6") and rural service meter pits.

Project Area

10+

1

10+

No Removal

Vegetation cover types

Other Coniferous	Other Deciduous	Eastern Red Cedar	Cottonwood	Bur Oak
Ponderosa Pine	Mixed Grass	Permanent Wetland	Seasonal Wetland	Row Crop

Vegetation will be similar post project. Disturbed areas will be re-vegetated post-construction.

Landscape within 5-Mile Radius

Yes Forested Creek Bottom of Green Grass Creek

No

Row Crop

Residential

Grassland

Proximity to public land 15 Mile Radius

Walk-in-Areas with forested land are located approximately 4.3 miles east of the corridor.

Additional information about discreet habitat types at multiple sites

Sample Site Description Station # / MRM#)

Multiple sample sites refer to NLEB Figure.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13.

Water Resources at Sample Site

50'

No



provides potential summer water source.

5.0

5.0



No Water Source

Forest Resources at Sample Site

2

1

3

Cottonwood

Bur Oak

Eastern Red Cedar

50

30

0

40

30

30

5



No Forest Resources

Conclusion

Yes

Multiple sample sites were identified within the Survey Area. Refer to the NLEB figure and photo log for location and species of tree documentation.

Mni Waste Water Company – Northwest Eagle Butte Drought Resiliency Project
Ziebach County, South Dakota

NLEB Habitat 1, facing southeast, cottonwood with snag



NLEB Habitat 3, facing east, cottonwood trees with exfoliating bark and a snag



NLEB Habitat 2, facing east, cottonwood with exfoliating bark



NLEB Habitat 4, facing southeast, cottonwood tree with exfoliating bark and holes



Mni Waste Water Company – Northwest Eagle Butte Drought Resiliency Project
Ziebach County, South Dakota

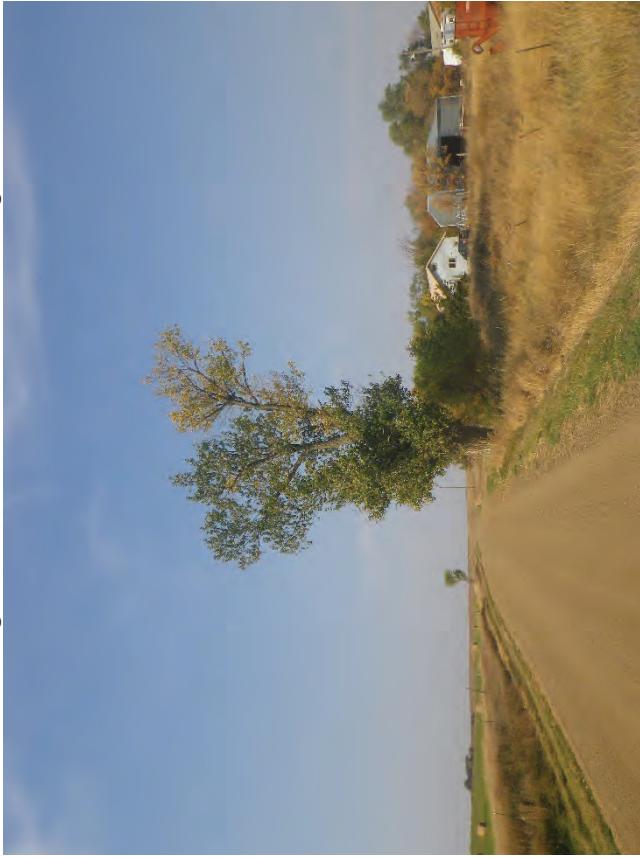
NLEB Habitat 5, facing northwest, trees with exfoliating bark



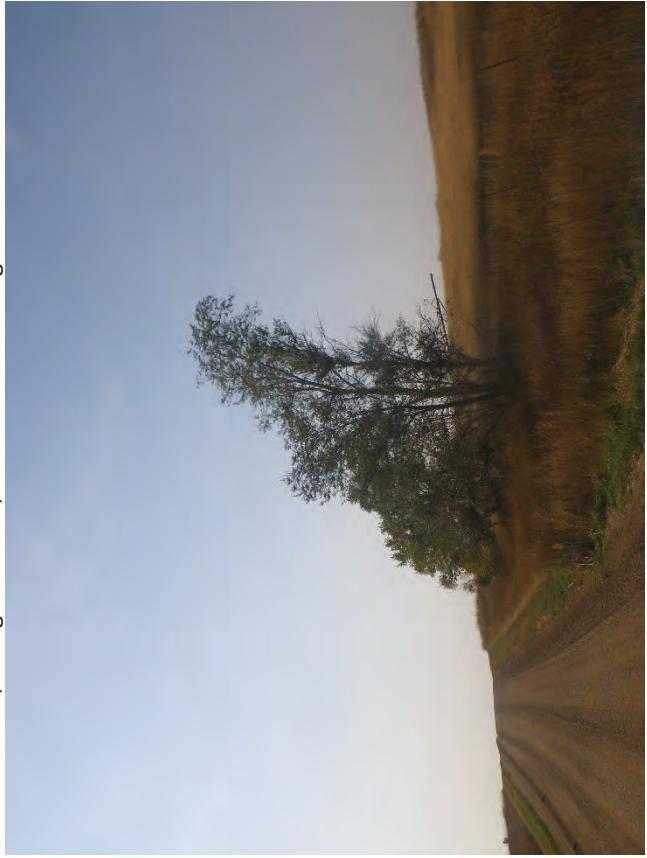
NLEB Habitat 7, facing west, trees with exfoliating bark and snags



NLEB Habitat 6, facing west, cottonwood tree with exfoliating bark



NLEB Habitat 8, facing southeast, trees with exfoliating bark



Mni Waste Water Company – Northwest Eagle Butte Drought Resiliency Project
Ziebach County, South Dakota
NLEB Habitat 9, facing southeast, cottonwood trees with exfoliating bark



NLEB Habitat 9, facing southeast, cottonwood trees with exfoliating bark

NLEB Habitat 10, facing west, forested creek bottom



NLEB Habitat 10, facing west, forested creek bottom

October 2024

Appendix A.

NLEB Habitat 12, facing south, forested creek bottom



NLEB Habitat 13, facing south, cottonwood trees with exfoliating bark





IN REPLY REFER TO:

DK-5100

2.1.4.17

United States Department of the Interior

BUREAU OF RECLAMATION
Rapid City Field Office
515 Ninth Street, Room 101
Rapid City, SD 57701

Appendix B.



Mr. Christopher Swanson
Field Supervisor
United States Fish and Wildlife Service
420 S. Garfield Avenue
Pierre, SD 57501-5408
christopher_swanson@fws.gov

Subject: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project
Environmental Assessment for the Construction of Rural Water Services

Dear Dr. Swanson:

The Mni Wašté Water Company (MWWC) is proposing the construction of a rural water pipeline in Dewey County, South Dakota (the Project). The Project is anticipated to start west of Eagle Butte, approximately 0.3 miles north of the Highway 212 and 242nd Avenue intersection, continuing north to install approximately 12 miles of water transmission pipe to provide a reliable source of quality drinking water to the rural area northwest of Eagle Butte. At this time, line routes have not been finalized but are projected to be installed within the Project Area shown on the enclosed Project Location map. The Project is being funded through the Bureau of Reclamation (Reclamation) WaterSMART Program.

Banner Associates, Inc. will be completing an Environmental Assessment (EA) compliant with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), and Reclamation Requirements.

At this time, we are contacting interested agencies and entities for any preliminary comments or data to incorporate into the draft EA. Your feedback will ensure that the final EA is comprehensive and addresses all potential environmental impacts of the Project.

A March 2025 search of the U.S. Fish & Wildlife Service's Information for Planning and Consultation database (IPAC) (Project Code: 2025-0003945), returned the following species as having the potential to occur in the Project Area:

Species	Status
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered
Piping Plover (<i>Charadrius melanotos</i>)	Threatened
Red Knot (<i>Calidris canutus rufa</i>)	Threatened
Whooping Crane (<i>Grus americana</i>)	Endangered
Pallid Sturgeon (<i>Scaphirhynchus albus</i>)	Endangered
Western Regal Fritillary (<i>Argynnis idalia occidentalis</i>)	Proposed Threatened
Monarch Butterfly (<i>Danaus plexippus</i>)	Proposed Threatened

INTERIOR REGION 5 • MISSOURI BASIN INTERIOR REGION 6 • ARKANSAS–RIO GRANDE–TEXAS GULF

COLORADO*, KANSAS, MONTANA*, NEBRASKA, NORTH DAKOTA*, OKLAHOMA, SOUTH DAKOTA*, TEXAS*, WYOMING*

Suckley's Cuckoo Bumble Bee (<i>Bombus suckleyi</i>)	Proposed Endangered
Black-footed Ferret (<i>Mustela nigripes</i>)	Experimental Population, Non-Essential

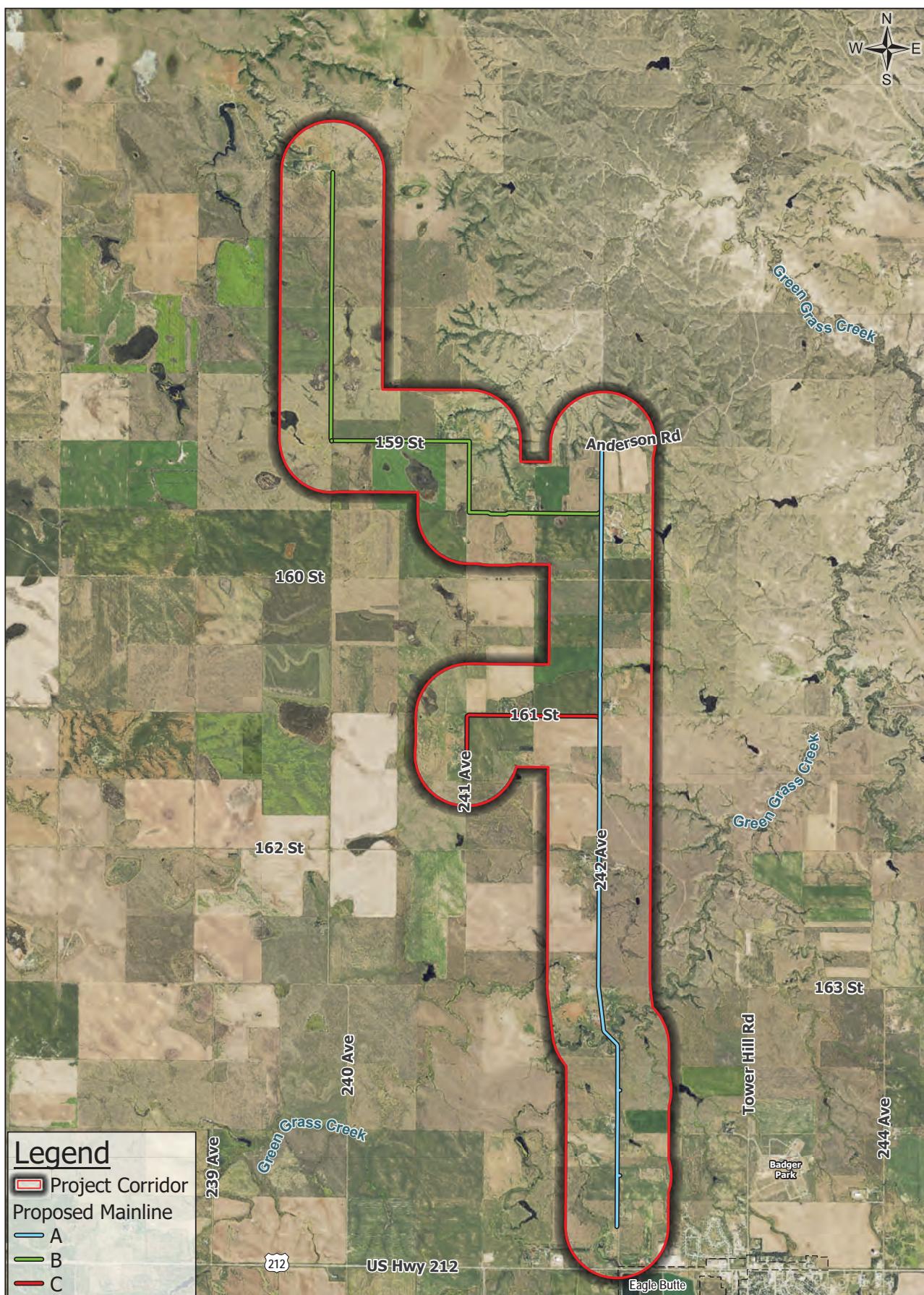
Reclamation kindly requests any available information regarding the listed species within the Project Area. Any data or information the Service can provide would be greatly appreciated. If you have any questions, please contact Ms. Corinna Hanson, Natural Resource Specialist, at (605) 519-5489 or cmhanson@usbr.gov. If you are deaf, hard of hearing, or have a speech disability, please dial 7-1-1 to access telecommunications relay services.

Sincerely,

SCOTT HETTINGER  Digitally signed by SCOTT HETTINGER
Date: 2025.04.01 16:06:33 -05'00'

Joseph E. Hall
Area Manager

Enclosure



**Project Location
Overview Map**
MWWC - Northwest Eagle Butte
Drought Resiliency Project

0 0.5 1 1.5 2 Miles



From: [Hanson, Corinna M](#)
To: [Leslie Murphy](#)
Cc: [Persinger, Ashley C](#)
Subject: FW: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services
Date: Friday, April 4, 2025 1:21:46 PM
Attachments: [image001.png](#)
[Scoping letter to USFWS.pdf](#)

FYI, response from USFWS.

-C

From: Correspondence, BOR DKA <BOR-sha-DKA-Correspondence@usbr.gov>
Sent: Friday, April 4, 2025 8:54 AM
To: Hanson, Corinna M <CMhanson@usbr.gov>
Subject: FW: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services

Reply received from Mr. Swanson.

Cassi

From: Swanson, Christopher (Chris) <christopher_swanson@fws.gov>
Sent: Wednesday, April 2, 2025 10:21 AM
To: Correspondence, BOR DKA <BOR-sha-DKA-Correspondence@usbr.gov>
Cc: Kim, Daniel H <daniel_kim@fws.gov>
Subject: Re: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services

Cassondra,

Thank you for your request. I'm including Dan Kim here from our office as he can determine if there is any information that we can provide to you to assist with your development of a draft environmental assessment for this project.

If you do not hear from us in the next two weeks, we do not have any comments to provide during the NEPA process. We will plan to engage on a future section 7 consultation when you are ready for this project.

Regards,

Chris

Chris Swanson
Field Supervisor
U.S. Fish and Wildlife Service
North and South Dakota Ecological Services

From: Correspondence, BOR DKA <BOR-sha-DKA-Correspondence@usbr.gov>
Sent: Wednesday, April 2, 2025 10:01 AM
To: Swanson, Christopher (Chris) <christopher_swanson@fws.gov>
Subject: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project
Environmental Assessment for the Construction of Rural Water Services

Good Morning Dr. Swanson,

Attached is the following signed letter, "Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services".

If you have any questions, please contact Ms. Corinna Hanson, Natural Resource Specialist, at (605) 519-5489 or cmhanson@usbr.gov.

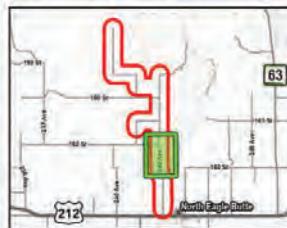
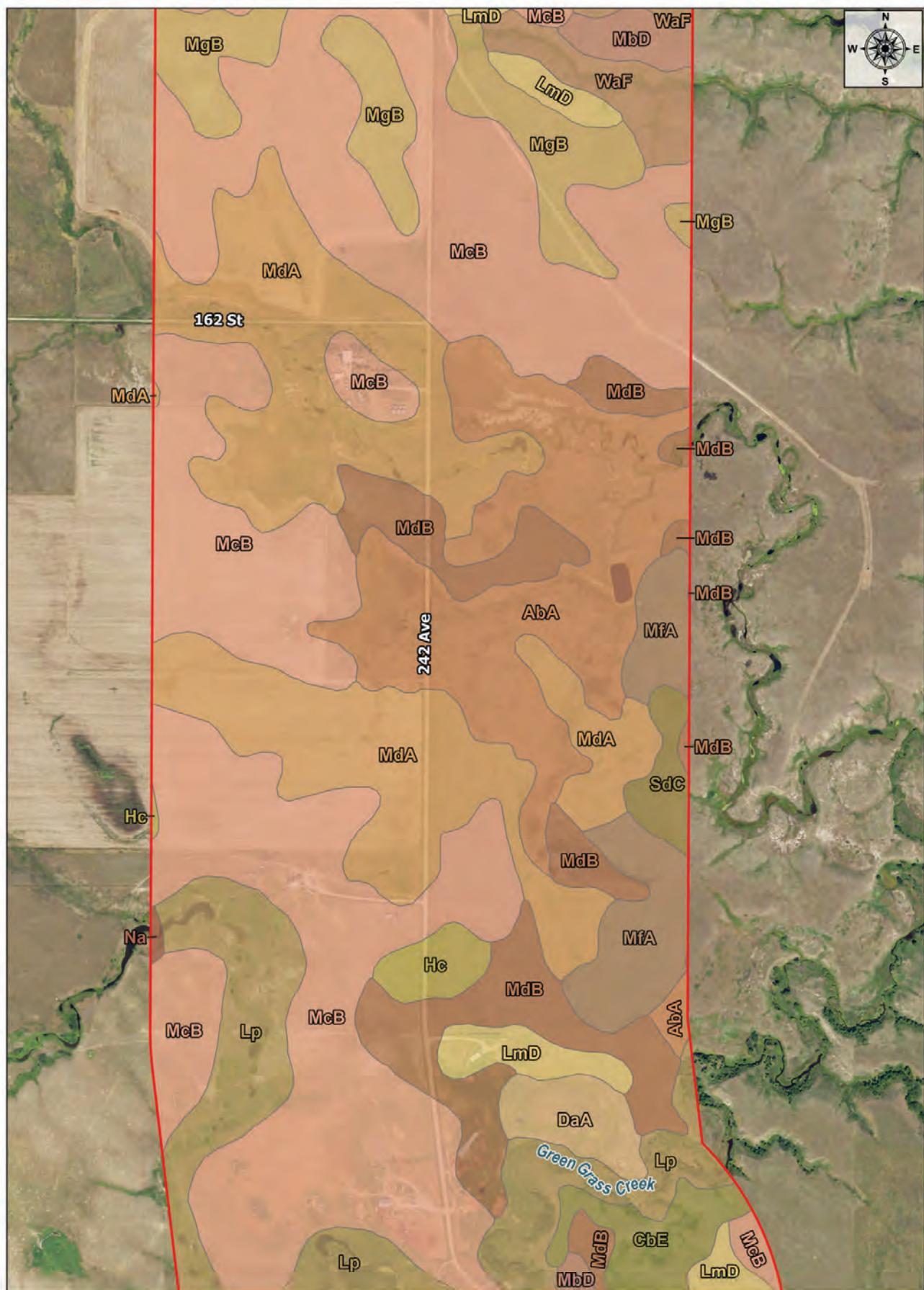
Thank you,

Cassandra B. Wyckoff

Rapid City Field Office
515 9th St. #101
Rapid City, SD 57701
PH: (605) 519 -5392
cwyckoff@usbr.gov

BOR_Logo





Soil Analysis

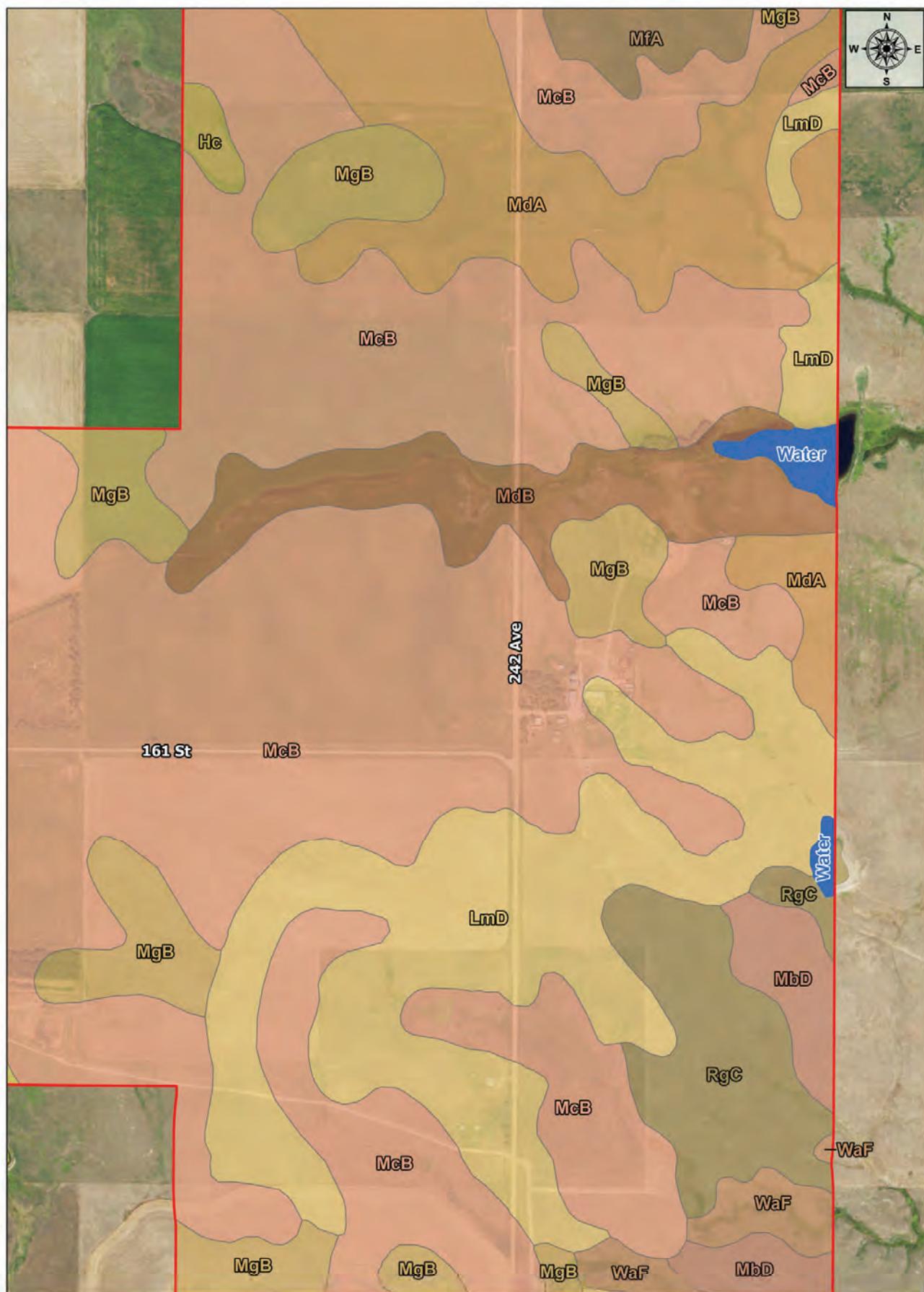
Page 2 of 8

MWWC - Northwest Eagle Butte Drought Resiliency Project

0 500 1,000 1,500 2,000 US Feet

Legend

Project Area	LmD	MfA
Soil Type	Lp	MgB
AbA	MbD	Na
CbE	McB	SdC
DaA	MdA	WaF
Hc	MdB	



Soil Analysis

Page 3 of 8

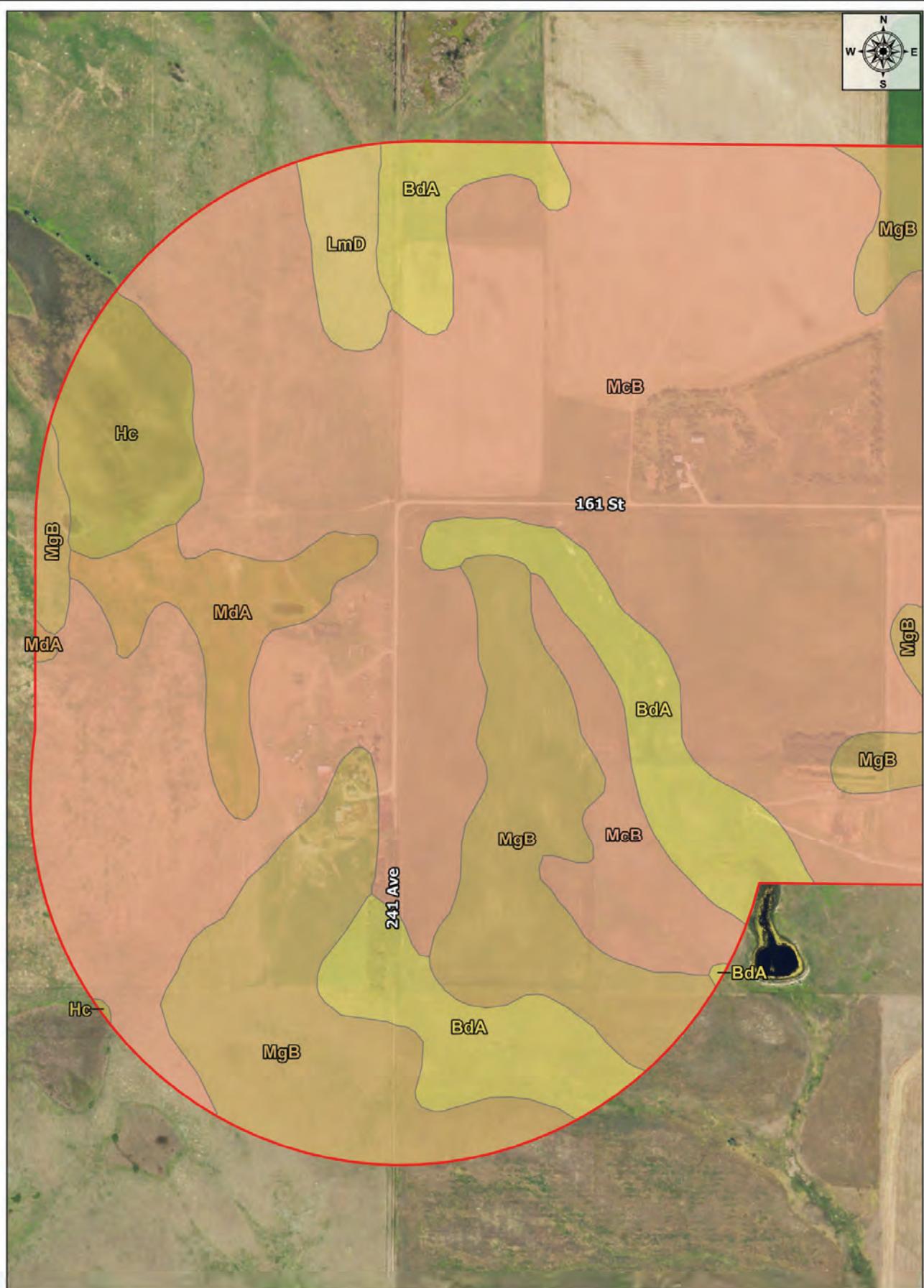
MWWC - Northwest Eagle Butte
Drought Resiliency Project

0 500 1,000 1,500 US Feet



Legend

Project Area	
Soil Type	
Water	



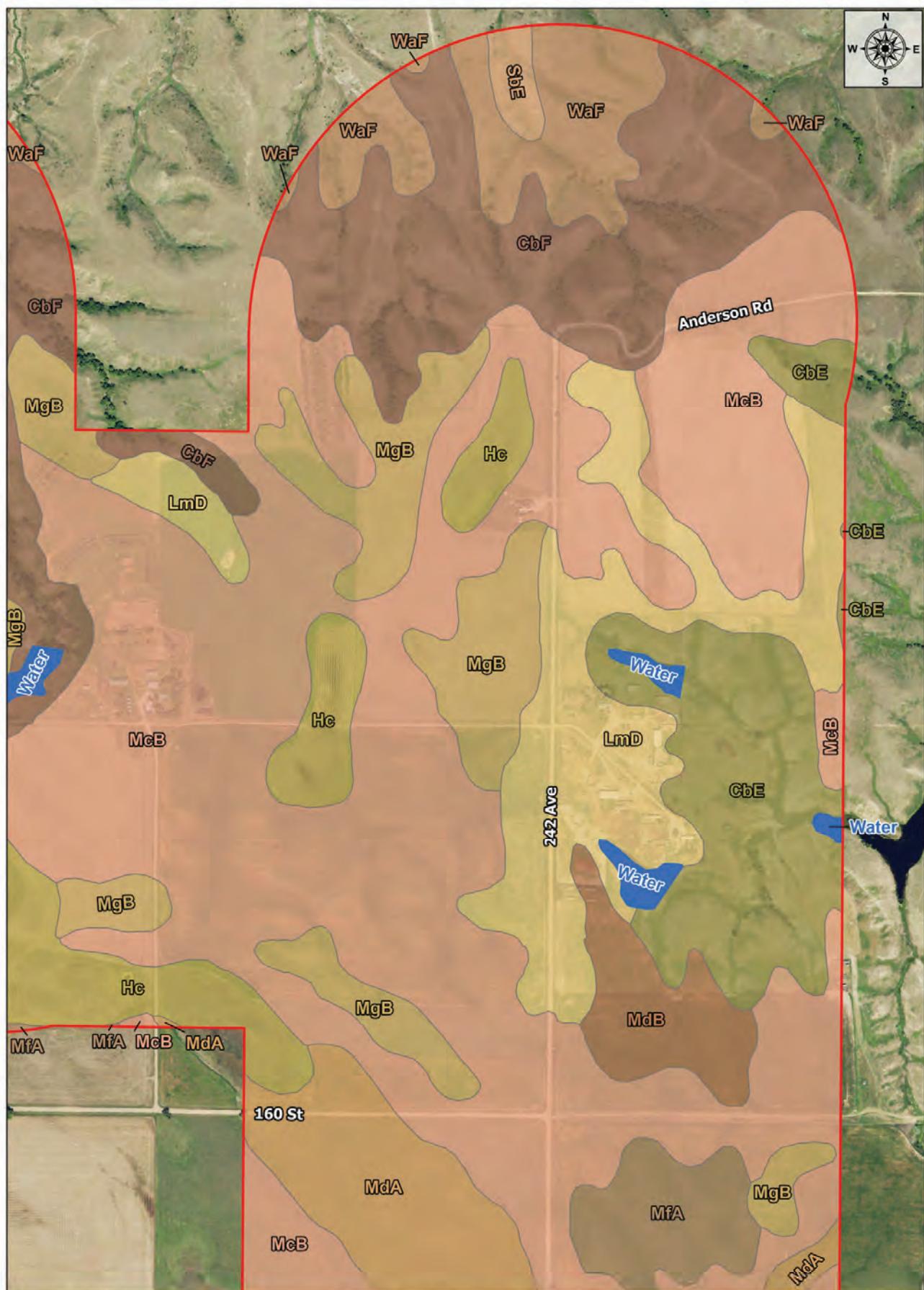
Soil Analysis

Page 4 of 8
 MWWC - Northwest Eagle Butte
 Drought Resiliency Project



Legend

Project Area	LmD
Soil Type	McB
BdA	MdA
Hc	MgB



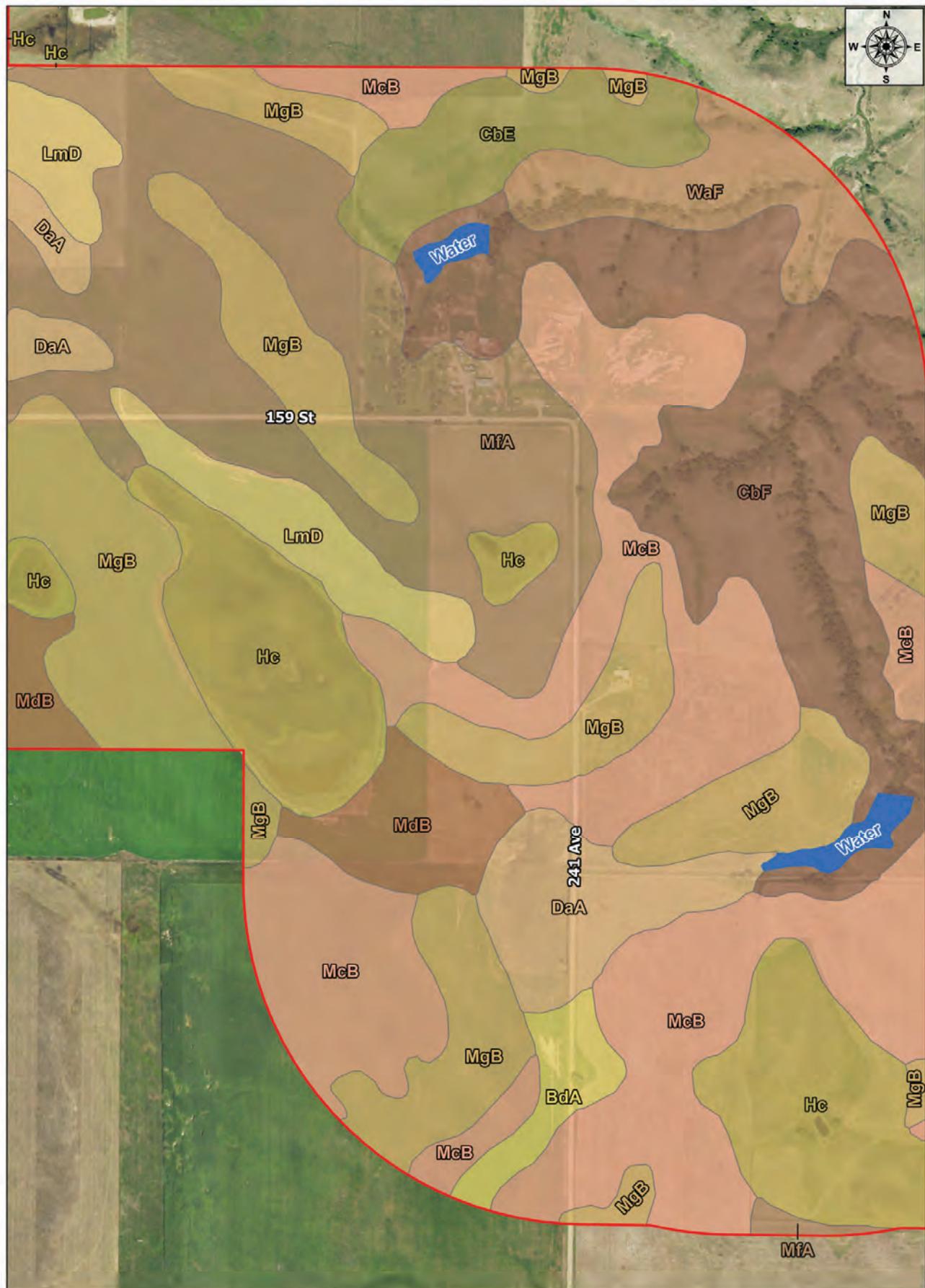
Soil Analysis

Page 5 of 8

Legend

Legend for Project Area and Soil Type:

- Project Area:
 - MdA (Red)
 - MdB (Brown)
 - MfA (Light Brown)
 - MgB (Dark Brown)
 - SbE (Light Brown)
 - WaF (Dark Brown)
 - Water (Blue)
- Soil Type:
 - CbE (Dark Brown)
 - CbF (Medium Brown)
 - Hc (Light Brown)
 - LmD (Yellow)
 - McB (Light Brown)



Soil Analysis

Page 6 of 8
 MWWC - Northwest Eagle Butte
 Drought Resiliency Project



0 500 1,000 1,500 US Feet

Legend

Project Area	LmD
Soil Type	McB
	MdB
	MfA
	MgB
	WaF
	Hc
	Water



Soil Analysis

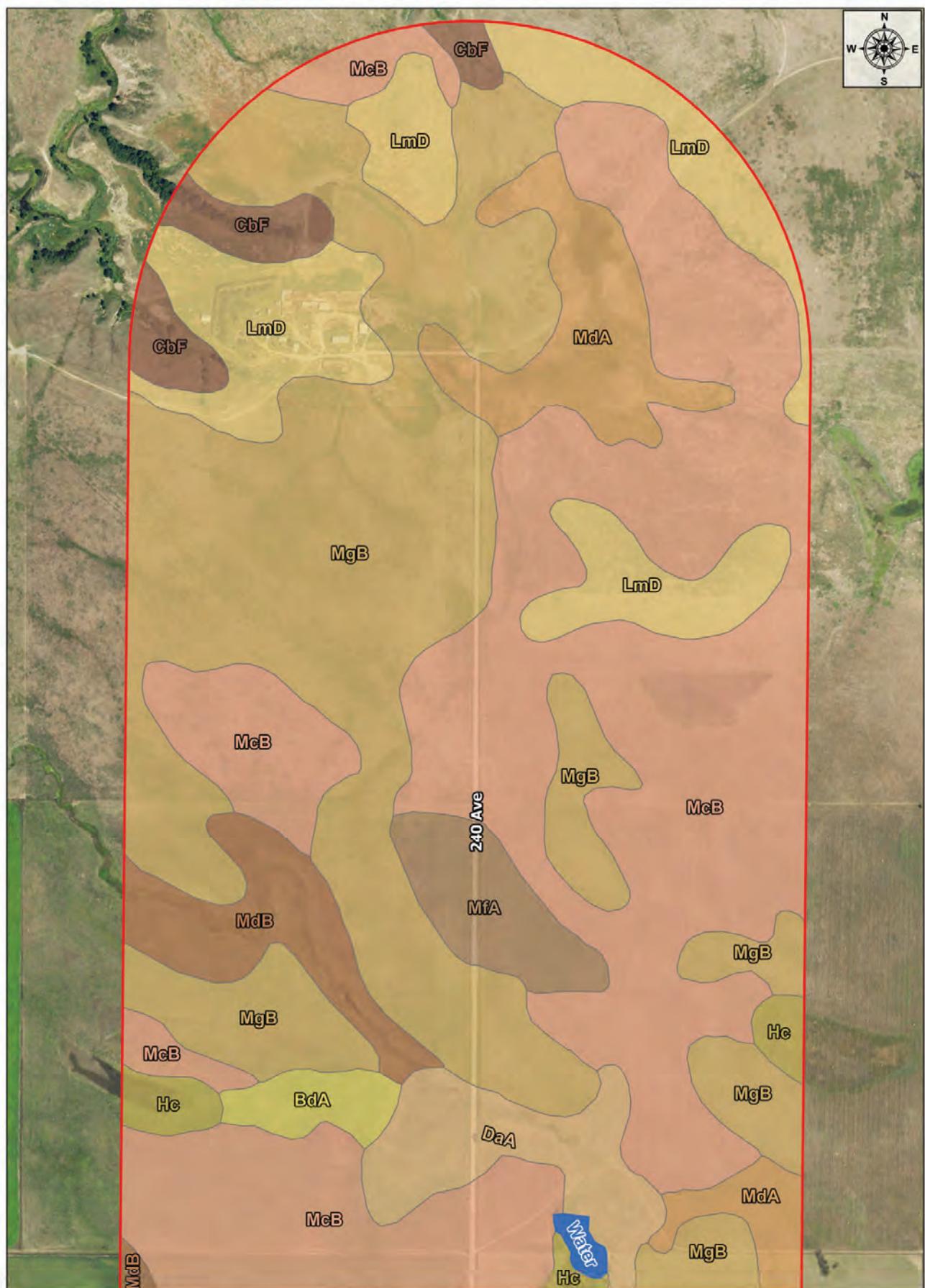
Page 7 of 8
 MWWC - Northwest Eagle Butte
 Drought Resiliency Project



0 500 1,000 1,500 US Feet

Legend

Project Area	McB
Soil Type	MdA
AbA	MdB
BdA	MfA
DaA	MgB
Hc	LmD
Water	



Soil Analysis

Page 8 of 8
 MWWC - Northwest Eagle Butte
 Drought Resiliency Project



0 500 1,000 1,500 US Feet

Legend

Project Area	McB
Soil Type	MdA
	MdB
	MfA
	MgB
	Hc
	LmD
	BdA
	DaA
	Water



Banner Associates, Inc.
221 W Capitol Ave, Ste 103
Pierre, SD 57501
Toll Free 855.323.6342

April 1, 2025

SUBJECT: Request for Public Scoping Comments for the Mni Wašté Water Company (MWWC) Northwest Butte Drought Resiliency Project - Environmental Assessment for the Construction of Rural Water Services

Dear Interested Party:

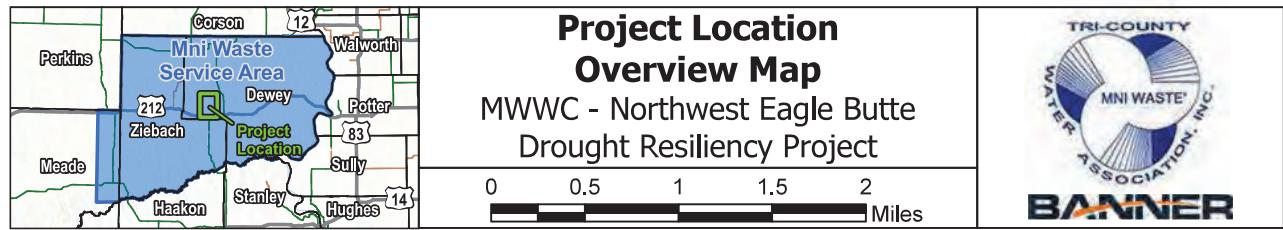
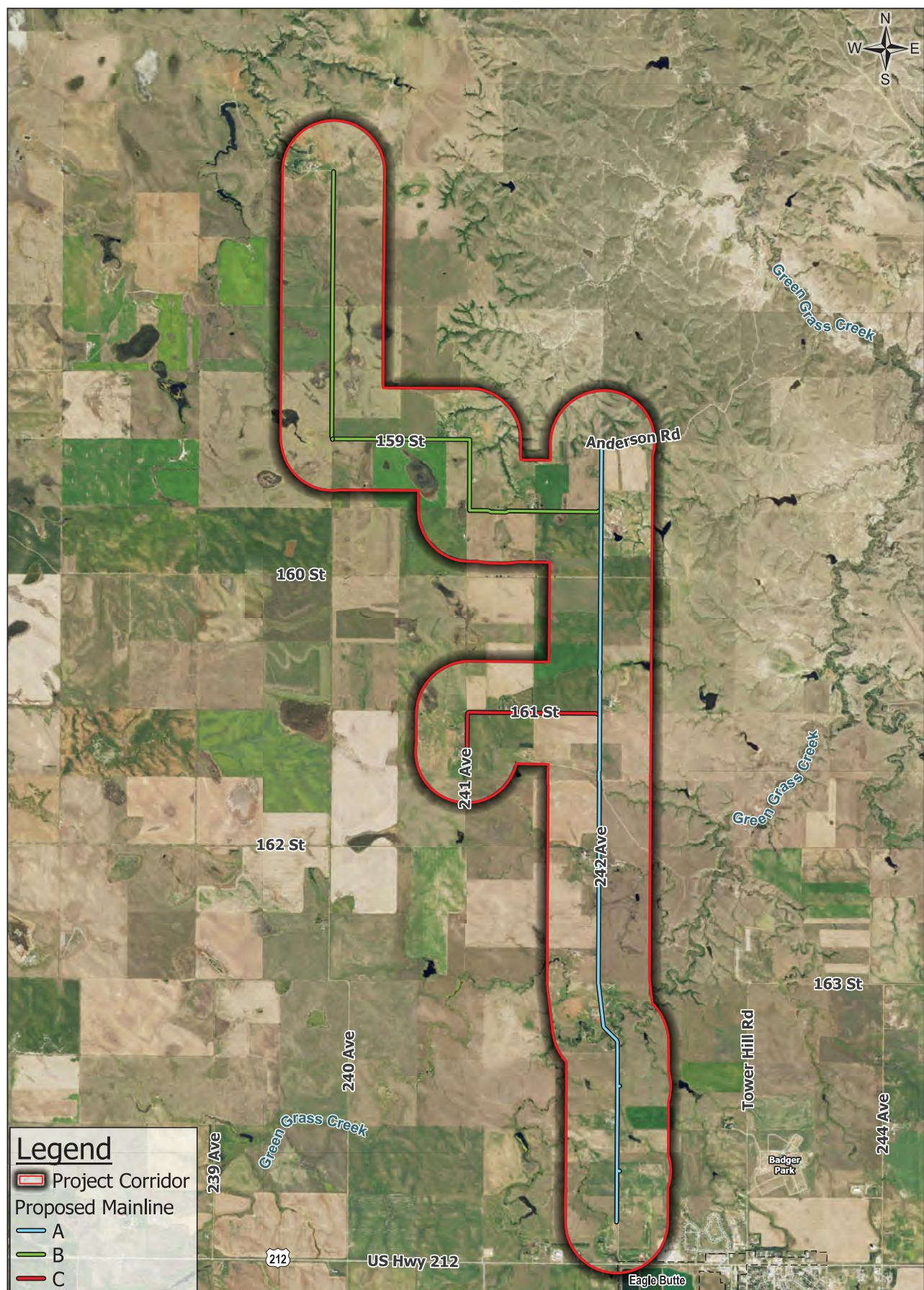
The Bureau of Reclamation (Reclamation) and the Mni Wašté Water Company (MWWC) are leading the preparation of an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for federal support of the "Northwest Eagle Butte Drought Resiliency Project" (Project). The Project proposes the construction of a rural water pipeline in Dewey County, South Dakota. The Project is anticipated to start west of Eagle Butte, approximately 0.3-mile north of the Highway 212 and 242nd Avenue intersection, continuing north to install approximately 12-miles of water transmission pipe to provide a reliable source of quality drinking water to the rural area northwest of Eagle Butte. At this time, line routes have not been finalized but are projected to be installed within the Project Area shown on the Project Location Figure. The Project is being funded through the Reclamation WaterSMART Program.

Banner Associates, Inc. will be completing an EA compliant with NEPA, the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), and Reclamation requirements. Reclamation, MWWC, and Banner are seeking scoping comments on the Project. We are contacting stakeholders, potentially interested persons, groups, tribes, tribal citizens, and agencies to inform them of the project and gather feedback. We request comments to help identify potential issues to consider in this environmental compliance effort. Your comments will help us refine the proposal, identify interested or affected parties, and will be used to develop possible alternatives to the Project.

For your comments to be reviewed and considered in a timely manner, we ask that comments be submitted by May 2, 2025. Comments received in response to this request, including names and addresses of those who comment, will be considered part of the public record for this project.

If you have questions about the Project or wish to provide comments on the Project, please contact:

Leslie Murphy, Environmental Department Head
Banner Associates, Inc.
221 West Capitol Avenue, Suite 103
Pierre, SD 57501
LeslieM@bannerassociates.com
Phone: 605.696.9155





South Dakota State Office
200 Fourth Street SW, Room 203
Huron, SD 57350

April 9, 2025

Ms. Leslie Murphy
Banner Associates, Inc.
221 West Capitol Avenue, Suite 103
Pierre, South Dakota 57501

RE: Environmental Review for:
Northwest Eagle Butte Drought Resiliency Project

Dear Ms. Murphy,

Thank you for the opportunity to provide a Farmland Protection Policy Act (FPPA) review on this project. The project as outlined will have **no impact** on prime or important farmland.

If you have any questions, please contact me at (605) 352-1234.

Sincerely,

A handwritten signature in blue ink that reads "Jessica Michalski".

JESSICA MICHALSKI
State Resource Conservationist

cc:

Nathan Jones, State Soil Scientist, NRCS, Huron SO



Environmental Review Report

Project Information

Report Generation Date: 4/14/2025 12:21:25 PM
Project ID: 2025-04-14-2145
Project Title: Northwest Eagle Butte Drought Resiliency Project
User Project Number(s):
Project Type: Water Use/Transfer/Channel Activities, Water management planning
Project Activities: None Selected
County(s): Dewey
Township/Range/Section(s): 012N023E1; 012N023E12; 012N024E18; 012N024E6; 012N024E7;
013N023E10; 013N023E11; 013N023E12; 013N023E13; 013N023E14;
013N023E15; 013N023E16; 013N023E22; 013N023E23; 013N023E24;
013N023E25; 013N023E26; 013N023E27; 013N023E3; 013N023E35;
013N023E36; 013N023E4; 013N023E9; 014N023E33; 014N023E34
Watershed(s) HUC8: None
Latitude/Longitude: 45.065273 / -101.280432

Contact Information

Organization: Game Fish and Parks
Contact Name: Jessica Speiser
Contact Phone: 605-553-8456
Contact Email: jessica.speiser@state.sd.us
Contact Address: 4130 Adventure Trail Rapid City SD 57702
Submitted On Behalf Of:

Project Description

Bureau of Reclamation and Mni Waste Water Company for Northwest Eagle Butte Drought Resiliency Project Project: construction of a rural water pipeline in Dewey County, SD to provide a reliable source of quality drinking water
Requesting: Comments to help identify potential environmental impacts Contact: Leslie Murphy Environmental Department Head Banner Associates, Inc. 221 West Capitol Ave, Suite 103 Pierre, SD 57501
LeslieM@bannerassociates.com Phone: 605-696-9155



Introduction

The vision of South Dakota Department of Game, Fish and Parks (SDGFP) is to conserve our state's outdoor heritage to enhance the quality of life for current and future generations. SDGFP has a state-wide mission to serve and connect people and families to the outdoors through effective management of our state's parks, fisheries and wildlife resources. SDGFP strives to prevent or minimize unnecessary damage to species and their habitats by offering possible mitigation measures.

Disclaimer

The information provided in this report can only be used as a site clearance letter if no conflicts with sensitive wildlife resources were detected. This information provides an indication of whether or not public or protected lands and sensitive resources are known or likely to be located near the proposed project's location. **The information generated in this report does not replace Endangered Species Act consultation obligations with the U.S. Fish and Wildlife Service (USFWS) for federal listed species.**

A majority of the sensitive species records in the report originate from the South Dakota Natural Heritage Database (SDNHD). The SDNHD tracks species at risk and certain unique habitats. These species may be monitored because they are rare, indicative of a vulnerable habitat type, or are legally designated as state or federal threatened or endangered species. Rare species are those that are declining and restricted to limited habitat, peripheral to a jurisdiction, isolated or disjunct due to geographic or climatic factors or classified as such due to lack of survey data. A list of monitored species can be found at <https://gfp.sd.gov/natural-heritage-program/>. Many places in South Dakota have not been surveyed for rare or protected species and habitats and the absence of a species from a proposed project area does not preclude its presence. **Accuracy of species lists, report information and project recommendations should be verified after 90 days.**

No environmental conflicts were detected by South Dakota Game, Fish and Parks for your proposed project. This report is considered final, and can serve as documentation for environmental clearance from South Dakota Game, Fish and Parks. This report does not replace coordination with the US Fish and Wildlife Service for Endangered Species Act compliance.



Project Type Recommendations

No recommendations have been identified for this project type.

Legal Obligations

South Dakota Endangered and Threatened Species Law

This state law (Chapter 34A-8) defines nongame, threatened and endangered species and wildlife and describes the relevant authorities of the Game, Fish and Parks Secretary and Commission. The SDGFP Commission may list, delist or change the status of state threatened or endangered species. Take of state threatened or endangered species is prohibited except for certain, authorized purposes or to protect life or property. This state law also prohibits the reintroduction of a species on the federal list of threatened or endangered species that is considered extirpated from the state, unless authorized by the South Dakota Legislature. More information about obtaining a state endangered take authorization is available here: <https://gfp.sd.gov/forms/endangeredspecies/>

Aquatic Invasive Species

South Dakota Administrative Rule 41:10:04:02 forbids the possession and transport of aquatic invasive species (AIS). Any construction vehicles, vessels, or equipment that will come into contact with surface waters in South Dakota that have previously been used outside of the state or in and AIS positive water within South Dakota must be thoroughly power washed with hot water (>140°F) and completely dried for a minimum of 7 days prior to use. All attached dirt, mud debris and vegetation must be removed and all compartments and tanks capable of holding standing water shall be drained and dry. This applies, but is not limited to, all equipment, pumps, lines, hoses and holding tanks. The list of AIS positive waters is available at <https://sdleastwanted.sd.gov/> or by calling 605-223-7706.

Federal Laws

The following federal laws contribute to the conservation and management of fish and wildlife resources in the United States: Endangered Species Act, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Clean Water Act, and the Fish and Wildlife Coordination Act. The National Environmental Policy Act (NEPA) requires compliance with these statutes and regulations.

Contact Information

U.S. Fish and Wildlife Service, Ecological Services Field Office
420 S. Garfield Ave, Suite 400



Pierre, South Dakota 57501
605-224-8693

U.S. Army Corp of Engineers, South Dakota Regulatory Office
28563 Powerhouse Road
Pierre, South Dakota 57501
605-224-8531

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). Under this federal act, “take of eagles, their parts, nests or eggs is prohibited unless a permit is issued for certain purposes and under certain circumstances as long as the authorized take is compatible with the preservation of eagles. Disturbance resulting in injury, decreased productivity, or nest abandonment by substantially interfering with normal breeding, feeding or sheltering behavior is also considered take. Eagle nests are protected under this law, whether active or inactive. **This report does not replace consultation with the USFWS regarding the protection of bald and golden eagles.**

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S. C. 703-712) provides international protection to migratory bird species included in treaties among the United States, Great Britain, Mexico and Japan. This federal act prohibits the taking, killing, possession and transportation (among other actions) of migratory birds, their eggs, parts, and nests, unless specifically permitted by regulations. This act has no provisions for allowing unauthorized take. Work closely with the USFWS to identify protective measures to avoid migratory bird take. A list of migratory bird species protected under this act can be found at 50 CFR 10.13. Introduced bird species are not protected under this Act. **This report does not replace consultation with the USFWS regarding the protection of migratory bird species.**

Endangered Species Act

The Endangered Species Act (16 U.S.C. 1531–1544) provides protections for native plant and animal species that are in danger of becoming extinct. Under Section 9, it is unlawful for the “take” of a listed species. This is defined as “... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct”. However, a permit may be issued for take that is the result of an otherwise legal activity. Please contact the USFWS to determine if a permit is needed.

The USFWS is in charge of the protection of listed species and their critical habitat. Similarly, other



federal agencies are also directed to conserve listed species and ensure their actions do not jeopardize a listed species existence or destroy or adversely modify critical habitat. As such, under Section 7, federal agencies should consult with the USFWS to ensure compliance with this Act.

This report does not replace consultation with the USFWS regarding listed species.

Clean Water Act

The intent of the Clean Water Act (33 U.S.C. 1251 et seq.) is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”. We recommend that proper planning take place to first and foremost avoid impacts to wetlands, streams, and associated riparian corridors. If dredge or fill materials will be placed into waterways or wetlands, the U.S. Army Corps of Engineers Regulatory Office should be contacted to determine if a 404 permit is needed.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (15 U.S.C. 661-667e) provides habitat protection by requiring a federal agency to consult with the USFWS and SDGFP (i.e. the state fish and wildlife agency) whenever an agency is proposing to control or modify a stream or other body of water. The intent of this consultation is to conserve wildlife resources by preventing habitat loss or damage.

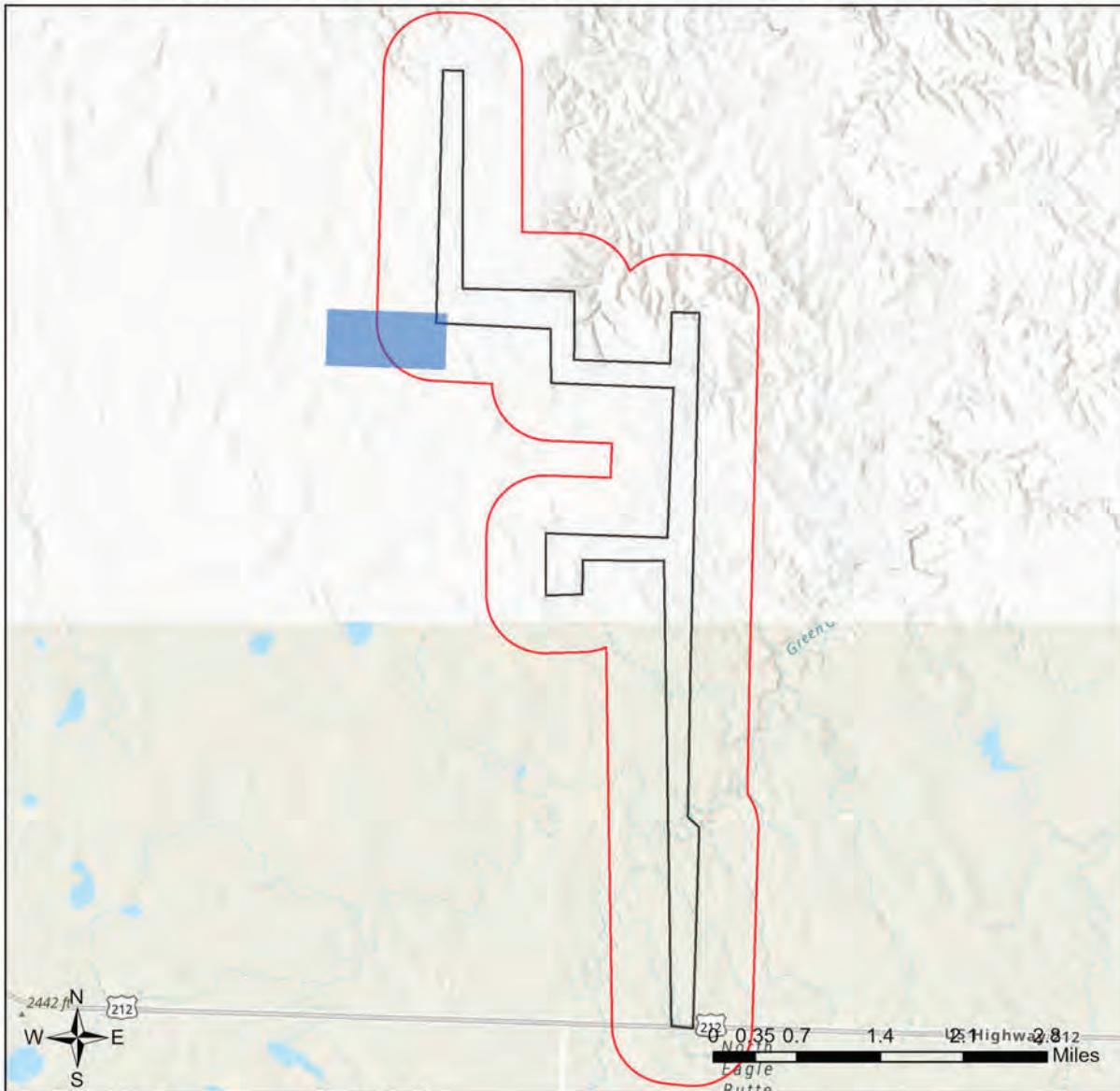
No Special Status Species were documented within the project vicinity.

Table 2. Protected Areas within 800 Meters of Project Vicinity

Area Name	Owner	Contact
Cheyenne River Reservation	Tribal	Cheyenne River Reservation
SPL	School and Public Lands	Commissioner of School and Public Lands

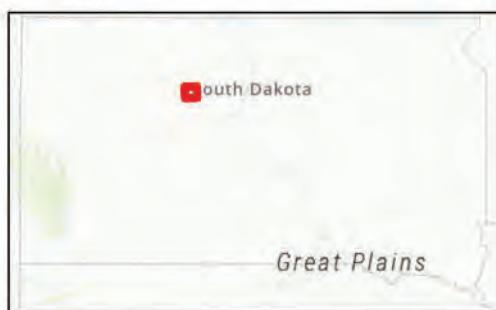


Northwest Eagle Butte Drought Resiliency Project
Topo Basemap with Land Ownership, Tribal Lands, and Locator Map



■ Buffered Project Boundary	■ Bureau of Land Management
■ Project Boundary	■ Bureau of Reclamation
■ Game Production Areas	■ Corps of Engineers
■ SD Parks and Rec Areas	■ National Fish Hatchery
■ School and Public Lands	■ National Park Service
■ The Nature Conservancy Lands	■ USFWS Wildlife Refuge
■ National Forest	■ Waterfowl Production Area
■ National Grassland	

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
South Dakota Game Fish and Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS
Esri, NASA, NGA, USGS



**SOUTH DAKOTA DEPARTMENT OF
GAME, FISH AND PARKS**

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

April 14, 2025

Leslie Murphy
Banner Associates, Inc.
221 West Capitol Ave, Suite 103
Pierre, SD 57501

RE: Northwest Eagle Butte Drought Resiliency Project
Dewey County, South Dakota

Dear Leslie,

The Department of Game, Fish and Parks has reviewed the above project in Dewey County, South Dakota.

We have conducted a search of the SD Natural Heritage Database for the above referenced project. This database monitors species at risk, specifically those species that are legally designated as threatened, endangered or rare. We did not find any occurrences of endangered, threatened or rare species in the immediate project area. Based on the information provided, there is no anticipated significant impact to fish and wildlife resources.

If you have any questions, please feel free to contact me at 605-553-8456.

Sincerely,

Jessica Speiser
Wildlife Diversity Biologist
4130 Adventure Trail
Rapid City, SD 57702
jessica.speiser@state.sd.us

From: [Hanson, Corinna M](#)
To: [Leslie Murphy](#)
Cc: [Persinger, Ashley C](#)
Subject: FW: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services
Date: Friday, April 4, 2025 1:21:46 PM
Attachments: [image001.png](#)
[Scoping letter to USFWS.pdf](#)

FYI, response from USFWS.

-C

From: Correspondence, BOR DKA <BOR-sha-DKA-Correspondence@usbr.gov>
Sent: Friday, April 4, 2025 8:54 AM
To: Hanson, Corinna M <CMhanson@usbr.gov>
Subject: FW: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services

Reply received from Mr. Swanson.

Cassi

From: Swanson, Christopher (Chris) <christopher_swanson@fws.gov>
Sent: Wednesday, April 2, 2025 10:21 AM
To: Correspondence, BOR DKA <BOR-sha-DKA-Correspondence@usbr.gov>
Cc: Kim, Daniel H <daniel_kim@fws.gov>
Subject: Re: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services

Cassondra,

Thank you for your request. I'm including Dan Kim here from our office as he can determine if there is any information that we can provide to you to assist with your development of a draft environmental assessment for this project.

If you do not hear from us in the next two weeks, we do not have any comments to provide during the NEPA process. We will plan to engage on a future section 7 consultation when you are ready for this project.

Regards,

Chris

Chris Swanson
Field Supervisor
U.S. Fish and Wildlife Service
North and South Dakota Ecological Services

From: Correspondence, BOR DKA <BOR-sha-DKA-Correspondence@usbr.gov>
Sent: Wednesday, April 2, 2025 10:01 AM
To: Swanson, Christopher (Chris) <christopher_swanson@fws.gov>
Subject: Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project
Environmental Assessment for the Construction of Rural Water Services

Good Morning Dr. Swanson,

Attached is the following signed letter, "Mni Wašté Water Company (MWWC) Northwest Eagle Butte Drought Resiliency Project Environmental Assessment for the Construction of Rural Water Services".

If you have any questions, please contact Ms. Corinna Hanson, Natural Resource Specialist, at (605) 519-5489 or cmhanson@usbr.gov.

Thank you,

Cassandra B. Wyckoff

Rapid City Field Office

515 9th St. #101

Rapid City, SD 57701

PH: (605) 519 -5392

cwyckoff@usbr.gov

BOR_Logo





Appendix D.
**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

May 16, 2025

Leslie Murphy, Environmental Department Head
Thomas Docken
Banner Associates, Inc
South Dakota Citizens Portal
Record Request Number: PUBRECREQ0003735

Subject: Environmental Review – Request for Public Scoping Comments for the Mni Wašté Water Company (MWWC) Northwest Eagle. Butte Drought Resiliency Project - Environmental Assessment for the Construction of Rural Water Services.

Dear Ms. Murphy and Mr. Docken:

The South Dakota Department of Agriculture and Natural Resources (DANR) has reviewed the above-referenced project for potential impacts to natural resources. Based on the information submitted, DANR has the following comments and permitting requirements.

Air Quality

This project is unlikely to have adverse impacts to air quality in the area. Should the parameters of the project change, please reach out to Tanner Turk at Tanner.Turk@state.sd.us or (605) 773-3151.

Drinking Water

This project will not have adverse environmental effects to drinking water in this area. Should the parameters of your project change, please reach out to Eric Fuehrer at (605) 394-6745 or Eric.Fuehrer@state.sd.us.

Forestry

Resource Conservation & Forestry (RCF) has reviewed your request and has the following comments:

Construction can have detrimental effects to surrounding trees if no protective measures are taken. Special construction measures may have to be taken to preserve and protect tree health by avoiding damage to tree roots, stems, or branches.

At a minimum the storage of equipment, machinery, or trucks under or against a tree should be avoided.

Barriers or sturdy fencing should be placed around trees that will remain on site following construction. Barriers should be placed a minimum of 1 foot radius from the base of the tree's trunk for every 1 inch in diameter measured 4.5 feet above the ground. This will protect against soil compaction, alteration of the natural soil level under the live canopy and any damage from occurring to the trunk of the tree.

Eighty-five to ninety percent of a tree's root system lies within the top 6-12 inches of soil extending out one to one and a half times the height of the tree. Trenching through this critical root zone could severely destabilize a tree and adversely affect its health. Tunneling under or around the root system is much less damaging and encouraged.

Trees often do not die immediately following construction damage but can decline over several months/years. A tree that sustains damage meeting or exceeding the following limits must be removed and, if conditions allow, replaced to maintain the canopy and ecosystem benefits of tree cover:

- a. The top or main stem of the tree is broken.
- b. The live crown of the tree is reduced below 30 percent.
- c. More than 1/3 of the circumference of a tree's main root system (a root 4 inches in diameter or larger) is injured such that the cambium layer (living tissue) is exposed.
- d. More than 1/3 of tree's total root system is severed or torn.
- e. More than 1/3 of the circumference of the trunk's cambium layer exposed.

For a list of suitable replacement trees or if you have any questions, please contact Amanda Morrison at Amanda.morrison@state.sd.us or (605) 394-2279.

Groundwater

This project is unlikely to have adverse effects on ground water quality. Should the parameters of your project change, please reach out to Matt Hicks at (605) 773-5337 or Matt.Hicks@state.sd.us. If this project impacts tribal lands, DANR recommends you also consult the tribe's environmental coordinator for any additional conditions.

Solid and Hazardous Waste

Based on the information provided, there is no solid waste information available for the project area. In addition, the project will likely have little or no impact on solid waste management in the area. If you have any questions, please contact Waste Management at (605) 773-3153.

It is not expected that any hazardous wastes sites will be encountered within the vicinity of your project area. However, if road construction is planned for areas within a city or town, the contractor should contact this Department prior to construction. Should any hazardous waste be generated during the implementation of this project, the generator must abide by all applicable hazardous waste regulations. To determine whether your project may generate hazardous waste, visit:

<https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses>. If you have any questions regarding the state's hazardous waste regulations please contact Anthony Wagner at 605-773-3153, or anthony.wagner@state.sd.us. Should the project occur on tribal lands, please contact Linda Jacobson at 303-312-6502 or Jacobson.Linda@epa.gov regarding potential hazardous waste-related considerations.

Demolition or renovation of a building structure may be subject to the National Emission Standards for Hazardous Air Pollutants. If demolition or renovation is part of this construction project, or if the scope of the project changes to include demolition or renovation, please contact Kristin Jendrek, U.S. EPA Region 8, at (303) 312-6126 or Jendrek.Kristin@epa.gov.

Surface Water

All surface waters are considered waters of the State and are protected under ARSD 74:51:01. This includes all rivers, streams, lakes, and wetlands regardless of federal waters of the United States jurisdictional status. Any project proposing to impact, alter, use, or discharge any substance including fill materials must contact the Department of Agriculture and Natural Resources prior to engaging in the proposed activity.

If this project impacts tribal lands, EPA Region 8 may require a NPDES permit for stormwater discharges from construction activities (1 acre or larger) or if any construction dewatering should occur; contact EPA Region 8 NPDES Staff. DANR recommends you contact the proper tribal authorities for any additional conditions.

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water Discharges Associated with Construction Activities. A Surface Water Discharge permit may be required if any construction dewatering should occur because of this project. Contact the Department of Agriculture and Natural Resources for additional information or guidance at 1-800-SDSTORM +1(800) 737-8676 or <https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/default.aspx>.

The discharge of pollutants from any source, including indiscriminate use of fill material, may not cause destruction or impairment except where authorized under Section 404 of the Federal Water Pollution Control Act. Please contact the United States Army Corps of Engineers for more information (605) 224-8531.

The Water Quality Program has several interactive maps on our website to search for locations of interest to check for any active or terminated surface water discharge permits. If the location in question does have a permit, the related documents can be found in a table under our interactive maps. If you are unable to find the information you are searching for, please contact the WQP at (605) 773-3351. The following links are to the various WQP search maps:

Individual Surface Water Discharge Permit (NPDES) Search:

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/swdpermitting/wwDBSearch.aspx>. For additional questions, please reach out to SWDPermits@state.sd.us.

Stormwater Permit (Industrial, Construction, and Contractor Authorization) Search:

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterDBSearch.aspx>. For additional questions, please reach out to stormwater@state.sd.us.

Mineral Development

The Minerals, Mining, and Superfund Program maintains databases of licensed construction aggregate mine sites and permitted oil & gas well sites. To find the location of construction aggregate mine sites and access related data, please visit <https://sdbit.maps.arcgis.com/apps/webappviewer/index.html?id=4046cfb6c4c24087831e18c6255466aestorage>. To find the location of permitted oil & gas wells and access related data, please visit <https://usd.maps.arcgis.com/apps/webappviewer/index.html?id=e54c5063b19c49629560a86a7be2eb3d>. To access the locations of or information pertaining to permitted mining operations, regulated mineral exploration areas, or to review the department's list of known historic abandoned mine sites, please contact Roberta Hudson at 605-773-4201 or at Roberta.Hudson@state.sd.us.

Tanks and Spills

The Inspection, Compliance, and Remediation Program (ICRP) maintains a database of registered storage tanks and spills/environmental events, including petroleum and chemical releases in South Dakota. For information about currently known petroleum storage tanks and spills/environmental events at or surrounding your project area (including PDF copies of case files), please review our online database:

<https://apps.sd.gov/nr42interactivemap>. If you have specific questions about a particular case file, feel free to contact this office by calling (605) 773-3296. However, if your question pertains to a spill/environmental event labeled as a Superfund, CERCLIS, FUD, or National Guard case, direct your questions to DANR Superfund Program staff at (605) 773-4201.

ICRP recommends you recheck the online database as your project progresses, to ensure you have up to date information about new spills/environmental events or newly installed registered tanks at or near your project area. While we do our best to maintain accurate information about spills/environmental events and registered tanks, in some cases the location information provided to us may have been inaccurate. For this reason, if contamination is encountered or if a spill occurs during onsite construction activity, that contamination or spill must be reported to DANR at (605) 773-3296 (605-773-3231 after hours). Contaminated soil that has been excavated should be segregated from clean soil and sampled to determine disposal requirements.

Please be aware if this project impacts property subject to tribal jurisdiction, state records may be incomplete. DANR recommends that you contact the proper tribal authorities for additional information. Thank you for providing DANR the opportunity to

comment on this project. If you have any questions regarding the information provided, please contact me at Jamison.Smith@state.sd.us or (605) 773-3296.

Sincerely,

Jamison Smith

Jamison Smith
Environmental Scientist I
SD DANR
Phone: (605) 773-3296
Email: Jamison.Smith@state.sd.us