FINDING OF NO SIGNIFICANT IMPACT

PHASE II OF THE MINNESOTA CANAL PIPEING PROJECT, DELTA COUNTY, COLORADO

In accordance with the National Environmental Policy Act of 1969, as amended, and the Council on Environmental Quality’s Regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR Part 1500-1508), the Bureau of Reclamation (Reclamation) has prepared an Environmental Assessment (EA) for Phase II of the Minnesota Canal Piping Project (Project) near Paonia, Colorado. The EA assesses a No Action and a Proposed Action alternative. Based on the following, Reclamation has determined that the proposed action with implemented environmental commitments will not result in a significant impact on the human environment.

Background

Reclamation is working with the U.S. Department of Agriculture, the Bureau of Land Management (BLM), and the seven Colorado River Basin states through the Colorado River Basin Salinity Control Program to implement many salinity control projects on the Colorado River. The program’s overall goal is to cost-effectively reduce the amount of salinity in the Colorado River.

Reclamation’s Basinwide Salinity Control Program opened the program to competition through a ‘Funding Opportunity Announcement’ process. New salinity control projects are funded through a cooperative agreement between Reclamation and the Project sponsor. The facilities will continue to be owned, operated, maintained, and replaced by the project sponsors.

Minnesota Canal and Reservoir Company

The Minnesota Canal and Reservoir Company (MCRC) of Paonia, Colorado is a private, non-profit, mutually funded irrigation company that manages several miles of water conveyance ditches, canals, and reservoirs in Delta County, Colorado. One of the canals managed by the MCRC is the Minnesota Canal. The MCRC has received two grants through the Bureau of Reclamation (Reclamation), in association with the Basinwide Salinity Control Program, aimed at reducing the amount of salt and selenium that reaches the Colorado River. The first grant awarded (Phase I) was used to improve the upper 5.2 miles of the Minnesota Canal by piping the existing earthen canal. The Phase II project consists of piping the remainder of the Minnesota Canal, known as the Extension Ditch, for its full length, a total of 3.8 miles.
**Purpose and Need**

The Colorado River and its tributaries provide municipal and industrial water to about 27 million people and irrigation water to nearly four million acres of land in the United States, and another 2.3 million people and 500,000 acres in Mexico. Elevated salinity concentrations in the River are a major concern in both the United States and Mexico. Elevated salinity levels have impacts to agricultural, municipal, and industrial water users.

In June 1974, Congress enacted the Colorado River Basin Salinity Control Act (Salinity Control Act), Public Law 93-320, which directed the Secretary of the Interior to proceed with a program to enhance and protect the quality of water available in the Colorado River for use in the United States and Republic of Mexico. In October 1984, Congress amended the original act by passing Public Law 98-569 to address wildlife habitat issues, including fish and wildlife values foregone, project funding, and operation and maintenance of habitat.

Public Law 104-20 of July 28, 1995, authorizes the Secretary of the Interior, acting through the Bureau of Reclamation, to implement a basinwide salinity control program. The Secretary may carry out the purposes of this legislation directly, or make grants, enter into contracts, memoranda of agreement, commitments for grants, cooperative agreements, or advances of funds to non-federal entities under such terms and conditions as the Secretary may require.

**Scoping/Public Involvement**

Reclamation’s scoping was primarily limited to the Minnesota Canal Reservoir Company, U.S. Fish and Wildlife Service, Colorado Parks and Wildlife, Colorado Water Conservation Board, and the Colorado Historic Preservation Officer. Reclamation had previously funded similar irrigation system improvements in the North Fork area, and previous EAs were also used as a source to identify potential issues and concerns. A draft EA was prepared and distributed on June 16, 2014 to twelve local, state, and federal agencies and organizations, and eleven property owners adjacent to the Minnesota Canal Extension Ditch.

No comments on the draft EA were received by Reclamation.

**No Action Alternative**

Under the No Action Alternative, Reclamation would not provide funding to the Minnesota Canal and Reservoir Company to pipe the Minnesota Canal Extension Ditch. Seepage from the canal would continue to contribute to salt loading in the Gunnison and Colorado rivers. Riparian and wetland habitats associated with the Extension Ditch would likely remain in place and continue to provide some benefits to local wildlife.

**Proposed Action Alternative**

Under the Proposed Action Alternative, Reclamation will provide funding to the Minnesota Canal and Reservoir Company to pipe approximately 3.8 miles of open irrigation ditches. It is
anticipated that implementation of the project will result in a total annual reduction of 2,328 tons of salt in the Colorado River. Reclamation’s funding would also be used to develop replacement fish and wildlife habitat as required the Salinity Control Act.

**Summary of Findings**

Reclamation conducted an analysis on a wide range of environmental criteria for the No Action and Proposed Action alternatives. Below is a summary of the analysis as discussed in the EA.

The No Action Alternative does not meet the purpose and need as described above.

Under the Proposed Action, Reclamation will approve funding of the salinity control project for Phase II of the Minnesota Canal Piping Project which includes the replacement of approximately 3.8 miles of existing earthen canal with pipe. The Proposed Action is predicted to have no effect on Indian trust assets, environmental justice, recreation, or visual resources. Details of predicted impacts (both beneficial and negative) for other resources are discussed in greater detail below.

**Water Rights and Uses** – The Proposed Action would provide for improved system management; however, no changes in water uses are anticipated. Water rights would not be adversely affected.

**Water Quality** – Implementation of the project is predicted to result in improved water quality. The off-farm improvements included in the Proposed Action are estimated to reduce 2,328 tons of salt annually in the Colorado River. Improvements would also reduce selenium loading in the Gunnison River. However, these selenium reduction benefits haven’t been quantified.

**Vegetation and Land Use** – An estimated 21.2 acres of wetland and riparian vegetation supported by irrigation canal seepage is predicted to be impacted by the Proposed Action. These vegetation types are classified as non-jurisdictional wetlands and therefore not subject to Section 404 of the Clean Water Act. However, habitat values associated with the losses of these vegetation types were classified and are subject to fish and wildlife habitat replacement. Habitat replacement is a requirement of the Salinity Control Act, and project funding is dependent on habitat replacement. Estimated habitat values lost as a result of the Proposed Action are 24.4 habitat units.

Temporary disturbances within the footprint of the pipeline would also occur during construction. The existing lateral prisms will be dewatered and backfilled to preclude water conveyance. Pipeline alignments and construction footprints would be revegetated subject to the easements and agreements between MCRC and individual land owners. Construction would follow Best Management Practices (BMPs) to minimize the construction footprint, protect water quality, and minimize soil erosion.

**Fish and Wildlife Resources** – Upland wildlife habitat impacted by the Proposed Action would likely result in minor temporary impacts to wildlife species within the Project Area. Local wildlife may temporarily avoid using portions of the project area during pipeline construction. However, these impacts should be short-term in duration. Key wildlife species such as mule deer, elk, and raptors using the Project Area and adjacent irrigated lands would return to those
areas when construction disturbances cease. Impacts to 21.2 acres of adjacent habitats would directly impact those species dependent on these habitat types. Habitat evaluations estimate that 24.4 fish and wildlife habitat units would be affected under the Proposed Action. Replacement habitat will be developed to comply with the requirement of the Colorado River Basin Salinity Control Act, in accordance with a habitat replacement plan approved by Reclamation. 11.56 habitat credits from the Phase I habitat replacement project along the North Fork River in the town of Paonia will be utilized as partial fulfillment of the required 24.4 habitat credits for Phase II. A habitat replacement plan has been developed for the remaining required habitat credits (12.88 credits) on property that is owned by Peter Heller. The property is held in a conservation easement, and the plan involves the construction of shallow potholes, removing deposited silt in an existing pond, nonnative plant removal, and numerous native shrub and tree plantings. The Habitat Replacement Plan will create approximately 15.59 habitat credits.

**Threatened and Endangered Species** – No federally threatened, endangered, or candidate species were documented within the project area. Biological surveys conducted by E.M. Ecological on May 14, 2013 and November 15, 2013 found no suitable habitat for federally listed species within the project area.

Reclamation previously consulted with the Fish and Wildlife Service regarding depletions associated with the Minnesota Canal during Phase I of the Minnesota Canal piping project. In a memorandum dated August 10, 2012, the Fish and Wildlife Service concluded that MCRC can rely on the Upper Colorado Endangered Fish Recovery Program to offset depletion impacts to Colorado River Endangered Fish, and continued depletions are not likely to jeopardize the continued existence of the species or adversely modify designated critical habitat. A “Gunnison River Recovery Agreement” has been executed between the Fish and Wildlife Service and MCRC as required by the Gunnison Basin PBO.

**Cultural Resources** – The Proposed Action will directly impact the Minnesota Canal, which was determined as eligible for listing in the National Register of Historic Places (NRHP). Avoidance of the resource is not feasible. To mitigate adverse effects to the Minnesota Canal, Reclamation, the Colorado State Historic Preservation Officer (SHPO), and MCRC entered into a Memorandum of Agreement (MOA) dated July 1, 2014. The agreement stipulates that Level I Documentation, as described in *Historic Resource Documentation, Standards for Level I, II, and III Documentation*, of the Minnesota Canal is appropriate to mitigate the adverse effects of the Proposed Action. Level I Documentation has been completed and will be sent to the SHPO pursuant to the MOA.

**Environmental Commitments**

The following environmental commitments will be implemented as an integral part of the Proposed Action. Environmental commitments include:

1. **Construction Activities confined to the Surveyed Corridor** – All construction activities would be confined within the 100-foot wide corridor and staging areas that have been surveyed for cultural, paleontological, and biological resources. Construction
activities outside of this corridor would require additional review by Reclamation to determine if the existing surveys and information are adequate to evaluate additional impacts outside this corridor. If additional borrow or waste areas are identified, the areas will be inventoried, surveyed, and evaluated prior to use. Additional NEPA/ESA compliance activities may be required if determined by Reclamation.

2. **Disturbed Areas** – During construction, topsoil (if present) would be saved and then redistributed after completion of construction activities. All disturbed areas would be smoothed, shaped, contoured and reseeded to as near their pre-project conditions as practicable. Seeding and planting would occur at appropriate times with weed-free seed mixes as per landowner specifications.

3. **Water Quality** – Best Management Practices (BMPs) would be implemented to minimize erosion and project water quality of downstream resources. In the event that dewatering during construction is needed, MCRC or its contractor would obtain required CWA Section 402 permits prior to dewatering. BMPs include:
   
   a. Silt curtains, cofferdams, dikes, straw bales, or other suitable erosion control measures will be used to prevent erosion, and prevent eroded materials from entering water bodies during construction.
   
   b. Concrete pours will occur in forms and/or behind cofferdams to prevent discharge into the waterway. Any wastewater from concrete-batching, vehicle wash down, and aggregate processing will be contained and treated or removed for off-site disposal.
   
   c. Fuels, lubricants, hydraulic fluids, and other petrochemicals will be stored and dispensed in an approved staging area. Equipment will be inspected daily for petrochemical leaks. Construction equipment will be parked, stored, and serviced only at an approved staging area.
   
   d. An oil spill response plan will be prepared for areas of work where spilled contaminants could flow into water bodies. All employees and workers, including those under separate contract, will be briefed and made familiar with this plan. The plan will be developed prior to initiation of construction. An oil spill response kit, which includes appropriate-sized spill blankets, shall be easily accessible and onsite at all times.
   
   e. Onsite supervisors and equipment operators will be trained and knowledgeable in the use of spill containment equipment.
   
   f. Appropriate federal and Colorado authorities will be immediately notified in the event of any contaminant spill.

4. **Irrigation Facilities and Structures** – Pursuant to the Cooperative Agreement between MCRC and Reclamation (Co. Ag. No. R13AC40005), MCRC will permanently dewater, remove from irrigation service, and render incapable of irrigation water delivery the Minnesota Canal Extension Ditch. The proposed pipeline, including new division boxes, will be placed along the existing canal and backfilled appropriately. MCRC will remove
all existing irrigation structures (headgates, drops, etc.) and refill any abandoned canal prism with soil.

5. **Vegetation Resources** – Populations of Federally listed sensitive plant species (Colorado desert parsley and Rocky Mountain thistle) will be marked along the ditch to identify areas where construction activities will be implemented with care to minimize impacts and disturbances as best as possible. Ground disturbances would be limited to only those necessary to safely implement the Proposed Action. Implementing BMPs reduces disturbances to vegetation resources and reduces the amount of planting or reseeding needed. BMPs include planting and reseeding disturbed areas, per landowner specifications, monitoring plantings to ensure establishment, and the use of accepted erosion control measures during construction. Pipe cleanouts/drains will be installed near more critical riparian areas so any draining required for maintenance will provide water to the riparian areas.

6. **Noxious Weeds** – Noxious weeds shall be controlled following the Delta County Weed Management Plan. Areas that are disturbed may be more vulnerable to nonnative and noxious weed infestation. To minimize impact to native vegetation, previously disturbed areas would be used for construction activities, wherever possible. After any disturbance, proper rehabilitation procedures would be followed to prevent the infestation of invasive species. This would include weed-free seeding mixtures of desirable native species and agricultural grasses, where appropriate.

7. **Fish and Wildlife Resources** – Construction areas would be confined to the smallest feasible area to limit disturbance to wildlife within the project area. Open pipeline trenches left overnight would be kept to a minimum to reduce potential entrainment of small animals and public safety problems, and they shall be covered or include exit ramps at least every ¼ mile to allow entrapped animals to escape. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through.

8. **Habitat Replacement** – Development and/or enhancement to replace the predicted 24.4 fish and wildlife habitat units lost under the proposed action is required under the Colorado River Salinity Control Act. MCRC is responsible for developing and implementing a Reclamation approved wildlife habitat replacement plan to replace fish and wildlife values foregone. Habitat replacement will be implemented at Peter Heller’s property concurrently with installation of the pipelines. A portion of the required habitat replacement credits will come from excess credits from a habitat replacement project completed in the Town of Paonia on town-owned property adjacent to the North Fork River. Additional NEPA, ESA, and Historic Preservation Act compliance may be needed to implement the habitat replacement plan.

9. **Federally Listed Species** – In August 2012, MCRC entered into a recovery agreement with the Fish and Wildlife Service to incorporate its historic depletions under the umbrella of the Gunnison Basin Biological Opinion. In the event that threatened or endangered species are encountered during construction, MCRC shall stop construction
activities until Reclamation has completed consultation with the Fish and Wildlife Service to ensure that adequate measures are in place to avoid or reduce impacts to the species.

10. **Cultural Resources** – Reclamation, MCRC, and the Colorado State Historic Preservation Office (SHPO) have entered into a Memorandum of Agreement to mitigate the Proposed Action’s adverse effects to cultural resources. The MOA commits to historic resource documentation of the Minnesota Canal (5DT1780), recording prior to construction activities in accordance with the guidance for Level I Documentation found in “Historic Resource Documentation, Standards for Level I, II, and III Documentation.” The report shall be submitted to the SHPO within one year of the execution of the MOA. In the event that cultural and/or paleontological resources are discovered during construction, MCRC shall stop construction activities until Reclamation has completed consultation with the SHPO and appropriate measures are implemented to protect or mitigate the discovered resource.

11. **Hazardous Materials** – During construction, the use, storage, and disposal of hazardous waste materials and wastes on-site will be managed in accordance with all federal, state, and local standards.

**Conclusions**

Based on the analysis of environmental impacts, coordination with the Fish & Wildlife Service and other State, Federal and local agencies, and a review of comments received, Reclamation concludes that implementation of Phase II of the Minnesota Canal Piping Project will not result in significant impacts on the quality of the human environment or the natural resources in the project area.

This Finding of No Significant Impact has, therefore, been prepared and is submitted to document environmental review and evaluation of the proposed action in compliance with the National Environmental Policy Act of 1969, as amended.

**References**


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