Finding of No Significant Impact and Final Supplemental Environmental Assessment for the Funding of Routine Operation, Maintenance, and Replacement of Associated Water Transmission Facilities of the Mni Wiconi Rural Water Supply Project, South Dakota

Dakotas Area Office
Bismarck, North Dakota
Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation’s natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to 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.
UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION
DAKOTAS AREA OFFICE
BISMARCK, NORTH DAKOTA

FINDING OF NO SIGNIFICANT IMPACT

OF THE

FINAL SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

FOR THE

Funding of Routine Operation, Maintenance, and Replacement of Associated Water Transmission Facilities of the Mni Wiconi Rural Water Supply Project, South Dakota

NO. DK-5000-16-01

Recommended: ___________________________ Date: 1-23-2019

Kate Kenninger
Environmental Specialist
Dakotas Area Office

Concur: ___________________________ Date: 1-23-2019

Scott Hettinger
Chief, Resources Management
Dakotas Area Office

Approved: ___________________________ Date: 1-23-2019

Arden Freitag
Area Manager
Dakotas Area Office
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Introduction

Issuance of this Finding of No Significant Impact (FONSI) follows the completion of the Supplemental Environmental Assessment for the Funding of Routine Operation, Maintenance, and Replacement of Associated Water Transmission Facilities of the Mni Wiconi Rural Water Supply Project, South Dakota.

The FONSI describes the reasons for the finding for the proposed action’s anticipated impacts insignificant. This document contains the FONSI and Final Supplemental Environmental Assessment.
Finding of No Significant Impact and Final Supplemental Environmental Assessment for the Funding of Routine Operation, Maintenance, and Replacement of Associated Water Transmission Facilities of the Mni Wiconi Rural Water Supply Project, South Dakota

The Bureau of Reclamation (Reclamation) proposes to fund the activities associated with the routine operation, maintenance, and replacement (OM&R) of the Mni Wiconi Rural Water Supply Project facilities (Project).

The Project would include (Figure 1-1):

1. Preparing Cooperative Agreements with the tribal sponsors of the Mni Wiconi Project, namely the Oglala Sioux Rural Water Supply System (OSRWSS) Core System, Lower Brule Sioux Rural Water System (LBSRWS), Rosebud Sioux Rural Water System (RSRWS), and OSRWSS on-reservation distribution system, known as the Department of Water Maintenance and Conservation (DWM&C);
2. Preparing Water Service Agreements with West River/Lyman-Jones Rural Water System;
3. Preparing Memorandums of Understanding with the tribal sponsors and West River/Lyman-Jones Rural Water System;
4. Preparing Programmatic Agreement with the tribal sponsors;
5. Financial and agreement oversight;
6. Coordination of transferring existing systems into the Mni Wiconi Project;
7. OM&R of the OSRWSS Core pipeline system, LBSRWS pipeline system, RSRWS pipeline system, and OSRWSS on-reservation distribution system, DWM&C, and would include
   a. Approximately 4,500 miles of pipeline;
   b. OSRWSS Core Water Treatment Plant and its intake;
   c. Lower Brule Water Treatment Plant and its intake;
   d. Approximately 64 booster pumps stations;
   e. Approximately 35 water storage reservoirs;
   f. Twelve water treatment facilities; and
   g. Approximately 38 wells and chemical injection buildings, underground vaults, control valves, Supervisory Control and Data Acquisition (SCADA), meters, cathodic protection anode systems, appurtenances, access roads, and project vehicles.

Appendix A in the Final Supplemental Environmental Assessment (SEA) includes detailed tabulation of activities.

Four agency responses were received regarding the preparation of the SEA in response to Reclamation’s scoping notice: Bureau of Indian Affairs, South Dakota Department of Environment and Natural Resources, U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture (Appendix D of the final SEA). One private party response was received.

One agency response was received regarding the public release of the draft SEA: (pages 8 – 11). No private party responses were received.
Agency Decision

**No Action.** The No Action Alternative consists of the future without the proposed federal action, there would be no funding from Reclamation for the routine OM&R activities for the Mni Wiconi Rural Water Project. The Mni Wiconi Rural Water Project is owned by the United States and held in trust for the benefit of the tribes. Should the deciding official choose the No Action Alternative, the project proponents (Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux tribes) would likely pursue funding through other agencies to support the OM&R functions of the Mni Wiconi Rural Water System.

**Proposed Action.** Reclamation has determined that the Proposed Action, Reclamation’s preferred alternative, as described in the SEA DK-5000-16-01 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 is contained in the final SEA.
Reclamation defines significance relative to context and intensity in accordance with CEQ Regulations, 40 CFR 1508.27.

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. With regard to public health and safety, the action no impacts to safety are anticipated from the action. Public access and transportation may be temporarily affecting during construction-type activities.

4. This action will not have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.

5. This action will not have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.

6. This action will not establish a precedent for future action or represent a decision in principal about future actions with potentially significant environmental effects.

7. The action will not have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.

8. 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 construction. For NHPA clearance of potential OM&R projects in previously cleared easements, Reclamation consulted with the Rosebud and Pine Ridge Sioux Tribes and their THPO on November 21, 2017 (Project Nos. 1597.2017.03 and 1597.2017.04). Consultation with each Tribe was completed in early January 2018. For future OM&R projects on the Lower Brule Reservation and in Stanley, Haakon, Lyman, Jackson, Bennett, Mellette and Jones counties, Reclamation is preparing a Programmatic Agreement (Agreement) with the Rosebud and Pine Ridge Sioux Tribes, the Lower Brule Sioux Tribe and its Cultural Resources director, the South Dakota State Historic Preservation Officer SHPO and the Advisory Council on Historic Preservation.

9. Reclamation has determined the Proposed Action will have no effect to the interior least tern, whooping crane, piping plover and its designated critical habitat, rufa red knot, pallid sturgeon, western prairie fringed orchid, American burying beetle, black-footed ferret, and northern long-eared bat.

10. All applicable Federal and State environmental laws, regulations, and executive orders will be adhered to.
11. 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 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.

12. Reclamation has determined the Proposed Action will have no impacts to Indian Trust Assets.

13. Reclamation 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 Mitigation Commitments of the Community
Alternative
This section presents environmental commitments which have been developed by Reclamation in
consultation with Federal and State agencies, the Tribes, and the public through responses to scoping.
These commitments are included as an inseparable component of this Proposed Action and are designed
to offset potential for significant environmental effects resulting from the Proposed Action.

As sponsor of the Project, the Tribes will be responsible for complying with these commitments. Should
this project be implemented, the Tribes will ensure that these commitments are implemented and
followed prior to and/or during construction of the Project, as these commitments are required for
Reclamation funding. Appropriate environmental commitments will be incorporated into the designs
and construction contracts and specifications of the project.

An Interagency Environmental Review Team, with appropriate agency representation, may be
assembled to review environmental compliance in the field, as needed.

These environmental commitments will be implemented to (1) prevent, minimize, or offset the
occurrence of potential for adverse environmental effects and (2) 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.

<table>
<thead>
<tr>
<th>General Best Management Practices</th>
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<tbody>
<tr>
<td>Comply with all appropriate Federal, State, and Local laws.</td>
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<tr>
<td>Follow recommended practices for construction, restoration, and maintenance.</td>
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<tr>
<td>Dump grounds, trash piles, and potential hazardous waste sites will be avoided.</td>
</tr>
<tr>
<td>All construction waste materials and excess or unneeded fill associated with construction will be disposed of on uplands, non-wetland areas.</td>
</tr>
<tr>
<td>Standard construction, industry 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.</td>
</tr>
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<table>
<thead>
<tr>
<th>Surface Water and Wetlands</th>
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<tbody>
<tr>
<td>Contractors will be required to make at least two boring attempts before using an alternative stream or river crossing method.</td>
</tr>
<tr>
<td>When pipeline construction through a wetland basin is unavoidable existing basin contours will be restored and trenches will be sufficiently compacted to prevent any drainage along the trench or through bottom seepage.</td>
</tr>
</tbody>
</table>
Project proponent and contractor will be responsible to comply with Section 404 of the Clean Water Act and avoid permanent impacts to isolated wetlands to the extent practicable.

Intermittent streams will be crossed only during low-flow periods and preferably when the streambeds are dry.

Woody species including those bordering wetlands, shelterbelts, riparian woodlands, woody draws, or woodland vegetation will be avoided to the extent possible. For unavoidable impacts to woody habitats, replacement plants at a 2:1 ratio of appropriate speciation would be planted.

Maintain in-stream flows during stream crossing construction.

Spoil, debris piling, construction materials, and any other obstructions will be removed from stream crossings to preserve normal water flow.

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

Erosion control measures will be employed as appropriate and at stream crossings at all times:

(a) Care will be exercised to preserve existing trees along the streambank.
(b) Stabilization, erosion controls, restoration, and re-vegetation of all streambeds and embankments will be performed as soon as a stream crossing is completed and maintained until stable.

Riparian woody shrubs and trees will be replanted where and as necessary to preserve the shading characteristics of the watercourse and the aesthetic nature of the streambank.

**Fish and Wildlife Species and Habitat**

**To the extent possible,** construction would avoid:
- Wetlands
- Federal, State, and Local wildlife areas and refuges
- Designated critical habitats
- Migratory bird habitats during the nesting brood rearing season (February 1 – July 15)

To minimize impacts to fisheries resources any stream identified as a fishery (fisheries – confirm with SD Game, Fish and Parks Department) that cannot be directionally bored will be avoided from April 15 to June 1 and crossed later in the summer or fall when flows are low or the stream is dry.

Replacement power lines will be buried to minimize electrocution hazards to raptors and minimize impacts to all birds, bats, and particularly benefit whooping cranes. Any new, above ground power lines and an additional equal length of existing power lines in the same vicinity must be marked with visibility enhancement devices to benefit migrating whooping cranes as well as all migratory birds and bats.

Construction within 660 feet of visible nesting bald eagles will be avoided from February through August.

Project proponent will coordinate with the U.S. Fish and Wildlife Service’s (Service) appropriate Refuges and Wetland Management Districts and provide the latest map version of the pipeline delivery system to avoid impacts to Service lands, including wetland and grassland easements, national wildlife refuges (NWR), waterfowl production areas or other Service lands interface, allowing for identification of an avoidance route for the contractor.

If threatened or endangered species are identified and encountered during construction, all ground-disturbing activities in the immediate area will be stopped until Reclamation can consult with the Service to determine appropriate steps to avoid impacting the species.

Pipeline construction work is prohibited within ½ mile of designated critical habitat during the piping plover breeding season (April 15 – August 31).

If forested habitat or potential bat inhabited structures are identified prior to or during construction activities an Impact Mitigation Assessment team would determine if bat surveys are required. If any tree (with a diameter of greater than 3 inches) removal activities cannot be avoided between April 1 and October 31, then consultation would take place with the Service.

Native prairie will be avoided to the extent possible. However, if native prairie sod must be broken, existing topsoil will be carefully salvaged and replanted with native grasses in a timely manner, with a seed mix recommended by the local Natural Resources Conservation Service (NRCS) and approved by Reclamation and the landowner.

Any new signage will be placed in a manner as to not allow raptors to perch by covering the top two holes of the post.

**Cultural Resources**
Cultural resource inventories will be performed under the direction of an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9). All appropriate cultural resource activities will be completed prior to the commencement of ground-disturbing activities, including Class I and Class III surveys and consultation with the with the appropriate Historic Preservation Officer (HPO). All cultural resources will be avoided if their significance cannot be established prior to disturbance. If avoidance is not practicable, Reclamation, in consultation with the appropriate HPO would determine if the site is eligible for nomination to the National Register of Historic Places [36CFR800.4(c) and 36CFR60.4]. If the site is eligible as a historic property, initially Reclamation, HPO, and other interested parties, depending on the type of property, will consult to determine a plan of mitigation. If an adverse effect cannot be avoided, the Advisory Council on Historic Preservation will be contacted. All ensuing activities will comply with the National Historic Preservation Act, as amended, (Public Law 89-665; 54 U.S.C. 300101 et seq.).

If previously undiscovered cultural resources are exposed during any activities, work within the area shall cease. The site will be secured and protected. Project work at the site will not resume until all activities needed to comply with the Protection of Historic Properties (36 CFR Part 800.13) have been completed. Reclamation will consult with the appropriate Historic Preservation Officer (HPO) and the Advisory Council on Historic Preservation on its determination as to whether the discovery qualifies as a historic property. Project work can continue under the advisement of the Project Archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

In the event of an inadvertent discovery of human remains or funerary objects, all work at the find spot and in the immediate vicinity shall cease. The site will be secured and protected until Reclamation officials and the HPO have been notified and arrive on site. Protection of the discovery site may include flagging the discovery location with a buffer zone around it, tarping the find spot, and having an individual stay at the location to prevent further disturbance. Contact information for the individual who discovered the site must be provided to Reclamation and the HPO. No digging, collecting, or moving human remains or other items will occur after the initial discovery. Reclamation and the HPO would be responsible for determining the appropriate course of action under the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq. [Nov. 16, 1990]).

Under the Archaeological Resources Protection Act (16 U.S.C. 470aa-470mm; Public Law 96-95 [1979]), 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. Therefore, Reclamation and the HPO would need to be notified evidence these types of activities or discovered during the project.

Under the National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties (TCP), a TCP is an historic property that derives its significance from the role it plays in a community’s historically rooted beliefs, customs, and practices. If a potential TCP is discovered during the course of implementing the project, all work in its vicinity must halt. Reclamation and the HPO would need to be notified and would be responsible for determining the appropriate course of action.

**Paleontological Resources**

Reclamation will consult with South Dakota Geological Survey to identify areas for paleontological survey where significant fossils are likely.

All previously recorded paleontological resources and paleontologically sensitive zones within the path of the proposed action will be inspected in the field by a qualified paleontologist. Avoidance measures will be developed to avoid significant resources.

**Future Modifications and Changes**

Major changes or modifications to the proposed action would be addressed through additional NEPA and NHPA compliance.
Subject: Bureau of Reclamation’s Release of the Draft Supplemental Environmental Assessment for the Funding of Routine Operation, Maintenance, and Replacement of Associated Water Transmission Facilities of the Mni Wiconi Rural Water Supply Project, South Dakota

Dear Interested Party:

The Bureau of Reclamation has prepared a draft supplemental environmental assessment (SEA) for the funding of routine operation, maintenance, and replacement of associated water transmission facilities of the Mni Wiconi Rural Water Supply Project. Reclamation is the lead Federal agency responsible for ensuring compliance with the National Environmental Policy Act, National Historic Preservation Act, and related federal environmental and cultural resource legislation. The SEA presents the Proposed Action Alternative and evaluates the potential impacts to the human and natural environment associated with the Proposed Action Alternative in comparison with the No Action Alternative.

Reclamation will use this draft SEA and any review comments to determine whether the project will have any significant impacts on the human and natural environment. If no significant issues are identified, Reclamation would issue a Finding of No Significant Impact and final SEA. If significant issues are identified, we may consider the preparation of an Environmental Impact Statement.

Reclamation defines significance in accordance with 40 CFR 1508.27.

A copy of the draft SEA is located at https://www.usbr.gov/gp/dkao/index.html. Hardcopies of the draft SEA may be obtained by calling Kate Kenninger, Natural Resource Specialist, at 701-221-1282 or by requesting in writing from Area Manager, Bureau of Reclamation, P.O. Box 1017, Bismarck, North Dakota, 58502

We would appreciate your review and comments on the draft SEA. The review period will be open until January 11, 2019. Comments may be submitted in writing to: Kate Kenninger, Dakotas Area Office, P.O. Box 1017, Bismarck, ND 58502-1017, email kkenninger@usbr.gov or by calling 701-221-1282.

Sincerely,

ARDEN FREITAG

Arden Freitag
Area Manager
Planning, Programs, and Project Management Division

Ms. Kate Kenninger
Bureau of Reclamation Dakotas Area Office
P.O. Box 1017
Bismarck, North Dakota 58502-1017

Dear Ms. Kenninger:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated December 7, 2018 (received December 13, 2018) regarding the release of the Draft Supplemental Environmental Assessment for the funding of routine operation, maintenance, and replacement (OM&R) of associated water transmission facilities of the Mni Wiconi Rural Water Supply Project. It is understood that the proposed OM&R would include approximately 4,500 miles of pipeline, the Mni Wiconi Oglala Sioux Rural Water Supply System Core Water Treatment Plant and its intake, the Lower Brule Water Treatment Plant and its intake, approximately 64 booster pump stations and 35 water storage reservoirs, twelve water treatment facilities, approximately 38 wells and chemical injection buildings, underground vaults, storage tanks, control valves, Supervisory Control and Data Acquisition (SCADA) meters, cathodic protection anode systems, appurtenances, access roads, and project vehicles. We offer the following comments for your consideration:

The Corps of Engineers, in cooperation with the Lower Brule Sioux Tribe, is currently studying potential opportunities to address erosion that is threatening the town of Lower Brule. The purpose of this study is to evaluate alternatives for shoreline protection to reduce the continued loss of land which is threatening the town of Lower Brule’s sewage lagoons, roadways and other infrastructure. This feasibility study is being conducted under authority of Section 203 of the Water Resources Development Act of 2000, as amended, also known as the Tribal Partnership Program.

Your plans should be coordinated with the state water quality office that has jurisdiction within the area where the project is located to ensure compliance with federal and state water quality standards and regulations mandated by the Clean Water Act and administered by the U.S. Environmental Protection Agency. Please coordinate with the South Dakota Department of Environment & Natural Resources concerning state water quality programs.

If you have not already done so, it is recommended you consult with the U.S. Fish and Wildlife Service and the South Dakota Department of Game, Fish and Parks, regarding fish and wildlife resources. In addition, the South Dakota State Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

The Federal floodplain management criterion basically states that construction which could be damaged by floodwaters or which could obstruct flood flows should not be located
in the one percent annual chance floodplain. If this is not practicable, any residential construction that could be damaged by floodwater must be placed above the one percent annual chance floodwater surface elevation. Any nonresidential construction that could be damaged by floodwater must be placed above or flood proofed to above the one percent annual chance floodwater surface elevation. All construction should be designed to minimize potential harm to or within the floodplain. Higher levels of protection are encouraged to provide added safety. If the operation of the constructed facilities is considered critical during flood periods, the facilities should be protected from at least the 0.2 percent annual chance flood.

If construction must occur in the floodplain, it must be located outside the floodway. If a floodway has not been determined and designated, the construction should be as far from the stream channel as possible. The goal of any construction in the floodplain is to achieve the highest level of flood protection with zero impact to adjacent property.

If proposed waterline construction crosses the floodplains of small drainageways and streams, flood-related problems should not occur if the lines are buried far enough below the beds of drainageways and streams to prevent exposure due to streambed erosion during periods of high floodflows. Any aboveground construction subject to flood damage, such as pump houses, should either be placed above, or flood proofed to, a level above the one percent annual chance flood elevation.

Any potential action that may alter Corps civil works projects requires Department of the Army authorization under Section 408 (33 USC 408) of the Rivers and Harbors Act. The Section 408 review is to ensure the proposed activities will not impair the usefulness of federal projects and are not injurious to the public interest. Please coordinate with the Omaha District contact to determine the level of Section 408 review that is necessary. Also please make note of the Programmatic Environmental Assessment for the state of South Dakota that identifies Section 408 actions deemed categorical permissions and the steps needed to process requests in an expedited fashion.

U.S. Army Corps of Engineers, Omaha District
Operations Branch
Attention: Mr. Heath R. Kruger, CENWO-CDT-N
1618 Capitol Ave.
Omaha, Nebraska 68102-4901

For portions of the proposed project not located within Corps owned or operated lands, your plans should be submitted to the local floodplain administrator for review and approval prior to construction. It should be ensured that the proposed project is in compliance with the floodplain management criteria of the counties the OM&R project is located and the State of South Dakota. In addition, please coordinate with the following floodplain management office:

South Dakota Division of Emergency Management
Attention: Mr. Marc Macy
118 W. Capitol Avenue
Pierre, South Dakota 57501
Telephone: 605-773-3231
Fax: 605-773-3580
Email: marc.macy@state.sd.us
Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. You can visit the Omaha District’s Regulatory website for permit applications and related information. Please review the information on the provided website (http://www.nwo.usace.army.mil/Missions/RegulatoryProgram.aspx) to determine if this project requires a 404 permit. For a detailed review of the permit requirements, preliminary and final project plans should be sent to:

U.S. Army Corps of Engineers
Pierre Regulatory Office
Attention: Mr. Steve Naylor, CENWO-ODR-SD
28563 Powerhouse Road, Room 120
Pierre, South Dakota 57501

In addition, please update your records with our current mailing address:

U.S. Army Corps of Engineers, Omaha District
Planning Branch
Attention: Mr. Eric Laux, CENWO-PMA-C
1616 Capitol Ave.
Omaha, Nebraska 68102-4901

If you have any questions, please contact Ms. Ameer Rief of my staff at (402) 995-2544 or amee.l.rief@usace.army.mil and reference PD# 8131 in the subject line.

Sincerely,

Eric A. Laux
Chief, Environmental & Cultural Resources
Final Supplemental Environmental Assessment for the Funding of Routine Operation, Maintenance, and Replacement of Associated Water Transmission Facilities of the Mni Wiconi Rural Water Supply Project, South Dakota
Mission Statements

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**List of Acronyms and Definitions**

**Action Area** – All areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (i.e. Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties and encompasses Pine Ridge Indian Reservation, Rosebud Indian Reservation, and the Lower Brule Indian Reservation of South Dakota).

**Affected Area** – also area affected, under NEPA analysis, Lower Brule Indian Reservation, Pine Ridge Indian Reservation, Rosebud Indian Reservation (Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties) represent the affected area.

**Critical Habitat** – It is a specific geographic area(s) that has been officially designated by 50 CFR Parts 17 or 220 as essential for the conservation of a threatened or endangered species and that may require special management and protection.

**DENR** – South Dakota Department of Environment and Natural Resources

**DWM&C** – Department of Water Maintenance and Conservation

**GHGs** – Greenhouse Gases

**ITA** – Indian Trust Asset

**LBSRWS** – Lower Brule Sioux Rural Water System

**NEPA** – National Environmental Policy Act of 1969 as amended

**NHPA** – National Historic Preservation Act of 1966 as amended

**OM&R** – Operation, and Maintenance & Replacement

**OSRWSS** – Oglala Sioux Rural Water Supply System

**Reclamation** – U.S. Department of the Interior, Bureau of Reclamation

**RSRWS** – Rosebud Sioux Rural Water System

**SCADA** – Supervisory Control and Data Acquisition

**SDGF&P** – South Dakota Game, Fish and Parks

**SDDOT** – South Dakota Department of Transportation

**SEA** – Supplemental Environmental Assessment

**SHPO** – State Historical Preservation Office

**The Project** – The subject of this SEA, funding of the operation, routine maintenance and replacement of the Mni Wiconi Rural Water Supply Project.

**THPO** – Tribal Historic Preservation Officer

**USACE** – U.S. Army Corps of Engineers

**USFWS** – U.S. Fish and Wildlife Service
Chapter 1 – Introduction and Background

Bureau of Reclamation (Reclamation) is preparing a Supplemental Environmental Assessment (SEA) to the Environmental Assessment: Mni Wiconi Rural Water Supply Project for the routine operation, maintenance and replacement (OM&R) of the Mni Wiconi Rural Water Supply Project (hereinafter referred to as the Mni Wiconi OM&R Project). A SEA was completed in 1995, titled the Supplement to the Mni Wiconi Municipal, Rural, and Industrial Water System Environmental Assessment for the Echo Point Intake Structure and Water Treatment Plant, which required relocation of the Mni Wiconi Core System Water Treatment Plant and Raw Water Intake from the design proposed in the original EA. In response to the Department of Interior’s Indian trust responsibilities, Reclamation has participated as the lead federal agency, and contributed to the construction of the Mni Wiconi Rural Water Supply Project since the mid-1990s. The Mni Wiconi Rural Water Supply Project is a municipal, rural and industrial water supply.

In compliance with the original legislation (The Mni Wiconi Project Act of 19883), the Mni Wiconi Rural Water Supply Project, which is Reclamation’s project, was constructed to deliver a bulk treated water supply to the residents of Pine Ridge Indian Reservation, Rosebud Indian Reservation, Lower Brule Indian Reservation; Haakon, Jackson, Jones, Lyman, Mellette, Pennington and Stanley Counties rural residents; and provides water through a bulk water contract to the West River Lyman/Jones Rural Water System branch of the rural water system which is off reservation. The Mni Wiconi OM&R Project includes the Oglala Sioux Rural Water Supply System (OSRWSS) Core Pipeline System and On-Reservation Distribution System, also known as Department of Water Maintenance and Conservation (DWM&C), Lower Brule Sioux Rural Water System (LBSRWS), and Rosebud Sioux Rural Water System (RSRWS) (Figure 1).

Construction of the Mni Wiconi Rural Water Supply Project has been completed. The transition to the OM&R status of this project is an important part of Reclamation’s role in protecting an essential Indian Trust Asset (ITA), the tribe’s potable water supply. The Mni Wiconi Project Act of 1988 authorized funds for the OM&R for the tribal components of the Mni Wiconi Rural Water Supply Project.

Project Area

The OSRWSS Core System provides water to an area that extends from Fort Pierre along the Missouri River, southeast to Lower Brule Indian Reservation, south and west to the Rosebud Indian Reservation in Todd County, and continues west to deliver water to the Pine Ridge Indian Reservation. The OSRWSS Core System also continues west from Fort Pierre through Hayes and then through southeast Haakon County into Jackson County, and ultimately to deliver water to the Pine Ridge Indian Reservation in Oglala Lakota County formerly known as Shannon (Figure 1). The OSRWSS Core System also provides bulk connections to West River/Lyman-Jones Rural Water System along both pipeline routes. The project area is roughly equivalent to

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1/6 of the surface area of the entire state of South Dakota or roughly 12,500 square miles. The project serves approximately 51,000 people and is utilized for watering of 225,000 cow/calf pairs.

The ecological region is primarily described as River Breaks and Subhumid Pierre Shale Plains. River Breaks consist of broken terraces and uplands that ultimately decrease in elevation from west to east with erodible soils such as Pierre shale. Lineal forests line the well wooded draws of riparian drainages including the Moreau, Cheyenne, Bad, and White Rivers. Subhumid Pierre Shale Plains are a slightly higher elevation of 1,700-2,800 feet above msl, characterized by extremely unstable, easily eroded soils resulting in deeply cut banks and slumping of hillsides (Tatanka Wakpala Land 2014; EPA 2016a). Precipitation averages 16-18 inches annually and temperature means in January range from 3 °F to 27 °F, while July temperature means range from 60 °F to 91 °F. The area is characterized by mid to shortgrass prairie in naturally vegetated areas with the exception of riparian areas. Grazing and dryland farming are the predominant land uses.

**Authority**


**Purpose And Need**

The Mni Wiconi Project was authorized and constructed to provide reliable and safe, good quality drinking water to a large area of South Dakota, which had insufficient water quantity and poor water quality.

The purpose of the proposed action is to provide funding for the OM&R of the OSRWSS (Core Pipeline System and On-Reservation Distribution System), LBSRWS, and RSRWS segments of the Mni Wiconi Project that have not previously been described in completed NEPA documentation.

The need is to provide environmental compliance for the broad array of activities carried out on a day-to-day basis that are necessary to maintain system operation.

For purposes of this SEA, acceptable quality means water that complies with the primary water quality standards adopted under the Safe Drinking Water Act. The federal government is responsible to provide and ensure these three tribes are served with a reliable source of quality water. Reclamation has overseen the construction of the Mni Wiconi Project since its original construction funding in 1988. This large, complicated rural water system needs to be maintained in order to ensure the appropriate protection of this ITA, and continued reliable delivery of quality water supply into the future.
National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) Process

The OM&R activities of the Mni Wiconi Rural Water Supply Project would involve the use of federal funds and Reclamation serves as the lead federal agency with responsibility for environmental compliance including NEPA compliance. This SEA is being prepared in compliance with NEPA and is a supplement to the original Mni Wiconi Municipal, Rural, and Industrial Water System EA completed for the project in 1993 and the supplemental EA completed for relocation of the Echo Point intake and water treatment plant in 1995.

As stated above, Reclamation has completed previous NEPA relative to the Mni Wiconi Rural Water Supply Project. These previous actions were also funded through Reclamation.

Alternative or additional funding sources apart from Reclamation’s action may include but are not limited to the following programs:
(a) Department of Agriculture, Rural Utilities Service;
(b) Environmental Protection Agency; and/or
(c) Indian Health Services.

Because the Mni Wiconi OM&R Project tribal components would be funded through Federal appropriations, tribal project proponents must comply with Federal laws and regulations concerning cultural resources. Compliance activities associated with Section 106 of the NHPA of 1966, as amended, was carried out for construction of each segment of the Mni Wiconi Project in accordance with the Section 800 regulations. As with NEPA, Reclamation is the lead Federal agency for compliance with NHPA Section 106 requirements. Reclamation’s plan is to develop a programmatic consultation program for Lower Brule Reservation and off-reservation components in Lyman, Stanley, Haakon, Jackson, Jones, Bennett and Jones Counties, South Dakota. A consultation process would be agreed upon with Lower Brule Sioux Tribe, South Dakota State Historic Preservation Officer (SHPO), Bureau of Indian Affairs, as appropriate, and other interested parties. Section 106 consultation was conducted separately with the Tribal Historic Preservation Officers (THPOs), Tribal Chairmans, and the Tribes rural water office for components within the boundaries of Pine Ridge and Rosebud Reservations because each tribe acts independently of one another.

This SEA may lead to a Finding of No Significant Impact, if impacts are found to be insignificant. If significant environmental impacts are identified, Reclamation may proceed with the preparation of an environmental impact statement. Comments, including Reclamation’s response, would be included in the FONSI. Reclamation defines significance in accordance with 40 CFR 1508.27 in reference to context and intensity. This SEA is being prepared to assist the involved Federal agencies and the responsible official in determining what environmental impacts are likely to occur as a result of proceeding with the proposed action.
Figure 1. Mni Wiconi Core Pipeline under Reclamation Responsibility for Operation, Maintenance, and Replacement and Areas Served.
Chapter 2 – Proposed Action and Alternatives Considered

Proposed Action – Reclamation’s Preferred Alternative
The Proposed Action, which is Reclamation’s Preferred Alternative, is to provide funding for the routine OM&R activities of the Mni Wiconi Project. Project construction was completed and has transitioned to OM&R status. The Project serves 18,000 Oglala Sioux Tribal Members, 11,300 Rosebud Sioux Tribal Members, 1,400 Lower Brule Sioux Tribal Members, and service to approximately 51,000 people overall.

The Mni Wiconi OM&R Project (refer to Figure 1) would include:

1. Preparing Cooperative Agreements with the tribal sponsors of the Mni Wiconi Project, namely the OSRWSS Core System, LBSRWS, RSRWS, and OSRWSS on-reservation distribution system, known as DWM&C;
2. Preparing Water Service Agreements with West River/Lyman-Jones Rural Water System;
3. Preparing Memorandums of Understanding with the tribal sponsors and West River/Lyman-Jones Rural Water System;
4. Preparing Programmatic Agreement with the tribal sponsors;
5. Financial and agreement oversight;
6. Coordination of transferring existing systems into the Mni Wiconi Project;
7. OM&R of the OSRWSS Core pipeline system, LBSRWS pipeline system, RSRWS pipeline system, and OSRWSS on-reservation distribution system, DWM&C, and would include:
   a. Approximately 4,500 miles of pipeline;
   b. OSRWSS Core Water Treatment Plant and its intake;
   c. Lower Brule Water Treatment Plant and its intake;
   d. Approximately 64 booster pump stations;
   e. Approximately 35 water storage reservoirs;
   f. Twelve water treatment facilities; and
   g. Approximately 38 wells and chemical injection buildings, underground vaults, control valves, Supervisory Control and Data Acquisition (SCADA), meters, cathodic protection anode systems, appurtenances, access roads, and project vehicles.

Routine OM&R Activity Descriptions

Pipeline Leaks. Most common rural water repairs typically involve pipeline leak repairs. Leaks are detected in numerous ways including pressure drops, lack of water, and/or emerging water on the surface in the vicinity of system pipe. Once detected, the appropriate valve serving the segment must be identified and closed. Excavation equipment necessary to expose the leak must be brought to the easement location. Access to the site is accomplished dependent on the location and landowner. The overburden of the pipe must be removed and stockpiled to the side. The pipe would be cut off and a gasketed repair completed or section of pipeline replaced. The pipeline would be pressure tested, disinfected or sanitized, and restoration would take place on the surface once the trench was backfilled and properly compacted.
Storage Tank Services. Storage tanks are routinely drained in order to control bacteria and sediment accumulation from entering the distribution system. Tanks are also prone to rust, and require periodic resurfacing and recoating of both the interior and exterior surfaces.

System Vaults Maintenance and Control Valve Exercise Services. System vaults, which contain system controls, are buried underground to protect controls from the elements to maximize lifespan and protecting from freezing. Control valves require regular “exercise” in which valves must be opened and closed at regular intervals to ensure that they can be utilized to isolate appurtenances or pipe segments or opened in order to bypass some other valve. Some valves are designed strictly to allow bleeding off air.

See Appendix A for a detailed tabulation of activities to be carried out under this NEPA document.

What is not Routine OM&R

Although the list of routine OM&R activities described within this document is extensive, several activities are not considered “routine”. Those activities require Reclamation to be notified and may require consultations by Reclamation with other State or Federal agencies such as South Dakota Department of Environment and Natural Resources (DENR), South Dakota Department of Game, Fish and Parks (SDGF&P), South Dakota Department of Transportation (SDDOT), U.S. Fish and Wildlife Service (USFWS), or U.S. Army Corps of Engineers (USACE). Such excluded activities that must be reviewed by Reclamation include, but may not be limited to:

- Actions that require excavation within waters regulated by the State including stream crossings, pipe exposure repairs, bored crossings that require repairs;
- Actions that require work within waters of the United States which would include any work with intakes including screen or pipeline in the Missouri River or contribute to waters of the U.S.;
- Actions that require permits from the State of South Dakota (DENR, SDGF&P, or SDDOT), USACE including Nationwide Permits, or the USFWS;
- Actions that require ground disturbance in areas not previously disturbed by prior Project construction (outside the right-of-way) and not previously cleared for cultural resources;
- Other actions identified through comments to the SEA and would be included in the FONSI.

Environmental Mitigation Commitments of Reclamation’s Preferred Alternative

Environmental commitments, presented in Appendix B, have been developed in consultation with Federal and State agencies, Tribes, and the public through construction and responses to scoping over the last decade of rural water system development in North Dakota and South Dakota by Reclamation and the project sponsor. These commitments are included as an inseparable component of this Proposed Action and are designed to offset potential for significant environmental effects resulting from the Proposed Action.

The Tribes would be responsible for complying with these commitments and will ensure that these commitments are implemented and followed prior to and/or during OM&R of the Project.
Appropriate environmental commitments would be incorporated into the designs and construction contracts for repairs.

An Interagency Environmental Review Team, with appropriate agency representation, may be assembled to review environmental compliance in the field, as needed.

The environmental commitments would be implemented to (1) prevent, minimize, or offset the potential for adverse environmental effects and (2) 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.

**No Action Alternative**
The No Action Alternative consists of the future without the proposed federal action – no funding from Reclamation for the routine OM&R activities for the Mni Wiconi Rural Water Project. The Mni Wiconi Rural Water Project is owned by the United States and held in trust for the benefit of the tribes. Should the deciding official choose the No Action Alternative, the project proponents (Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux tribes) would likely pursue funding through other agencies to support the OM&R functions of the Mni Wiconi Rural Water System.

**Future Modifications and Changes to the System**
If Reclamation funds are used or Reclamation is the lead federal agency for future actions that involve additions, extensions, extraordinary maintenance, or OM&R activities requiring state or federal approvals or permits (i.e. work in waters of the U.S.), Reclamation would address such actions through additional NEPA and NHPA compliance on a case-by-case basis.
Chapter 3 – Affected Environment and Environmental Impacts

The affected area encompasses the communities, land, water, and air-sheds that might be impacted by the Mni Wiconi OM&R Project. The boundaries of the affected area for each resource extend to where effects can be reasonably and meaningfully measured and vary considerably by resource. The Mni Wiconi OM&R Project is essential and integral to continuing to provide reliable potable water to the people of the Pine Ridge, Rosebud, Lower Brule Sioux Reservations, West River/Lyman-Jones Rural Water System, and associated communities. The project area is relatively dispersed, characterized primarily by agriculture, existing farms, ranches, temporary and permanent water basins, numerous rivers, widely dispersed buildings and home sites, and numerous relatively small rural communities.

Resource Areas Considered and Eliminated from Further Analysis

In light of Reclamation’s Environmental Commitments (Appendix B) and in response to comments received from the scoping notice, the Mni Wiconi OM&R Project would have no potential to affect certain resource areas or its affect to certain resource areas is so minor (negligible) that it was discounted. These resource areas include air quality, noise, recreation, public safety/access/transportation, paleontological resources, soils and geology, vegetation, water resources, wildlife, visual resources and climate change (Table 1).

<table>
<thead>
<tr>
<th>Resource</th>
<th>Rationale for Elimination from Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>Temporary effects during construction-type activities related to OM&amp;R would include fugitive dust. Application of standard construction, industry measures would be taken to minimize fugitive dust emissions during construction activities.</td>
</tr>
<tr>
<td>Noise</td>
<td>Temporary effects during construction-type activities related to OM&amp;R would include an increase in noise. The impact would be short-term and would occur mainly during daylight hours.</td>
</tr>
<tr>
<td>Recreation</td>
<td>No impact to recreation areas is anticipated from the proposed Mni Wiconi OM&amp;R Project.</td>
</tr>
<tr>
<td>Public Safety, Access, and Transportation</td>
<td>No impacts to public safety are anticipated from the proposed Mni Wiconi OM&amp;R Project. Public access and transportation have the potential to be temporarily affected during construction-type activities.</td>
</tr>
<tr>
<td>Paleontological Resources</td>
<td>No response was received from the South Dakota State Geological Survey during the scoping process. All OM&amp;R activities proposed would take place within existing rights-of-way. No impact to paleontological resources is anticipated from the proposed Mni Wiconi OM&amp;R Project.</td>
</tr>
<tr>
<td>Soils and Geology</td>
<td>All OM&amp;R activities proposed, would take place within existing rights-of-way, and therefore previously-disturbed areas. Minor disturbance of soils would occur during construction and would be restored to current state or better during post-construction.</td>
</tr>
<tr>
<td>Resource</td>
<td>Rationale for Elimination from Further Analysis</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Future work (where Reclamation is the lead Federal agency or Reclamation provides the funding) requiring federal or state permitting, would require additional review by Reclamation. This includes but it is not limited to actions that require ground disturbance in areas not previously disturbed by prior Project construction.</td>
</tr>
<tr>
<td>Vegetation</td>
<td>All OM&amp;R activities proposed, would take place within existing rights-of-way, and therefore previously-disturbed areas. During construction-type activities, existing topsoil would be carefully salvaged and replanted with native grasses in a timely manner. The seed mix would be recommended by the local National Resources Conservation Service and approved by Reclamation and the landowner. Noxious weed control would include spraying application of chemical herbicide. Wooded vegetation would be avoided to the extent practical. For unavoidable impacts to woody habitats, replacement plants at a 2:1 ratio of appropriate speciation would be planted.</td>
</tr>
<tr>
<td>Water Resources</td>
<td>All OM&amp;R activities proposed, would take place within existing rights-of-way, and therefore previously-disturbed areas. Wetland and stream crossing would be avoided to the extent possible. When unavoidable, construction activities would follow the Environmental Commitments regarding water resources found in Appendix B. Operations of the OSRWSS Core System WTP and Lower Brule WTP and their intakes on the Missouri River would be maintained. Future work (where Reclamation is the lead Federal agency or Reclamation provides the funding) requiring federal or state permitting, would require additional review by Reclamation. This includes but it is not limited to: actions that require excavation within waters regulated by the State including stream crossings, pipe exposure repairs, bored crossings that require repairs; actions that require work within waters of the United States which would include any work with intakes including screen or pipeline in the Missouri River or contribute to waters of the U.S.; and actions that require permits from the USACE, including Nationwide Permits.</td>
</tr>
<tr>
<td>Wildlife</td>
<td>All OM&amp;R activities proposed, would take place within existing rights-of-way, and therefore previously-disturbed areas. Impacts to wildlife would include displacement due to noise from construction and traffic from OM&amp;R activities. Impacts would be temporary and would cease upon completion of construction-type activities.</td>
</tr>
<tr>
<td>Visual Resources</td>
<td>All OM&amp;R activities proposed, would take place within existing rights-of-way, and therefore previously-disturbed areas. Impacts to visual resources would be temporary and would cease upon completion of construction-type activities.</td>
</tr>
<tr>
<td>Climate Change</td>
<td>Emission of CO₂ and other Greenhouse Gases from the construction components of the proposed project would be low and would not substantively contribute to climate change.</td>
</tr>
</tbody>
</table>
Threatened And Endangered Species And Designated Critical Habitat

Reclamation consulted the USFWS, South Dakota Ecological Service’s Office website (http://www.fws.gov/southdakotafieldoffice/SpeciesByCounty_Oct2015.pdf) and the Information, Planning, and Conservation System (https://ecos.fws.gov/ipac/) to obtain a list of threatened and endangered species and critical habitats associated with the affected area (Table 2).

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.

Action Area
The Action Area identified is based on Reclamation’s assessment of the potential direct and indirect effects of the proposed action to federally listed species (50 CFR 402.02). The evaluation of federally listed species focuses on the aquatic and terrestrial environments that may be influenced by the activities of the Mni Wiconi OM&R Project. Therefore, the Project Action Area consists of Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties and encompasses Pine Ridge Indian Reservation, Rosebud Indian Reservation, and the Lower Brule Indian Reservation of South Dakota.

Table 2. Federally-Listed Species in the Action Area.

<table>
<thead>
<tr>
<th>Group</th>
<th>Species</th>
<th>Federal Status</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird</td>
<td>Interior Least Tern</td>
<td>E</td>
<td>Lyman, Stanley, Haakon</td>
</tr>
<tr>
<td></td>
<td>Piping Plover</td>
<td>T</td>
<td>Lyman, Stanley, Haakon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CH</td>
<td>Stanley, Haakon</td>
</tr>
<tr>
<td></td>
<td>Rufa Red Knot</td>
<td>T</td>
<td>Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett, Oglala Lakota</td>
</tr>
<tr>
<td></td>
<td>Whooping Crane</td>
<td>E</td>
<td>Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett, Oglala Lakota</td>
</tr>
<tr>
<td>Fish</td>
<td>Pallid Sturgeon</td>
<td>E</td>
<td>Lyman, Stanley</td>
</tr>
<tr>
<td>Plant</td>
<td>Western Prairie Fringed Orchid</td>
<td>T</td>
<td>Todd, Bennett, Oglala Lakota</td>
</tr>
<tr>
<td>Invertebrate</td>
<td>American Burying Beetle</td>
<td>E</td>
<td>Todd, Bennett</td>
</tr>
<tr>
<td>Mammal</td>
<td>Black-footed Ferret</td>
<td>E</td>
<td>Lyman, Stanley</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XN</td>
<td>Mellette, Todd</td>
</tr>
<tr>
<td></td>
<td>Northern Long-eared Bat</td>
<td>T</td>
<td>Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett, Oglala Lakota</td>
</tr>
</tbody>
</table>

1 T = threatened, E = endangered, XN = experimental/non-essential population.
**Interior Least Tern (Sterna antillarum)**

Interior least terns are 8 to 10 inches in length, have a black crown on their head, a white underside and forehead, grayish back and wings, orange legs, and a yellow bill with a black tip.

**Population Rangewide**

There are three subspecies of least tern: the eastern or coastal least tern (*Sterna antillarum antillarum*) that breeds along the Atlantic and Gulf Coast, the California least tern (*Sterna antillarum browni*) that breeds along the California Coast, and the interior least tern (*Sterna antillarum athallasos*) that extends from Texas to Montana, and from eastern Colorado and New Mexico to southern Indiana. The interior least tern was listed as endangered in 1985 (*Federal Register* 50:21784-21792). Historically, interior least terns utilized major river systems from Texas to Montana, and from eastern Colorado and New Mexico to southern Indiana. However, due to dams and channelization, much of their suitable nesting habitat has been eliminated and has disturbed food sources. Wintering locations have been documented along the Central American and South American coasts, from Venezuela to northeastern Brazil. In 2005, the adult population of interior least terns was estimated at 17,500 (Lott 2006).

**Action Area**

In South Dakota, interior least terns nest along the Missouri River and Cheyenne River, utilizing sandbars with spare vegetation. Some of the only naturally occurring sandbar nesting habitat occurs on the Missouri River below Fort Randall and Gavins Point Dams. Interior least terns are colony nesters, typically arriving at the nesting grounds in early to mid-May. The population and fledge ratio (number of young that survive to fledging age per adult pair) of interior least terns have been monitored by the USACE since 1986 (Figure 2). The South Dakota population of interior least terns have fluctuated between approximately 150 and 500 individuals from 1986 to 2004. The fledge ratio has ranged from under 0.5 to almost 2.0. High water impacts were apparent on population counts and nesting in 1996 and 1997. Overall, a positive trend in adult census counts has occurred since 1986. According to the USFWS (2017), interior least terns are known to occur in Haakon, Lyman, and Stanley Counties, South Dakota. The Missouri River Recovery Least Tern and Piping Plover Data Management System (TP DMS) has recorded multiple nests in Stanley County, along the Cheyenne and Missouri Rivers (USACE 2018).
Piping Plover (*Charadrius melodus*) and its Designated Critical Habitat

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 Rangewide

Three sub-populations of piping plovers 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. Much like the interior least tern, piping plover numbers have declined due to dams and channelization, reducing suitable habitat. In 2006, the adult population of piping plovers was estimated at approximately 8,100, with 3,000 of that estimate in the Northern Great Plains (Elliott-Smith et al. 2009).


**Action Area**

In the Great Plains, piping plovers nest on open beaches, alkaline wetlands, and sandflats. Nesting extends from late April through August, with most nests initiated in May and June. The population and fledge ratio (number of young that survive to fledging age per adult pair) of piping plovers have been monitored by the USACE since 1986 (Figure 3). The South Dakota
population of piping plovers have fluctuated between approximately 40 and 600 individuals from 1986 to 2004. The fledge ratio has ranged from under 0.5 to greater than 2.0. High water impacts were apparent on population counts and nesting in 1996 and 1997. Overall, a positive trend in adult census counts has occurred since 1986. According to the USFWS (2017), piping plovers are known to occur in Haakon and Stanley Counties, South Dakota. The TP DMS has recorded multiple nests in Stanley County, along the Cheyenne and Missouri Rivers (USACE 2018).

Designated critical habitat of the piping plover in South Dakota includes Lake Oahe and the Missouri River from Fort Randall Dam south to Ponca State Park, Nebraska. Action Area counties where designated critical habitat for the piping plover include Stanley and Haakon (Figure 4).
Rufa Red Knot (*Calidris canutus rufa*)
Rufa red knots are typically 9 to 11 inches in length. During the breeding seasons they are a mottled gray, black, and white that run 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 Rangewide**
The rufa red knot was listed as threatened in 2014 (*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 stepping stones between wintering and breeding areas. Many of the key migration staging areas are along the coasts but there are records in the interior states which show small numbers (fewer than 10) of red knots.

**Action Area**
The red knot is a rare, transient migrant in South Dakota. According to the South Dakota Ornithologists’ Union’s sightings database, there have been 26 sightings in the state since 1970 (USFWS 2014a). Sullivan et. al. (2009) does not have any recorded occurrence of red knots in the Action Area, with the closes sighting near Blunt, South Dakota in 2016.

Whooping Crane (*Grus americana*)
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 they have black legs.

**Population Rangewide**
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, 329 whooping cranes were estimated during the winter 2015-2016 survey, centered on the Aransas National Wildlife Refuge (Whooping Crane Conservation Association 2016).

The whooping crane recovery plan includes scientific information about the species and provides objectives and actions needed to down-list the species (Canadian Wildlife Service and U.S. Fish and Wildlife Service 2007). Recovery actions designed to achieve these objectives include protection and enhancement of the breeding, migration, and wintering habitat for the Aransas-Wood Buffalo population. The goals are to allow the wild flock to grow and reach ecological and genetic stability; reintroduction and establishment of geographically separate self-sustaining wild flocks to ensure resilience to catastrophic events; and maintenance of a captive breeding flock that is genetically managed to retain a minimum of 90 percent of the whooping cranes’ genetic material for 100 years.

**Action Area**
The whooping crane passes through South Dakota each spring and fall while migrating between its breeding territory in northern Canada and wintering grounds on the Gulf of Mexico. Frequently, whooping cranes migrate with sandhill cranes. Whooping cranes inhabit shallow wetlands but may also be found in upland areas, especially during migration. The whooping crane prefers freshwater marshes, wet prairies, shallow lakes, and wastewater lagoons with extensive visibility for feeding and loafing during migration.

Overnight roosting sites usually have shallow water in which whooping cranes stand. Whooping cranes roost on un-vegetated sandbars, wetlands, and stock dams. Fall migration occurs in South Dakota from late September to mid-October, while spring migration occurs from late April to mid-June. Whooping cranes are usually found in small groups of seven or fewer individuals and are easily disturbed when roosting or feeding.

The Mni Wiconi Project Area is partially located within the migration corridor, as shown in Figure 5. In 2010, the USFWS produced the Whooping Crane Migration Corridor Map that outline the percentage of confirmed crane sightings based on current and historical sighting reports. Sightings of the whooping crane have occurred in the Action Area, with most sightings along the Missouri River corridor.
Figure 5. Whooping Crane Observations in the Mni Wiconi Rural Water Supply Project Area.

**Pallid Sturgeon** (*Scaphirhynchus albus*)
Pallid sturgeon are one of the largest fish found in the Missouri and Mississippi River Systems, weighing up to 85 pounds. Pallid sturgeon are typically light brown with a white underside. The snout is flat and shovel-shaped with fleshy chin barbels.

**Population Rangewide**
The pallid sturgeon was listed as endangered in 1990 (*Federal Register* 55:36641-36647). The pallid sturgeon requires turbid water and flow rates of large, free-flowing rivers. Historically the population ranged in the lower 200 miles of the Yellowstone River; the Missouri River (from Fort Benton, MT to St. Louis, MO); the Mississippi River from St. Louis south to Louisiana; larger tributaries include the Platte, Kansas, St. Francis, Ohio, Arkansas, and Yazoo/Big Sunflower Rivers; and the Atchafalaya River. Total length of the pallid sturgeon’s historical range was approximately 3,515 river miles (USFWS 2014b). A majority of its habitat has declined due to river channelization, construction of impoundments, and related changes in water flow. Today, the pallid sturgeon has been limited to fragmented segments of free-flowing rivers within its historical range (Figure 6).

Source: [https://www.fws.gov/southdakotafieloffice/STURGEON.HTM](https://www.fws.gov/southdakotafieloffice/STURGEON.HTM)
Figure 6. Current range of pallid sturgeon, includes both wild and hatchery-reared fish (available at: https://www.fws.gov/mountain-prairie/species/fish/pallidsturgeon/recoveryplan2014.pdf).

**Action Area**
Due to alterations on the Missouri River, much of the riverine system that existed historically in South Dakota has transitioned into a lacustrine system. Remnant pallid sturgeon exist in the
South Dakota system, however, there has been no evidence of reproduction since dam completions (Aron 2006).

**Western Prairie Fringed Orchid (Platanthera praeclara)**
The western prairie fringed orchid can reach up to 47 inches tall with numerous white flowers about an inch long. Each flower contains a long nectar spur. The stem contains five to ten leaves, with the lower leaves smoother, longer, and larger than the upper leaves.

**Population Rangewide**
The western prairie fringed orchid was listed as threatened in 1989 (Federal Register 54:39857-39863). The western prairie fringed orchid is native to Midwest tallgrass prairies and historical documentation suggest it was distributed throughout the prairie states and provinces from Manitoba to Oklahoma. The significant decline of the western prairie fringed orchid is due to conversion of most habitats to agriculture.

**Action Area**
Historical documents of extant ranges suggest the western prairie fringed orchid is extirpated from South Dakota (USFWS 1996). A specimen was last collected in 1916 (SDGF&P n.d.).

**American Burying Beetle (Nicrophorus americanus)**
American burying beetles are about an inch long. The body is black and the wing covers, pronotum, face, and antennae tips have orange-red markings.

**Population Rangewide**
The American burying beetle was listed as endangered in 1989 (Federal Register 54:29652-29655). The American burying beetle once occurred in 35 states and the southern borders of three eastern Canadian provinces (Ontario, Quebec, Nova Scotia). Today, the beetle occurs in nine states: Rhode Island, Massachusetts, Oklahoma, Arkansas, Nebraska, Kansas, South Dakota, Texas, and Missouri. Loss of the American burying beetle is thought to be due to a combination of factors including but not limited to pesticide application, loss of the Passenger Pigeon, and habitat fragmentation. American burying beetles are found in prairie, forest edge, and shrubland. Carrion availability is thought to be the limiting factor in beetle habitat, not vegetation and soil type.

**Action Area**
The American burying beetle occurs in southcentral South Dakota. The majority of the South Dakota population is found in southern Tripp County, with other individuals found in eastern Todd, western Gregory, and Bennett Counties. In 2005, a population estimate was completed and determined approximately 1,000 individuals over 500 miles² in South Dakota (USFWS 2015).
Black-footed Ferret (*Mustela nigripes*)

Black-footed ferrets have a tan body with black legs and feet, a black tip on the tail, and a black mask. They reach approximately 6 inches in height and a length of 18 – 20 inches and weigh from 1.5 – 2.5 pounds.

**Population Rangewide**

The black-footed ferret was originally listed under the Endangered Species Preservation Act in 1967 (*Federal Register* 32:4001) and then under a revised listing of the Endangered Species Act (*Federal Register* 35:8491). At one time, black-footed ferrets ranged throughout the plains from Texas to southern Saskatchewan and are associated with prairie dog towns. Populations have been effected by disease, prairie dog eradication programs, and habitat degradation. Today, black-footed ferrets are limited to several captive populations and a few wild populations. In 2006, approximately 700 black-footed ferrets existed in the wild (USFWS 2013).

**Action Area**

Black-footed ferrets have been reintroduced to six sites in South Dakota: Badlands National Park (1994), Conata Basin (1996), Cheyenne River Indian Reservation (2000), Rosebud Indian Reservation (2003), Lower Brule Indian Reservation (2006), and Wind Cave National Park (2007) (USFWS 2012). One, potentially two, of the remaining wild populations of black-footed ferrets occur in South Dakota. One population of black-footed ferret occurs at Conata Basin (Buffalo Gap National Grasslands) and the second potentially occurs on Cheyenne River Indian Reservation. Of the 700 wild black-footed ferrets, 430 individuals occur in the South Dakota population (USFWS 2013).

Northern Long-eared Bat (*Myotis septentrionalis*)

Northern long-eared bats 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 Rangewide**

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). The range of the northern long-eared bat includes much of the eastern and north-central United States and most of the Canadian provinces. The northern long-eared bat spends winters hibernating in caves and mines. In summer, the northern long-eared bat roosts underneath bark of live and dead trees, rock crevices, caves, mines, barns, and sheds. The dramatic decline of the northern long-eared bat is due to white-nose syndrome. There are many unknowns regarding white-nose syndrome, however it is expected that the
disease will spread throughout the United States. Other sources of decline include impacts to hibernacula, degradation of summer habitat, and wind farm operation.

**Action Area**
The entire state of South Dakota is within the northern long-eared bat range. All South Dakota counties are within the white-nose syndrome zone. One county in the Action Area, Jackson, has white-nose syndrome infected hibernacula (Figure 7). The species is considered abundant throughout the Black Hills region and several hibernacula have been discovered in natural caves and abandoned mines (Tigner and Stukel 2003). According to Swier (2003), the distribution of the species on the eastern side of South Dakota is restricted to gallery forests bordering the Missouri River.

![Northern Long-Eared Bat Final 4(d) Rule](https://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf)

Figure 7. White-nose syndrome zone (available at: https://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf).

**Effects Analysis**
The term “effects of the action” refers to the direct and indirect effects of a proposed action on a 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 §402.02). Reclamation reviewed the Action Area settings, life history, habitat
information, and environmental baseline for each of the federally-listed species to evaluate potential effects.

**Proposed Action Alternative**

Reclamation’s full list of environmental commitments is located in Appendix B; environmental commitments with regard to federally-listed species are as follows:

- Construction would avoid migratory bird habitats during the nesting brood rearing season (February 1 – July 15);
- Replacement power lines will be buried to minimize electrocution hazards. Any new, above ground lines and an additional equal length of existing power lines in the same vicinity must be marked with visibility enhancement devices;
- Any stream identified as a fishery that cannot be directionally bored will be avoided from April 15 to June 1 and crossed later in the summer or fall when flows are low or the stream is dry;
- If any tree (with a diameter of greater than 3 inches) removal activities cannot be avoided, then individual project consultation would take place with the USFWS;
- Should any federally listed species appear in the Project Area it will be immediately reviewed by DKAO Environment and Resources staff who will contact the USFWS should any further Section 7 consultation be required.
- Activities would avoid the Missouri River shoreline during the interior least tern and piping plover nesting season (April to August 30). If activities cannot avoid the shoreline during this time period, consultation will take place with the USFWS.
- Wetlands and agricultural fields provides potential stopover habitat for whooping crane in the Action Area during times of migration. If a whooping crane is sighted within one mile of the project during OM&R activities, all work will cease within one mile of that part of the project and Reclamation will contact the USFWS. In coordination with the USFWS, work will resume after the bird(s) leave the area.
- If the Proposed Action activities are planned in American burying beetle habitat, Reclamation will consult with the USFWS, as appropriate.
- The Proposed Action will avoid prairie dog habitat. If prairie dog habitat cannot be avoided, consultation will take place with the USFWS, as appropriate.
- Northern long-eared bat may use “suitable” roosting trees adjacent to the Proposed Action activities within the Action Area. If there are plans for tree removal, consultation with the USFWS will take place, as appropriate.

Reclamation has considered the potential of the Proposed Project to affect federally-listed, species including the interior least tern, piping plover and its designated critical habitat, rufa red knot, whooping crane, pallid sturgeon, western prairie fringed orchid, American burying beetle, black-footed ferret, and northern long-eared bat.

The Proposed Action would take place in previously-disturbed areas; however, in the event that threatened or endangered species are encountered during activities, Reclamation will consult with the USFWS to determine the appropriate steps to avoid effect to these species, including
cessation of construction. With the environmental commitments listed above, the Proposed Action will have no effect to threatened and endangered species and designated critical habitat.

**No Action Alternative**
The No Action Alternative would not involve OM&R activities associated with the Proposed Project. Therefore, the No Action Alternative would have no effect on the interior least tern, piping plover and its designated critical habitat, rufa red knot, whooping crane, pallid sturgeon, western prairie fringed orchid, American burying beetle, black-footed ferret, and northern long-eared bat.

**Bald and Golden Eagle Protection Act**
The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) as amended was enacted in 1940 and prohibits anyone, without a permit, from taking bald eagles or golden eagles, including their parts, nests, or eggs.

Bald eagles (*Haliaeetus leucocephalus*) range in size from 30 – 43 inches in length, with a wingspan of 80 inches (6.5 feet). Weight ranges from 6 – 14 pounds, with females typically larger than males. Adult bald eagles have a dark brown body with a white head and tail. The range of the bald eagle is throughout most of North America. Bald eagles nest and winter in South Dakota.

Golden eagles (*Aquila chrysaetos*) range in size from 30 – 40 inches in length, with a wingspan of 79 inches (6.5 feet). Weight ranges from 6.5 – 13.0 pounds, with females typically larger than males. Adult golden eagles are mostly dark brown, with golden brown feathers on head and nape. The range of the golden eagle is throughout most of North America, with breeding in the western United States, southwestern Canada, and northern Mexico.

**Affected Environment**
Wintering for bald eagles generally occurs on the open water below the Missouri River Dams in South Dakota (Figure 8A). Golden eagles nest mainly west of the Missouri River, but can winter in other parts of the state (SDGF&P 2007) (Figure 8B).
Proposed Action Alternative
The Proposed Action would include the following environmental commitments to reduce potential impact to bald eagles and golden eagles:

- Construction within 660 feet of visible nesting bald and golden eagles will be avoided from February 1 to August 15;
- Replacement power lines will be buried to minimize electrocution hazards. Any new, above ground lines and an additional equal length of existing power lines in the same vicinity must be marked with visibility enhancement devices.

The proposed OM&R activities would take place in existing easements, and therefore previously-disturbed areas. Additionally, based on the environmental commitments listed above, Reclamation has determined minimal impacts to bald eagles and golden eagles from the proposed project.

No Action Alternative
The source of funding is the difference between the No Action Alternative and the Proposed Action. The No Action Alternative would not include Reclamation’s environmental commitments. The project proponents (Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux tribes) would likely pursue funding through other agencies to support the OM&R functions of the Mni Wiconi Rural Water System.

Cultural Resources
Although the easements for the Mni Wiconi Project were reviewed under NEPA and NHPA prior to construction, OM&R projects are considered new undertakings or projects that also require review. This EA aids in streamlining future OM&R project reviews. Commitments are included for NHPA clearance.

A list of potential OM&R projects are included in the EA. These projects could be undertaken without additional formal review as long as they are within the previously cleared easements. Reclamation’s rural water division would still need to be involved in OM&R decisions.

Proposed Action Alternative
For NHPA clearance of potential OM&R projects in previously cleared easements, Reclamation consulted with the Rosebud and Pine Ridge Sioux Tribes and their THPO on November 21, 2017.
(Project Nos. 1597.2017.03 and 1597.2017.04). Consultation with each Tribe was completed in early January 2018.

For future OM&R projects on previously cleared easements on the Lower Brule Reservation and in Stanley, Haakon, Lyman, Jackson, Bennett, Mellette and Jones counties, Reclamation is preparing a Programmatic Agreement with the Rosebud and Pine Ridge Sioux Tribes, the Lower Brule Sioux Tribe and its Cultural Resources director, the South Dakota State Historic Preservation Officer SHPO and the Advisory Council on Historic Preservation. Other interested parties will also be consulted during the preparation of this Agreement.

If new easements are added to the system and cleared under NEPA and NHPA, Reclamation can add them to the EA as well, which will keep the documents current.

**No Action Alternative**
The source of funding is the difference between the No Action Alternative and the Proposed Action. The No Action Alternative would not include Reclamation’s environmental commitments. The project proponents (Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux tribes) would likely pursue funding through other agencies to support the OM&R functions of the Mni Wiconi Rural Water System.

**Social and Economic Conditions**
This section describes the current condition of social and economic indicators associated with the affected area, including three reservations, served by the Mni Wiconi Rural Water Supply Project that would be directly impacted by the alternative action. The affected area includes Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties and encompasses Pine Ridge Indian Reservation, Rosebud Indian Reservation, and the Lower Brule Indian Reservation of South Dakota. Indicators of the social and economic condition in those counties and reservations include population, sectors of economic activity including agriculture and recreation, and labor force.

**Methods**
An evaluation of social and economic conditions requires data on past and current conditions from which the significance of economic impacts can be measured. Data for this SEA were obtained from the U.S. Department of Commerce’s Census Bureau, U.S. Department of the Interior Bureau of Indian Affairs, and the U.S. Department of Agriculture, National Agricultural Statistics Service. The affected area includes Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties, South Dakota.

**Existing Condition**
The current condition of the following economic indicators in the affected area are described in this section: population, sectors of economic activity, labor force totals, agricultural acreage and value of production, and recreation and tourism expenditures.

**Population**
According to historical data, the population of South Dakota was 666,257 in 1970 and approximately 34,433 individuals resided in the affected area at that time (U.S. Census Bureau 1982). In 2017, the estimated population of South Dakota had grown to 869,666 and the affected
area had increased to 43,044 individuals (Table 3; U.S. Census Bureau 2017). From 1970 to 2017, the affected area experienced an approximate 22% increase in total population, while the state experienced a greater increase of approximately 26% (Table 3).

Table 3. Population Estimates for the Affected Area and South Dakota.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected Area*</td>
<td>34,433</td>
<td>38,035</td>
<td>36,447</td>
<td>40,159</td>
<td>41,441</td>
<td>43,044</td>
<td>+22.2</td>
</tr>
<tr>
<td>State of South Dakota</td>
<td>666,257</td>
<td>690,768</td>
<td>696,004</td>
<td>754,844</td>
<td>816,299</td>
<td>869,666</td>
<td>+26.5</td>
</tr>
</tbody>
</table>

* Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties


The affected area includes three reservations: Pine Ridge, Rosebud, and Lower Brule. The 2012-2016 American Community Survey estimates, American Indian and Alaska Native Population accounted for approximately 8.7% of residents in South Dakota and 64.4% of residents in the affected area (Table 4; U.S. Census Bureau 2017). Approximately, 32,553 individuals reside on Pine Ridge, Rosebud, and Lower Brule Reservations, 82.5% of the population on the Reservations are of American Indian or Alaska Native decent (Table 4; U.S. Census Bureau 2017).


<table>
<thead>
<tr>
<th>Area</th>
<th>Total Population</th>
<th>American Indian Population*</th>
<th>Percent American Indian Population*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Ridge Reservation</td>
<td>19,698</td>
<td>16,513</td>
<td>83.8</td>
</tr>
<tr>
<td>Rosebud Reservation</td>
<td>11,324</td>
<td>8,907</td>
<td>78.7</td>
</tr>
<tr>
<td>Lower Brule Reservation</td>
<td>1,531</td>
<td>1,423</td>
<td>92.9</td>
</tr>
<tr>
<td>Affected Area*</td>
<td>42,737</td>
<td>27,524</td>
<td>64.4</td>
</tr>
<tr>
<td>State of South Dakota</td>
<td>851,058</td>
<td>74,187</td>
<td>8.7</td>
</tr>
</tbody>
</table>

* Includes Alaska Native Population
* Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, and Oglala Lakota Counties

Source: U.S. Census Bureau (2017).

Sectors of Economic Activity
The primary industry sectors of economic activity in South Dakota include agriculture, tourism, retail, finance, and healthcare (Doering 2016; Forbes Media, LLC 2016; South Dakota Department of Tourism 2016). Table 5 includes the components of the economic industry on the three reservations; the affected area; the state of South Dakota, and the number of jobs each industry employs. The industry sector with the highest number of occupations for the Pine Ridge and Rosebud Reservations, the affected area, and the state of South Dakota is educational
services, health care, and social assistance; public administration was the top industry sector for Lower Brule. Other top sectors included agriculture, forestry, fishing and hunting, and mining; retail trade; art, entertainment, and recreation, and accommodation and food services; and public administration. This section further describes economic activity as it relates to the top two industry sectors for the state: agriculture and tourism.

Table 5. Employment by Industry for the Reservations of Pine Ridge, Rosebud, Lower Brule; the Affected Area; and South Dakota.

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Pine Ridge</th>
<th>Rosebud</th>
<th>Lower Brule</th>
<th>Affected Area*</th>
<th>South Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting, and mining</td>
<td>441</td>
<td>269</td>
<td>35</td>
<td>1,861</td>
<td>30,060</td>
</tr>
<tr>
<td>Construction</td>
<td>196</td>
<td>197</td>
<td>30</td>
<td>753</td>
<td>30,720</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>95</td>
<td>21</td>
<td>3</td>
<td>232</td>
<td>43,188</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>36</td>
<td>40</td>
<td>2</td>
<td>319</td>
<td>13,025</td>
</tr>
<tr>
<td>Retail trade</td>
<td>345</td>
<td>295</td>
<td>12</td>
<td>1,284</td>
<td>49,369</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>117</td>
<td>101</td>
<td>11</td>
<td>492</td>
<td>18,087</td>
</tr>
<tr>
<td>Information</td>
<td>44</td>
<td>24</td>
<td>0</td>
<td>147</td>
<td>7,257</td>
</tr>
<tr>
<td>Finance and insurance, and real estate and rental and leasing</td>
<td>153</td>
<td>176</td>
<td>23</td>
<td>570</td>
<td>31,499</td>
</tr>
<tr>
<td>Professional, scientific, and management, and administrative and waste management services</td>
<td>126</td>
<td>67</td>
<td>23</td>
<td>407</td>
<td>26,482</td>
</tr>
<tr>
<td>Educational services, and health care and social assistance</td>
<td>1,978</td>
<td>1,110</td>
<td>124</td>
<td>4,348</td>
<td>104,783</td>
</tr>
<tr>
<td>Art, entertainment, and recreation, and accommodation and food services</td>
<td>535</td>
<td>272</td>
<td>64</td>
<td>1,329</td>
<td>39,807</td>
</tr>
<tr>
<td>Other services, except public administration</td>
<td>115</td>
<td>119</td>
<td>3</td>
<td>417</td>
<td>19,662</td>
</tr>
<tr>
<td>Public administration</td>
<td>724</td>
<td>462</td>
<td>154</td>
<td>1,782</td>
<td>20,754</td>
</tr>
</tbody>
</table>

* Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties

Agriculture

Although the farming/fishing/forestry sector does not employ many individuals directly in South Dakota (approximately 2% of the total population), the sector contributes to a range of farm-related industries including food services and food manufacturing (USDA 2016a). In 2014, South Dakota was ranked 12th in the nation for agricultural sector production value (USDA 2016b). Table 6 depicts agricultural activity and revenue for the three reservations, the affected area, and the state of South Dakota.

Table 6. 2012 Agricultural Acres and Product Values in Pine Ridge, Rosebud, Lower Brule; the Affected Area; and the State of South Dakota.
### Table

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Farms</th>
<th>Land in Farms (acres)</th>
<th>Market Value of Agricultural Products Sold ($1,000)</th>
<th>Market Value of Agricultural Products Sold per Farm ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Ridge</td>
<td>463</td>
<td>2,321,399</td>
<td>54,541</td>
<td>117,800</td>
</tr>
<tr>
<td>Rosebud</td>
<td>376</td>
<td>1,509,923</td>
<td>83,028</td>
<td>220,820</td>
</tr>
<tr>
<td>Lower Brule</td>
<td>64</td>
<td>230,455</td>
<td>21,576</td>
<td>337,123</td>
</tr>
<tr>
<td>Affected Area*</td>
<td>2,225</td>
<td>7,989,917</td>
<td>595,383</td>
<td>239,578*</td>
</tr>
<tr>
<td>State of South Dakota</td>
<td>31,989</td>
<td>43,257,076</td>
<td>10,170,227</td>
<td>317,929</td>
</tr>
</tbody>
</table>

* Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, and Oglala Lakota Counties

+ Mean average of Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett and Oglala Lakota Counties

Source: USDA, NASS 2014a; USDA, NASS 2014b

In 2012, there were approximately 32,000 farms and 43 million acres of farmland in the state of South Dakota. The three reservations had 3% of the total farms in the state and 9% of the total land in farms, whereas the affected area had 7% of total farms in the state and 18% of the total land in farms. Approximately $10 billion of agricultural products were sold in the state of South Dakota in 2012. The market value of agricultural products sold ranged from approximately $117,000 to $337,000 per farm on the three reservations and $239,000 for the affected area; all but Lower Brule Reservation are below the state average of approximately $318,000.

The primary crop for the three reservations and the affected area is wheat (USDA, NASS 2014a; USDA, NASS 2014b). Other main crops include corn and sunflower. Livestock production, predominantly cattle, also plays a key role in the agriculture sector (USDA, NASS 2014b). In 2012, South Dakota ranked eighth in the nation for the total number of cattle with approximately 2.2 million (USDA, NASS 2016).

**Tourism**

Overall, in 2014, tourism had a $1.99 billion direct impact on South Dakota’s economy (South Dakota Department of Tourism 2015). South Dakota has six national parks, including the Badlands National Park, Mount Rushmore National Memorial, and Wind Cave National Park, which are all located within an approximate one to two hour drive from the project area. In 2015, national parks had over 4.3 million visitors in South Dakota, equating to over $282 million in economic benefits from national park tourism (NPS 2015). Other popular tourist areas in the region include Crazy Horse Memorial, Fort Pierre National Grassland, and the Missouri River. The South Dakota State Park system operates 56 state parks and recreation areas. Many are located along the Missouri River, which provides opportunity for boating, kayaking canoeing and a variety of other water-related activities, it also provides camping, hiking, and wildlife viewing activities.

A popular recreational hobby for many in the state includes hunting and fishing. In 2011, over half a million residents and non-residents participated in hunting and fishing activities in South Dakota, resulting in almost a billion dollars of expenditures for the state (Table 7). Expenditures include food, lodging, boating, and equipment costs spent in the state of South Dakota. Non-residents accounted for 42% of total anglers and 53% of total hunters, and almost 40% of the total expenditures spent in the state.
Table 7. Hunting and fishing expenditures for residents and non-residents in South Dakota.

<table>
<thead>
<tr>
<th></th>
<th>Anglers</th>
<th>Hunting</th>
<th>Expenditures ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>156,000</td>
<td>127,000</td>
<td>553,973,000</td>
</tr>
<tr>
<td>Non-residents</td>
<td>112,000</td>
<td>144,000</td>
<td>359,232,000</td>
</tr>
<tr>
<td>Total</td>
<td>268,000</td>
<td>270,000</td>
<td>913,205,000</td>
</tr>
</tbody>
</table>


Many types of employment positions are created through the tourism industry related to lodging, food and beverage, retail, recreation, and transportation (Table 8). A total of approximately 59,000 jobs were sustained in 2015 by the visitor economy in South Dakota (Tourism Economics 2015a, 2015b). Approximately 1,715 jobs in the affected area were sustained through tourism. The largest amount of visitor spending for the affected area and the state of South Dakota was categorized in transport, which includes local and air transportation.

Table 8. 2015 Employment Supported by Visitor Spending in the Affected Area and the State of South Dakota.

<table>
<thead>
<tr>
<th>Area</th>
<th>Visitors Spending (millions of dollars)</th>
<th>Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lodging</td>
<td>Food &amp; Beverages</td>
</tr>
<tr>
<td>Affected Area*</td>
<td>31.20</td>
<td>24.44</td>
</tr>
<tr>
<td>State of South Dakota</td>
<td>700.67</td>
<td>832.18</td>
</tr>
</tbody>
</table>

* Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, and Oglala Lakota Counties

Source: Tourism Economics 2015a, 2015b.

Proposed Action Alternative
Should the deciding official choose the Proposed Action, the construction projects related to OM&R would provide short-term employment opportunities in the area. Furthermore, the Proposed Action would contribute to the economic sectors of agriculture and tourism, as it would provide funding for the OM&R of an existing water supply. A stable water supply resulting from funded OM&R activities may make the area increasingly attractive to new businesses and industry, thus providing the potential for improving and growing the local and regional economy.

No Action Alternative
Under the No Action Alternative, the Mni Wiconi Rural Water Supply Project would not benefit from Reclamation funding for OM&R activities. The project proponents including the Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux tribes would likely seek out other funding to maintain their rural water systems.
Environmental Justice
Executive Order 12898 (1994) requires measures to be taken to avoid disproportionately high adverse impacts on minority or low-income communities by pursuing fair treatment and meaningful involvement of minority and low-income populations. Fair treatment means that low income or minority groups would not bear a disproportionate share of negative human health or environmental impacts from the development, implementation, and enforcement of environmental law. Meaningful involvement means that affected populations have the opportunity to participate in the decision process and their concerns are considered.

Income and Poverty
Approximately 78% – 93% of the reservation residents are American Indians, and 8.7% of the total population of South Dakota are American Indians (Table 4). Reservations have a median household income lower than the affected area average and state average (Table 9). The Reservations have the highest rates of individuals living below poverty level and the highest unemployment rate compared to affected area (all counties) and the state (Table 9). The Reservations also have the lowest percentage of total population earning a high school diploma or bachelor’s degree when compared to the affected area and state.


<table>
<thead>
<tr>
<th>Area</th>
<th>Median Household Income ($)</th>
<th>Individuals Living Below Poverty Level (%)</th>
<th>Unemployment Rate (%)</th>
<th>High School Diploma or Equivalent (%)</th>
<th>Bachelor’s Degree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Ridge</td>
<td>30,908</td>
<td>50.8</td>
<td>25.2</td>
<td>78.7</td>
<td>12.8</td>
</tr>
<tr>
<td>Rosebud</td>
<td>29,938</td>
<td>49.6</td>
<td>20.6</td>
<td>77.9</td>
<td>14.5</td>
</tr>
<tr>
<td>Lower Brule</td>
<td>33,421</td>
<td>43.4</td>
<td>17.1</td>
<td>78.2</td>
<td>7.9</td>
</tr>
<tr>
<td>Affected Area*</td>
<td>39,858</td>
<td>31.9</td>
<td>6.7</td>
<td>85.4</td>
<td>17.4</td>
</tr>
<tr>
<td>State of South Dakota</td>
<td>52,078</td>
<td>14.0</td>
<td>2.8</td>
<td>91.2</td>
<td>27.5</td>
</tr>
</tbody>
</table>

* Lyman, Jones, Stanley, Haakon, Mellette, Jackson, Todd, Bennett, and Oglala Lakota Counties (mean for each category).

Proposed Action
The Proposed Action would promote environmental justice for Indian Tribes and low-income communities by ensuring funding for OM&R of the Mni Wiconi Project, resulting in a reliable supply of potable water to the tribal and non-tribal residents in the affected area and three Reservations served by the Mni Wiconi Rural Water Supply Project.

No Action Alternative
Under the no action alternative Indian Tribes and low-income people living in the affected area and the three Reservations would not benefit from Reclamation funding for OM&R of the Mni Wiconi Rural Water Supply Project. The project proponents including the Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux Tribes would likely seek out other funding to maintain their rural water systems.

**Indian Trust Assets (ITA)**

**Affected Environment**

ITAs are “legal interests in property or resources held in trust by the United States for Indian tribes or individual Indians” (Indian Trust Policy issued July 2, 1993). The Secretary of the Interior is the trustee for the United States on behalf of Indian tribes. ITAs include land, minerals, timber, ethnobotanical resources, hunting and fishing rights, water rights, and in-stream flows. ITAs may be located on or off-Reservation lands. During the NEPA process, Reclamation, as a representative of the Secretary of the Interior, must evaluate whether the proposed action may affect ITAs. This policy reaffirms the legal trust relationship and the government-to-government relationship between the Secretary of the Interior and Indian tribes.

Trust lands are present within the project area, and would be crossed by the project. The Bureau of Indian Affairs administers trust lands within the project area.

For the proposed project, Indian water rights are the primary ITA involved. The Tribes water right to the Missouri River stems from the Supreme Court decision in Winter’s v. the United States (1908), which enunciated the Winter’s Doctrine. According to the doctrine, the establishment of an Indian reservation implied that sufficient water was reserved (or set aside) to fulfill purposes for which the reservation was created, with the priority date being the date the reservation was established. As such, Indian water rights, when quantified, constitute an ITA. In Arizona v. California (1963) the U.S. Supreme Court held that water allocated should be sufficient to meet both present and future needs of the reservation to assure the viability of the reservation as a homeland. These rights are also not forfeited by non-use. Currently, the only tribal reserved water rights that have been quantified or are being quantified are:

- State of Wyoming settlement with tribes of the Wind River Reservation (adjudicated under the McCarran Amendment)
- Compact between the state of Montana and the tribes of the Fort Peck Reservation (awaiting congressional approval)
- Compact between the state of Montana and the tribes of the Fort Belknap Reservation (ratified by the state legislature)
- Compact between the state of Montana and the Crow tribe (ratified by the state legislature)
- Compact between the state of Montana and the tribes of the Rocky Boys Reservation (awaiting congressional approval)
- Compact between the State of Montana and the Northern Cheyenne Tribe (The Northern Cheyenne Reserved Water Rights Settlement Act [Public Law 102-374])

The USACE is responsible for operation of reservoirs within the Missouri River basin, including Lake Sakakawea. 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 Three Affiliated Tribes, with the Agreement at Fort Berthold (July 27, 1866) and subsequent establishment of the Fort Berthold Indian Reservation, have water rights to the Missouri River main-stem flow; this water right is currently unquantified. However, the USACE recognizes tribal water rights to the Missouri River regardless of whether these rights have not been quantified or adjudicated. In effect, if the Three Affiliated Tribes adjudicated their water right on Lake Sakakawea, the USACE would consider it an existing depletion and adjust operations accordingly.

“When a Tribe exercises its water rights, these consumptive uses will then be incorporated as an existing depletion. Unless specifically provided for by law, these rights do not entail an allocation of storage. Accordingly, water must actually be diverted to have an impact on the operation of the System. Further modifications to System operation, in accordance with pertinent legal requirements, will be considered as Tribal water rights are exercised in accordance with applicable law (USACE 2006 Missouri River Main stem Reservoir System Master Control Manual, Missouri River Basin, Appendix E, page 10.)”

**Proposed Action**
The proposed project would not require real property transactions involving trust lands, as project construction is completed and easements are obtained.

With regards to water rights, the proposed project would continue the Tribes ability to exercise their implied water right to the Missouri River and put their water to beneficial use. The proposed project would result in beneficial effects to the Tribes by funding continued access to the potable water supply within the Pine Ridge, Lower Brule, and Rosebud Reservations.

**No Action Alternative**
Under the no action alternative the Mni Wiconi Rural Water Supply Project would not benefit from Reclamation funding for OM&R activities. The project proponents including the Oglala Sioux, Rosebud Sioux, and Lower Brule Sioux tribes would likely seek out other funding to maintain their rural water systems.
Chapter 4 – Summary

Reclamation has examined the potential for significant environmental effects of the proposed project to Threatened and Endangered Species, Bald and Golden Eagle Protection Act, Climate Change, Cultural Resources, Social and Economic Conditions, Environmental Justice, and ITAs.

Temporary Effects. Primary OM&R activities would include pipeline leak repair, pipe maintenance, storage tank services, and system vault maintenance and control valve exercise services. All work would take place within existing easements. Primarily effects from the project are of a temporary nature. Temporary devegetation or loss of agricultural production of the pipeline route would occur from equipment tracks and work activity. Restoration of the pipeline route would see agriculture fields returned to crop production and payments made to the landowners for lost production or grassland fields reseeded with a seed mixture recommended by NRCS and approved by Reclamation and landowner. Pipeline maintenance or replacement in agricultural fields that result in crop losses are off-set through payment, water crossings are commonly bored, and wetlands and other wildlife habitats are managed according to the Environmental Mitigation Commitments of Reclamation’s Preferred Alternative.

Permanent Effects. Continued funding for OM&R activities would result in a reliable supply of potable water to the tribal and non-tribal residents in the affected area and three Reservations served by the Mni Wiconi Rural Water Supply Project.

No cumulative effects were identified.
Chapter 5 – Compliance with Environmental Statutes

If the Proposed Action Alternative is implemented, it would be accomplished in accordance and compliance with the following environmental laws, regulations, and directives. All permits and necessary authorizations would be obtained prior to construction.

Funding of the Mni Wiconi OM&R Project would require compliance with the appropriate, applicable State, Federal and Local Laws including but not limited to:

- Native American Graves Protection and Repatriation Act (P.L. 101-601)
- Archaeological and Historic Preservation Act (P.L. 93-291)
- Archeological Resources Protection Act of 1979 (P.L. 96-95)
- National Environmental Policy Act of 1969 (42 USC 4321)
- Clean Air Act (33 USC 7401) and Amendments
- Clean Water Act (33 USC 1251 et seq.), Sections 401, 402, and 404
- Safe Drinking Water Act (42 USC 300f)
- Endangered Species Act of 1973 (P.L. 93-205)
- Farmland Protection Policy Act (P.L. 97-98)
- Fish and Wildlife Coordination Act of 1958 (PL 85-624)
- Indian Trust Responsibilities (512 DM Chapter 2)
- Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments
- Executive Order 11988 – Floodplain Management (1977)
- Executive Order 11990 – Protection of Wetlands (1977)
- Executive Order 12898 – Environmental Justice (1994)
- Executive Order 13007 – Indian Sacred Sites (1996)
- Executive Order 13186- Protection of Migratory Birds (2001) Responsibilities of Federal Agencies To Protect Migratory Birds in furtherance of the purposes of the migratory bird conventions
- Executive Order 13112 signed by President William Clinton on February 3, 1999.
- Invasive Species
- Bald and Golden Eagle Protection Acts (16 U.S.C. 668-668d)
- Fish and Wildlife Coordination Act (16 U.S.C. 661-666c)
Chapter 6 – Agency Consultation and Coordination

List of Preparers
Kate Kenninger – Natural Resource Specialist – DKAO – Bismarck, North Dakota
Elizabeth N. McPhillips – Natural Resource Specialist (retired) – DKAO – Bismarck, North Dakota
Greg Hiemenz – Natural Resource Specialist (retired) – DKAO – Bismarck, North Dakota
Kelly McPhillips – Environmental Specialist (retired) – DKAO – Bismarck, North Dakota
Matt Cox – Archaeologist – DKAO – Bismarck, North Dakota
Renee Boen – Archaeologist (no longer with DKAO) – DKAO – Rapid City, South Dakota
Stacy A. Myhre – Deputy Rural Water Manager – DKAO – Pierre, South Dakota

Agencies and Persons Consulted

Reclamation’s Scoping Notice for Preparation of a Supplemental EA and responses are cataloged in Appendix D. One private party and four agency letters of response were received.
Chapter 7 – Literature Cited


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Appendix A: Mni Wiconi Rural Water Supply Project Routine Operations, Maintenance & Replacement Activities

Operation and maintenance activities of the Oglala Sioux Rural Water Supply System (OSRWSS) Core pipeline system, Lower Brule Sioux Rural Water System (LBSRWS) pipeline system, Rosebud Sioux Rural Water System (RSRWS) pipeline system, and OSRWSS DWM&C on-reservation distribution system, all which includes numerous storage tanks, booster pump stations, approximately 4,500 miles of pipe, control valves, and Supervisory Control And Data Acquisition (SCADA) meters including cathodic protection anode systems and appurtenances:

1. Pipeline leak repair and pipeline replacement;
2. Maintenance and “exercising” of control valves;
3. Flushing, cleaning, painting, and disinfection treatment of water storage tanks;
4. Flushing, cleaning, and disinfection treatment of pipeline distribution systems;
5. Oversight of water meter readings, measurements, data collection, repair and replacements (including water meter inventory and water meter reading audits);
6. SCADA meter repair and replacement;
7. Appurtenances repair and replacement;
8. Cathodic protection devices repairs and replacement;
9. Maintenance and calibration of testing equipment;

Operation and maintenance of the Mni Wiconi OSRWSS Core Water Treatment Plant (WTP) and Lower Brule WTP and their associated intakes on the Missouri River, wastewater lagoons, and discharge facilities:

1. Sludge removal and disposal at appropriate facility at WTPs;
2. Discharge at WTPs.

General Facilities Maintenance:

1. Installing survey markers;
2. Fencing, including post replacement in the same hole location and depth;
3. Maintaining or replacing existing electrical poles, boxes, lines;
4. Stand-by power repairs and maintenance;
5. Conduct periodic associated facilities reviews;
6. Conduct periodic security reviews;
7. Conduct inventory of maintenance supplies;
8. Lighting – Repair/replacement of existing lighting with in-kind light fixtures, to include lighting poles in the same hole location and depth;
9. Vegetation maintenance:
   a. Mowing and lawn maintenance along roadsides, parking lots, alongside and around buildings, water treatment plants, structures, trails, well heads, instruments, fences, pipeline rights-of-ways, and lagoons,
   b. Removal of intrusive trees and shrubs from rights-of-way and around facility structures during the non-use period for migratory birds and bats (February 1 – October 31) and dispose of properly, including the stumps,
   c. Spray application of chemical herbicide for weed control;
10. Maintenance of existing roads, parking lots, and associated facilities:
   a. Paving – Removal of existing pavement, re-shaping of base, adding new pavement;
   b. Chip/Seal – Seal coat existing pavement and addition of rock chips;
   c. Paint striping – Adding or repainting lines on pavement;
   d. Gravel Roads – Maintain by grading and adding additional gravel [Source of gravel previously approved by the Area Archaeologist];
   e. Re-shaping of Mni Wiconi project gravel roads that is confined to the existing roadbed to maintain proper drainage;
   f. Replacing non-historic culverts in-kind within the existing road prism;
   g. Spraying application of chemical herbicide to remove unwanted vegetation and noxious weeds;
   h. Seeding of road side slopes, repair sites, disturbed areas;
   i. Replacing signs on existing poles or installing new pole in the same location at the same depth;
   j. Maintain system access roads – Maintain existing roadbed by watering, scarifying, grading, compacting, and repairing localized erosion.

Buildings – Lower Brule WTP; Fort Pierre WTP; Equipment/Storage Buildings; Chemical Delivery Buildings; Offices and Shops of Pierre, OSRWSS Core, LBSRWS, RSRWS, OSRWSS DWM&C on-reservation:
1. Renovation, remodeling, or repair of previously determined non-historic buildings and contents or structures that are less than 45 years old and when there is no disturbance of soil [All buildings or structures 45 years old or older or previously determined non-historic based solely on age will be evaluated and/or reviewed for effects by the Area Archaeologist];
2. Oversight of chemical treatment buildings and controls.

Well Maintenance for LBSRWS, RSRWS, OSRWSS DWM&C on-reservation:
1. Building maintenance;
2. Security measure improvements;
3. Pump maintenance;
4. Sour development and repairs;
5. Quality assessments;
6. Well head protection;
7. Well abandonment;
8. Stand-by power repairs and maintenance;
9. Chemical feed equipment and injection;
10. Chemical storage.

Maintenance and replacement of project vehicles, service light and heavy duty equipment, including but not limited to: Pick-ups, Dump trucks, Excavators, Backhoes, Cars, Trailers, Blades, and Trailers.
Appendix B: Environmental Commitments

<table>
<thead>
<tr>
<th>General Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comply with all appropriate Federal, State, and Local laws.</td>
</tr>
<tr>
<td>Follow recommended practices for construction, restoration, and maintenance.</td>
</tr>
<tr>
<td>Dump grounds, trash piles, and potential hazardous waste sites will be avoided.</td>
</tr>
<tr>
<td>All construction waste materials and excess or unneeded fill associated with construction will be disposed of on uplands, non-wetland areas.</td>
</tr>
<tr>
<td>Standard construction, industry 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Surface Water and Wetlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractors will be required to make at least two boring attempts before using an alternative stream or river crossing method.</td>
</tr>
<tr>
<td>When pipeline construction through a wetland basin is unavoidable existing basin contours will be restored and trenches will be sufficiently compacted to prevent any drainage along the trench or through bottom seepage.</td>
</tr>
<tr>
<td>Project proponent and contractor will be responsible to comply with Section 404 of the Clean Water Act and avoid permanent impacts to isolated wetlands to the extent practicable.</td>
</tr>
<tr>
<td>Intermittent streams will be crossed only during low-flow periods and preferably when the streambeds are dry.</td>
</tr>
<tr>
<td>Woody species including those bordering wetlands, shelterbelts, riparian woodlands, woody draws, or woodland vegetation will be avoided to the extent possible. For unavoidable impacts to woody habitats, replacement plants at a 2:1 ratio of appropriate speciation would planted.</td>
</tr>
<tr>
<td>Maintain in-stream flows during stream crossing construction.</td>
</tr>
<tr>
<td>Spoil, debris piling, construction materials, and any other obstructions will be removed from stream crossings to preserve normal water flow.</td>
</tr>
<tr>
<td>Use the shortest practicable alignment to minimize disturbance in crossing streams.</td>
</tr>
<tr>
<td>Erosion control measures will be employed as appropriate and at stream crossings at all times:</td>
</tr>
<tr>
<td>(a) Care will be exercised to preserve existing trees along the streambank.</td>
</tr>
<tr>
<td>(b) Stabilization, erosion controls, restoration, and re-vegetation of all streambeds and embankments will be performed as soon as a stream crossing is completed and maintained until stable.</td>
</tr>
<tr>
<td>Riparian woody shrubs and trees will be replanted where and as necessary to preserve the shading characteristics of the watercourse and the aesthetic nature of the streambank.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fish and Wildlife Species and Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>To the extent possible, construction would avoid:</td>
</tr>
<tr>
<td>- Wetlands</td>
</tr>
<tr>
<td>- Federal, State, and Local wildlife areas and refuges</td>
</tr>
<tr>
<td>- Designated critical habitats</td>
</tr>
<tr>
<td>- Migratory bird habitats during the nesting brood rearing season (February 1 – July 15)</td>
</tr>
</tbody>
</table>
To minimize impacts to fisheries resources any stream identified as a fishery (fisheries – confirm with SD Game, Fish and Parks Department) that cannot be directionally bored will be avoided from April 15 to June 1 and crossed later in the summer or fall when flows are low or the stream is dry.

Replacement power lines will be buried to minimize electrocution hazards to raptors and minimize impacts to all birds, bats, and particularly benefit whooping cranes. Any new, above ground power lines and an additional equal length of existing power lines in the same vicinity must be marked with visibility enhancement devices to benefit migrating whooping cranes as well as all migratory birds and bats.

Construction within 660 feet of visible nesting bald eagles will be avoided from February through August.

Project proponent will coordinate with the U.S. Fish and Wildlife Service’s (Service) appropriate Refuges and Wetland Management Districts and provide the latest-map version of the pipeline delivery system to avoid impacts to Service lands, including wetland and grassland easements, national wildlife refuges (NWR), waterfowl production areas or other Service lands interface, allowing for identification of an avoidance route for the contractor.

If threatened or endangered species are identified and encountered during construction, all ground-disturbing activities in the immediate area will be stopped until Reclamation can consult with the Service to determine appropriate steps to avoid impacting the species.

Pipeline construction work is prohibited within ½ mile of designated critical habitat during the piping plover breeding season (April 15 – August 31).

If forested habitat or potential bat inhabited structures are identified prior to or during construction activities an Impact Mitigation Assessment team would determine if bat surveys are required. If any tree (with a diameter of greater than 3 inches) removal activities cannot be avoided between April 1 and October 31, then consultation would take place with the Service.

Native prairie will be avoided to the extent possible. However, if native prairie sod must be broken, existing topsoil will be carefully salvaged and replanted with native grasses in a timely manner, with a seed mix recommended by the local Natural Resources Conservation Service (NRCS) and approved by Reclamation and the landowner.

Any new signage will be placed in a manner as to not allow raptors to perch by covering the top two holes of the post.

### Cultural Resources

Cultural resource inventories will be performed under the direction of an archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards (48 FR 44738-9). All appropriate cultural resource activities will be completed prior to the commencement of ground-disturbing activities, including Class I and Class III surveys and consultation with the with the appropriate Historic Preservation Officer (HPO). All cultural resources will be avoided if their significance cannot be established prior to disturbance. If avoidance is not practicable, Reclamation, in consultation with the appropriate HPO would determine if the site is eligible for nomination to the National Register of Historic Places [36CFR800.4(c) and 36CFR60.4]. If the site is eligible as a historic property, initially Reclamation, HPO, and other interested parties, depending on the type of property, will consult to determine a plan of mitigation. If an adverse effect cannot be avoided, the Advisory Council on Historic Preservation will be contacted. All ensuing activities will comply with the National Historic Preservation Act, as amended, (Public Law 89-665; 54 U.S.C. 300101 et seq.).

If previously undiscovered cultural resources are exposed during any activities, work within the area shall cease. The site will be secured and protected. Project work at the site will not resume until all activities needed to comply with the Protection of Historic Properties (36 CFR Part 800.13) have been completed. Reclamation will consult with the appropriate Historic Preservation Officer (HPO) and the Advisory Council on Historic Preservation on its determination as to whether the discovery qualifies as a historic property. Project work can continue under the advisement of the Project Archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards (48 FR 22716, Sept. 1983).
In the event of an inadvertent discovery of human remains or funerary objects, all work at the find spot and in the immediate vicinity shall cease. The site will be secured and protected until Reclamation officials and the HPO have been notified and arrive on site. Protection of the discovery site may include flagging the discovery location with a buffer zone around it, tarping the find spot, and having an individual stay at the location to prevent further disturbance. Contact information for the individual who discovered the site must be provided to Reclamation and the HPO. No digging, collecting, or moving human remains or other items will occur after the initial discovery. Reclamation and the HPO would be responsible for determining the appropriate course of action under the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq. [Nov. 16, 1990]).

Under the Archaeological Resources Protection Act (16 U.S.C. 470aa-470mm; Public Law 96-95 [1979]), 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. Therefore, Reclamation and the HPO would need to be notified evidence these types of activities or discovered during the project.

Under the National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties (TCP), a TCP is an historic property that derives its significance from the role it plays in a community’s historically rooted beliefs, customs, and practices. If a potential TCP is discovered during the course of implementing the project, all work in its vicinity must halt. Reclamation and the HPO would need to be notified and would be responsible for determining the appropriate course of action.

**Paleontological Resources**

Reclamation will consult with South Dakota Geological Survey to identify areas for paleontological survey where significant fossils are likely.

All previously recorded paleontological resources and paleontologically sensitive zones within the path of the proposed action will be inspected in the field by a qualified paleontologist. Avoidance measures will be developed to avoid significant resources.
Appendix C: Scoping Notice Contact List

KELLY HEPLER, SECRETARY, SOUTH DAKOTA DEPARTMENT OF GAME, FISH, AND PARKS

MARK HARBERG, PROGRAM MANAGER, U.S. ARMY CORPS OF ENGINEERS

STEVE NAYLOR, PROGRAM COORDINATOR, SOUTH DAKOTA REGULATORY OFFICE

STEVEN M. PIRNER, P.E., SECRETARY, SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES

DIRECTOR, ENVIRONMENTAL SERVICES, SD DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

SCOTT LARSON, NORTH AND SOUTH DAKOTA FIELD SUPERVISOR ECOLOGICAL SERVICES FIELD OFFICE

MARK MAYER, ADMINISTRATOR, DRINKING WATER PROGRAM SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES

DR. DUSTIN OEDEKOVEN, INTERIM SECRETARY, SOUTH DAKOTA DEPARTMENT OF AGRICULTURE

KIM MALSAM-RYSDON, SECRETARY OF HEALTH SOUTH DAKOTA DEPARTMENT OF HEALTH

HONORABLE JOHN THUNE, UNITED STATES SENATOR

HONORABLE MIKE ROUNDS, UNITED STATES SENATOR

HONORABLE KRISTI NOEM, HOUSE OF REPRESENTATIVES

JEFFREY ZIMPRICH, STATE CONSERVATIONIST, USDA-NRCS SOUTH DAKOTA

FORT PIERRE RANGER STATION, U.S. FOREST SERVICE

TIMOTHY LaPOINTE, REGIONAL DIRECTOR, BUREAU OF INDIAN AFFAIRS

DANELLE DAUGHERTY, DEPUTY REGIONAL DIRECTOR, BUREAU OF INDIAN AFFAIRS

DARIN BERGQUIST, SECRETARY OF TRANSPORTATION, SD DEPARTMENT OF TRANSPORTATION

RYAN BRUNNER, COMMISSIONER, SCHOOL AND PUBLIC LANDS

TIM COWMAN, STATE GEOLOGIST
STEVE EMERY, SECRETARY OF TRIBAL RELATIONS

RENEE BOEN, STATE HISTORIC PRESERVATION OFFICER, STATE HISTORIC PRESERVATION OFFICE

REVIEW & COMPLIANCE COORDINATOR STATE HISTORIC PRESERVATION OFFICE

ANDREA GRIESE, ENVIRONMENTAL PROTECTION AGENCY

HONORABLE DENNIS DAUGAARD, GOVERNOR OF SOUTH DAKOTA

DOUG BENEVENTO, REGIONAL ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

WILDLIFE DIVERSITY PROGRAM, SOUTH DAKOTA GAME FISH AND PARKS

SOUTH DAKOTA GAME FISH AND PARKS, ENDANGERED SPECIES-WILDLIFE DIVERSITY COORDINATOR, WILDLIFE DIVERSITY PROGRAM

PAM MICHALEK, LYMAN COUNTY AUDITOR

SUE GANJE, OGLALA LAKOTA COUNTY AUDITOR

JOHN BRUNSKILL, JONES COUNTY AUDITOR

SUSAN WILLIAMS, BENNETT COUNTY AUDITOR

PHILENA BURTCH, STANLEY COUNTY AUDITOR

VICKI WILSON, JACKSON COUNTY AUDITOR

CARLA SMITH, HAAKON COUNTY AUDITOR

JENNY GALBRAITH, MELLETTE COUNTY AUDITOR

WESTERN AREA POWER ADMINISTRATION, 200 FOURTH STREET SW #410

US GEOLOGICAL SURVEY, SOUTH DAKOTA WATER SCIENCE CENTER

ALEX SOLEM, PRESIDENT, SOUTH DAKOTA CHAPTER OF THE WILDLIFE SOCIETY

FIELD OFFICE SUPERVISOR, BUREAU OF LAND MANAGEMENT, SOUTH DAKOTA FIELD OFFICE

USDA RURAL DEVELOPMENT, STATE OFFICE
CORISSA KRUEGER, MANAGER, WESTERN SOUTH DAKOTA CONSERVATION
THE NATURE CONSERVANCY

CHRIS HESLA, EXECUTIVE DIRECTOR, SOUTH DAKOTA WILDLIFE FEDERATION

REGIONAL ARCHAEOLOGIST, BUREAU OF INDIAN AFFAIRS,

DANIEL DAVIS, DIRECTOR, OEHE, GREAT PLAINS AREA INDIAN HEALTH SERVICE

MIKE BOLAND, DISTRICT ENGINEER, INDIAN HEALTH SERVICE

DIRECTOR, OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

JAMES McCauley, PROGRAM MANAGER, LOWER BRULE RURAL WATER SYSTEM

JAKE FITZGERALD, MANAGER, WEST RIVER/LYMAN-JONES RURAL WATER SYSTEMS, INC

SYED HUQ, WATER RESOURCES DIRECTOR, ROSEBUD RURAL WATER SYSTEM

RON BLACKSMITH, MANAGER, OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

CHUCK JACOBS, DIRECTOR, OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

RICH KAMERZELL, FIELD SUPERVISOR, OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

STEVE LANGDEAU, WATER TREATMENT PLANT DIRECTOR LOWER BRULE RURAL WATER SYSTEM

BILL LANGDEAU, O&M DIRECTOR, LOWER BRULE RURAL WATER SYSTEM

YOUNG COLOMBE, O&M MANAGER, ROSEBUD RURAL WATER SYSTEM

WILLARD CLIFFORD, WATER SYSTEM/DATA SUPERVISOR, OGLALA SIOUX RURAL WATER SUPPLY SYSTEM

PAUL GOLDHAMMER, PRESIDENT, WEST RIVER/LYMAN-JONES RURAL WATER SYSTEMS, INC

MR HAROLD FRAZIER, CHAIRMAN, CHEYENNE RIVER SIOUX TRIBE

TRIBAL HISTORIC PRESERVATION OFFICER, CROW CREEK SIOUX TRIBE

HONORABLE LESTER THOMPSON, JR, CHAIRMAN CROW CREEK SIOUX TRIBE
TRIBAL HISTORIC PRESERVATION OFFICER FLANDREAU SANTEE SIOUX TRIBE
MR ANTHONY REIDER, PRESIDENT, FLANDREAU SANTEE SIOUX TRIBE
DIRECTOR, FT. PECK ASSINIBOINE & SIOUX CULTURAL RESOURCES
DEPARTMENT
MR FLOYD AZURE, CHAIRMAN, FT. PECK ASSINIBOINE & SIOUX
MR BOYD GOURNEAU, LOWER BRULE SIOUX TRIBE
TRIBAL HISTORIC PRESERVATION OFFICER, LOWER SIOUX INDIAN COMMUNITY
HONORABLE TROY SCOTT WESTON, PRESIDENT, OGLALA SIOUX TRIBE
HONORABLE RODNEY M. BORDEAUX, PRESIDENT, ROSEBUD SIOUX TRIBE
MS SHELLEY BUCK, TRIBAL COUNCIL PRESIDENT, PRAIRIE ISLAND INDIAN
COMMUNITY
TRIBAL HISTORIC PRESERVATION OFFICER, ROSEBUD SIOUX TRIBE
MS TIANUA CARNES, CHAIRPERSON, SAC AND FOX NATION OF MISSOURI IN
KANSAS & NEBRASKA
MS KAY RHOADS, PRINCIPAL CHIEF, SAC AND FOX NATION OF OKLAHOMA
MR CHRISTINA BLACKCLOUD, CHAIRPERSON, SAC AND FOX TRIBE OF THE
MISSISSIPPI IN IOWA
TRIBAL HISTORIC PERSERVATION OFFICER, SAC AND THE FOX TRIBE OF THE
MISSISSIPPI
MR ROGER TRUDELL, CHAIRPERSON, SANTEE SIOUX NATION NEBRASKA
TRIBAL HISTORIC PRESERVATION OFFICER, SANTEE SIOUX NATION, NEBRASKA
TRIBAL HISTORIC PRESERVATION OFFICER, SISSETON-WAHPETON OYATE
MR DAVID FLUTE, CHAIRMAN, SISSETON-WAHPETON OYATE
HONORABLE MYRA PEARSON, CHAIRWOMAN, SPIRIT LAKE TRIBE
TRIBAL HISTORIC PRESERVATION OFFICER, SPIRIT LAKE TRIBE
TRIBAL HISTORIC PRESERVATION OFFICER, STANDING ROCK SIOUX TRIBE
ARCHAEOLOGIST, STANDING ROCK SIOUX TRIBE
C-4
HONORABLE MIKE FAITH, CHAIRMAN, STANDING ROCK SIOUX TRIBE
SECTION 106 REVIEW & COMPLIANCE OFFICER, STANDING ROCK SIOUX TRIBE
TRIBAL HISTORIC PRESERVATION OFFICER, MANDAN HIDATSA & ARIKARA NATION
HONORABLE MARK FOX, CHAIRMAN, MANDAN HIDATSA & ARIKARA NATION
TRIBAL HISTORIC PRESERVATION OFFICER, UPPER SIOUX COMMUNITY
MR KEVIN JENSVOLD, CHAIRMAN, UPPER SIOUX COMMUNITY
TRIBAL HISTORIC PRESERVATION OFFICER, YANKTON SIOUX TRIBE
HONORABLE ROBERT FLYING HAWK, CHAIRMAN, YANKTON SIOUX TRIBE
TRIBAL HISTORIC PRESERVATION OFFICER, SHEYENNE RIVER SIOUX TRIBE
TOM KIRSCHENMANN, ENVIRONMENTAL REVIEW COORDINATOR, SOUTH DAKOTA DEPARTMENT OF GAME FISH AND PARKS
KENNEBEC PUBLIC LIBRARY
PRESHO PUBLIC LIBRARY
MIDLAND COMMUNITY LIBRARY
OGLALA LAKOTA COLLEGE LIBRARY
BENNETT COUNTY PUBLIC LIBRARY
STANLEY PUBLIC LIBRARY
HAAKON COUNTY PUBLIC LIBRARY
SOUTH DAKOTA STATE LIBRARY
TRIPP COUNTY LIBRARY
Appendix D: Scoping Notice and Responses
Subject: Bureau of Reclamation’s Preparation of a Supplemental Environmental Assessment for Funding of Operation, Maintenance, and Replacement of Mni Wiconi Rural Water Supply System Facilities in South Dakota

Dear Interested Party,

The Bureau of Reclamation (Reclamation) has proposed to fund the Operation, Maintenance and Replacement (OM&R) of Mni Wiconi Rural Water System (System) facilities segments through funding agreements with Oglala Sioux Tribe, Rosebud Sioux Tribe and Lower Brule Sioux Tribe. Both the Mni Wiconi Project Act of 1988 and the 2012 Amendments Act, which authorized OM&R between the Tribes and Reclamation, included the requirement of compliance with the National Environmental Policy Act (NEPA). Construction of the System has been completed and would now transition to the OM&R phase. The current cost of OM&R through funding of the four Tribal agreements (Map) is approximately $12M annually.

Similar to the environmental assessments (EAs) completed for construction of the Mni Wiconi Project 1, Reclamation, as the lead Federal agency, is responsible for ensuring compliance with the NEPA, National Historic Preservation Act, and related federal environmental and cultural resource legislation for implementation of OM&R activities for the approximately 4000 miles of pipe and facilities that comprise the System. Reclamation has previously completed two environmental analyses under NEPA relative to the System including Environmental Assessment for Mni Wiconi Rural Water Supply Project and a Supplemental Environmental Assessment for the Mni Wiconi Project: Echo Point Alternative Locations for The Intake Structure And Water Treatment Plant.

Reclamation will use this supplemental environmental assessment (SEA) to evaluate the environmental impacts associated with the implementation of the OM&R phase of the Mni Wiconi Project. The SEA will consider the potential for environmental effects to the human and natural environment and will be documented as a supplement to the existing EA completed for design and construction of the System that serves the Pine Ridge Indian Reservation, the Rosebud Indian Reservation, the Lower Brule Indian Reservation and spans Lyman, Jones, Stanley, Haakon, Mellette, Jackson Todd, and Oglala Lakota Counties.

1 The Mni Wiconi Municipal, Rural Water Supply Project EA was completed March 8, 1993. A supplement was completed, Supplement to the Environmental Assessment for the Mni Wiconi Project: Echo Point Alternative Locations for the Intake Structure and Water Treatment Plant, (September 17, 1993) for the locations of the Mni Wiconi Core System Water Treatment Plant and Raw Water Intake.
Reclamation's proposed action would fund the OM&R of the following System facilities for the benefit of the Oglala Sioux Tribe, Rosebud Sioux Tribe, and the Lower Brule Sioux Tribe:

1. Intake pumping and treatment facilities located along the Missouri River near Fort Pierre and Lower Brule, South Dakota;
2. pipelines extending from the Missouri River near Fort Pierre, South Dakota, to the Lower Brule, Rosebud and Pine Ridge Indian Reservations;
3. facilities to allow for interconnections with the West River Rural Water System and Lyman-Jones Rural Water System;
4. distribution and treatment facilities to serve the needs of the Pine Ridge, Rosebud and Lower Brule Indian Reservations, including facilities constructed pursuant to the Act or transferred into the Project according to the Act;
5. appurtenant buildings and access roads;
6. property and property rights including easements;
7. such pumping plants, wells, and facilities as the Secretary deems necessary or appropriate to meet the water supply, economic, public health, and environmental water needs of the reservations.

We are requesting your input about the proposed action and information or concerns you may have regarding potential project effects. If no significant issues are identified during scoping or review of the SEA, Reclamation would issue a Finding of No Significant Impact. Conversely, if any significant issues are identified, Reclamation would consider whether to proceed with the preparation of an environmental impact statement.

Reclamation defines significance in accordance with 40 CFR 1508.27.

To be most helpful to the preparers please provide any comments, concerns or information regarding this project by May 30, 2016. Questions or comments regarding the preparation of the SEA may be directed to Kate Kenninger at 701-221-1282, kkenninger@usbr.gov or Nell McPhillips at 701-221-1275, emcphillips@usbr.gov, or by requesting in writing to: Area Manager, Bureau of Reclamation, P.O. Box 1017, Bismarck, North Dakota 58502.

Sincerely,

DAVID ROSENKRANCE

David Rosenkrance
Area Manager

Enclosure - Map

cc: Contact List Available From Dakotas Area Office
bc: DK-1000 (Rosenkranz, Freitag), DK-2000 (Karsky, Froehlich, Haines), DK-5000 (Reinhart, JHall, Kerninger), DK-5100 (Boen, Leasure) (via electronic copy)

WDB:KMcPhillipsJDuBois:04/14/16:701-221-1257
V:\Public\NEPA\Meni Wiconi\communications\mni wiconi SCOPING LETTER-04-01-2016.doc.docx
United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401

IN REPLY REFER TO:
DECRM
MC-208

David Rosenkrance, Area Manager
Bureau of Reclamation-Dakotas Area Office
Post Office Box 1017
Bismarck, North Dakota 58502-1017

Dear Mr. Rosenkrance:

We received your letter regarding the proposed project listed below. We have considered the potential for both environmental damage and impacts to archaeological and Native American religious sites on lands held in trust by the Bureau of Indian Affairs, Great Plains Region. You should be aware, however, that Tribes or Tribal members may have lands in fee status near the sites of interest. These lands would not necessarily be in our databases, and the Tribes should be contacted directly to ensure all concerns are recognized. The action considered has the following notification date and project location:

* April 22, 2016

Bureau of Reclamation’s Preparation of a Supplemental Environmental Assessment for Funding of Operation, Maintenance, and Replacement of Mni Wiconi Rural Water Supply System Facilities in South Dakota

We have no environmental objections to the action as long as the project complies with all pertinent laws and regulations. Questions regarding environmental opinions and conditions can be addressed to Kodi Augare-Estey, Environmental Protection Specialist, at (605) 226-7656.

We also find that the listed action will not affect cultural resources on Tribal or individual landholdings for which we are responsible. Methodologies for the treatment of cultural resources now known or yet to be discovered – particularly human remains – must nevertheless utilize the best available science in accordance with provisions of the Native American Graves Protection and Repatriation Act, the Archaeological Resources Protection Act of 1979 (as amended), and all other pertinent legislation and implementing regulations. Archaeological concerns can be addressed to Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

[Signature]

Deputy Regional Director – Trust Services
May 3, 2016

David Rosenkrance  
US Department of Interior  
Bureau of Reclamation  
PO Box 1017  
Bismarck, ND 58502-1017

Dear Mr. Rosenkrance:

The South Dakota Department of Environment and Natural Resources (DENR) reviewed the proposal by the Bureau of Reclamation to fund the Operation, Maintenance and Replacement (OM&R) of the Mni Wiconi Rural Water System facilities and have the following comments.

1. Based on the information provided, the Drinking Water Program does not anticipate any adverse impacts.

2. Based on the information provided, the Air Quality Program does not anticipate any adverse impacts.

3. Based on the information provided, the Surface Water Program does not anticipate any adverse impacts.

4. The Waste Management Program does not anticipate any adverse impacts. All waste material must be managed according to our solid waste requirements. Please contact the Waste Management Program if you have any questions on solid waste disposal requirements at (605) 773-3153.

5. The Ground Water Quality Program of DENR has reviewed the above-referenced project for potential impacts to ground water quality. Based on the information submitted in your letter dated April 22, 2016 which indicates no significant ground disturbance is to occur, the department does not anticipate adverse impacts to ground water quality by this project.
If you have any questions concerning these comments, please contact me at (605) 773-3351.

Sincerely,

[Signature]

John Miller
Environmental Scientist
Surface Water Quality Program

cc: Mark Mayer, Drinking Water Program
    Rick Boddicker, Air Quality Program
    Vonni Kallencyn, Waste Management Program
    Ryan Fitzpatrick, Ground Water Quality Program
United States Department of the Interior

BUREAU OF RECLAMATION
Great Plains Region
Dakotas Area Office
P.O. Box 1017
Bismarck, ND 58502-1017

IN REPLY REFER TO:
DK-5000-16-01
ENV-6.00

APR 22 2016

Subject: Bureau of Reclamation’s Preparation of a Supplemental Environmental Assessment for Funding of Operation, Maintenance, and Replacement of Mini Wiconi Rural Water Supply System Facilities in South Dakota

Dear Interested Party:

The Bureau of Reclamation (Reclamation) has proposed to fund the Operation, Maintenance and Replacement (OM&R) of Mini Wiconi Rural Water System (System) facilities segments through funding agreements with Oglala Sioux Tribe, Rosebud Sioux Tribe and Lower Brule Sioux Tribe. Both the Mini Wiconi Project Act of 1988 and the 2012 Amendments Act, which authorized OM&R between the Tribes and Reclamation, included the requirement of compliance with the National Environmental Policy Act (NEPA). Construction of the System has been completed and would now transition to the OM&R phase. The current cost of OM&R through funding of the four Tribal agreements (Mas) is approximately $12M annually.

Similar to the environmental assessments (EAs) completed for construction of the Mini Wiconi Project, Reclamation, as the lead Federal agency, is responsible for ensuring compliance with the NEPA, National Historic Preservation Act, and related federal environmental and cultural resource legislation for implementation of OM&R activities for the approximately 4000 miles of pipe and facilities that comprise the System. Reclamation has previously completed two environmental analyses under NEPA relative to the System, including Environmental Assessment for Mini Wiconi Rural Water Supply Project and a Supplemental Environmental Assessment for the Mini Wiconi Project: Echo Point Alternative Locations for the Intake Structure and Water Treatment Plant.

Reclamation will use this supplemental environmental assessment (SEA) to evaluate the environmental impacts associated with the implementation of the OM&R phase of the Mini Wiconi Project. The SEA will consider the potential for environmental effects to the human and natural environment and will be documented as a supplement to the existing EA completed for design and construction of the System that serves the Pine Ridge Indian Reservation, the Rosebud Indian Reservation, the Lower Brule Indian Reservation and spans Lyman, Jones, Stanley, Haakon, Mellette, Jackson Todd, and Oglala Lakota Counties.

1 The Mini Wiconi Municipal, Rural Water Supply Project EA was completed March 8, 1993. A supplement was completed, Supplement to the Environmental Assessment for the Mini Wiconi Project: Echo Point Alternative Locations for the Intake Structure and Water Treatment Plant, (September 17, 1993) for the locations of the Mini Wiconi Core System Water Treatment Plant and Raw Water Intake.
Reclamation's proposed action would fund the OM&R of the following System facilities for the benefit of the Oglala Sioux Tribe, Rosebud Sioux Tribe, and the Lower Brule Sioux Tribe:

1. Intake pumping and treatment facilities located along the Missouri River near Fort Pierre and Lower Brule, South Dakota;
2. pipelines extending from the Missouri River near Fort Pierre, South Dakota, to the Lower Brule, Rosebud and Pine Ridge Indian Reservation;
3. facilities to allow for interconnections with the West River Rural Water System and Lyman-Jones Rural Water System;
4. distribution and treatment facilities to serve the needs of the Pine Ridge, Rosebud and Lower Brule Indian Reservations, including facilities constructed pursuant to the Act or transferred into the Project according to the Act;
5. appurtenant buildings and access roads;
6. property and property rights including easements;
7. such pumping plants, wells, and facilities as the Secretary deems necessary or appropriate to meet the water supply, economic, public health, and environmental water needs of the reservations.

We are requesting your input about the proposed action and information or concerns you may have regarding potential project effects. If no significant issues are identified during scoping or review of the SEA, Reclamation would issue a Finding of No Significant Impact. Conversely, if any significant issues are identified, Reclamation would consider whether to proceed with the preparation of an environmental impact statement.

Reclamation defines significance in accordance with 40 CFR 1508.27.

To be most helpful to the preparers please provide any comments, concerns or information regarding this project by May 30, 2016. Questions or comments regarding the preparation of the SEA may be directed to Kate Kenninger at 701-221-1282, kkenninger@usbr.gov or Nell McPhillips at 701-221-1275, emcphillips@usbr.gov, or by requesting in writing to: Area Manager, Bureau of Reclamation, P.O. Box 1017, Bismarck, North Dakota 58502.

Sincerely,

[Signature]

David Rosenkranz
Area Manager

Enclosure - Map

cc: Contact List Available From Dakotas Area Office

[Stamp: This constitutes a report of the Department of the Interior prepared in accordance with the Fish and Wildlife Coordination Act (16 U.S.C. 831 et seq.). We have reviewed and have NO OBJECTION to this proposed project.

[Signature] Date

Field Supervisor]
May 20, 2016

Kate Kenninger
BUREAU OF RECLAMATION
Great Plains Region
Dakotas Area Office
P.O. Box 1017
Bismarck, ND 58502-1017

RE: Environmental Review for
Bureau of Reclamation’s Preparation of a Supplemental Environmental Assessment for
Funding of Operation, Maintenance, and Replacement of Mni Wiconi Rural Water
Supply System Facilities in South Dakota

Dear Ms. Kenninger:

Thank you for the opportunity to provide environmental review for this activity.

BOR issuing a Finding of No Significant impact for Mni Wiconi OM&R activities does not appear
to involve new construction that would impact cultural resources or Prime and Important
Farmlands if present. However, if Mni Wiconi OM&R activities will involve new ground
disturbance or the addition of auditory, visual, or atmospheric effects, BOR should follow the
requirements of the National Historic Preservation Act, and the Farmland Protection Policy Act
(FPPA) and consult with appropriate parties.

If you have any questions, please contact me at (605) 348-2889 ext. 104.

Sincerely,

TIMOTHY NORDQUIST
NRCS Conservation Agronomist