

FINDING OF NO SIGNIFICANT IMPACT

Fort Laramie Canal Tunnel No. 1 and 2 Rehabilitation Project

FONSI # WYAO-2024-02



**Department of the Interior
Bureau of Reclamation
Missouri Basin Region
Wyoming Area Office**

May 2025

Finding of No Significant Impact

Fort Laramie Canal Tunnel No. 1 and 2 Rehabilitation Project

FONSI # WYAO-2024-02

PROPOSED ACTION

The Proposed Action Alternative would allow for the demolition and reconstruction of approximately 6,642 feet of irrigation tunneling along the Fort Laramie Canal. Improvements would be made during the reconstruction phase of the Project to extend both tunnels' service life. The Proposed Action Alternative would include approval from Reclamation to complete the Project, as well as access to the Bureau of Land Management (BLM) managed land and additional Right of Way (ROW) within the Project area to complete construction activities. The Proposed Action was developed and vetted through Reclamation's processes which included value planning and value engineering workshops, as well as design, estimating, and constructability workshops.

BACKGROUND

On July 17th, 2019, the ceiling of Tunnel No. 2 collapsed, forming a sinkhole above the midpoint of the tunnel. Following the collapse, the tunnel filled with soil and debris and created a blockage which prevented water from flowing through the tunnel. The debris obstruction inside the tunnel resulted in a breach of the Fort Laramie canal upstream of the tunnel and damaged adjacent property. The breach also destroyed the emergency wasteway upstream of the tunnel as well.

Temporary emergency repairs were initiated in late summer of 2019. Initial work included backfilling the sinkhole and emplacement of steel ribs inside the tunnel to reinforce the damaged concrete walls. The stopgap placement of steel ribs caused a loss of water-flow capacity in the canal estimated at 10-15%. Metal sheeting was added to the ribs and improved tunnel capacity.

Goshen Irrigation District (GID) is proposing this interstate Project (in Wyoming and Nebraska) with the support of Gering Ft. Laramie Irrigation District (GFLID). The Fort Laramie Canal is a transferred works facility whereby Reclamation owns the facility but the responsibility for operation and maintenance of the 85.3-mile-long canal, as well as 300 miles of laterals and 200 miles of drains located within Wyoming, has been transferred to GID.

A 51/49% cost share exists between GID and GFLID for the operation and maintenance of the canal system. This cost share also applies to potential Bureau funding for the rehabilitation of the two tunnels considered within this Environmental Assessment. Together, the districts have sought funding from a multitude of sources including federal funding through the Reclamation Extraordinary Maintenance (XM) program, a Congressional budget earmark, NRCS PL-566 program, the FEMA BRIC program, and the Urban Canals Act. Partial funding has been secured from Reclamation, the States of Wyoming and Nebraska. It is anticipated that total project funding will consist of a variety of federal programs and other non-federal sources if they become available.

Water for the Fort Laramie Canal is diverted at the Whalen Diversion Dam, part of Reclamation's North Platte Project completed in 1918. Water is obtained from the North Platte River and flows through the Fort Laramie Canal to Tunnel No. 1 located 4.8 canal miles

downstream of the Whalen Diversion Dam. Tunnel No. 2 is located approximately 4 miles southeast of Tunnel No. 1 and 13.5 miles downstream of the Whalen Diversion Dam.

ENVIRONMENTAL COMMITMENTS AND BEST MANAGEMENT PRACTICES

Mitigation measures and environmental protection measures will be established prior to construction and implemented by all construction personnel. The measures are intended to minimize or eliminate the environmental effects associated with the rehabilitation of Tunnels No. 1 and 2. These measures will be identified in the following permits obtained by the District or General Contractor prior to construction activities:

- WYDEQ, Wyoming Pollutant Discharge Elimination System (WYPDES) Large Construction Permit and Stormwater Pollution Prevention Plan (SWPPP),
- National Historic Preservation Act Section 106 Consultation,
- Anti-idling policy
- Ultra-low sulfur fuel
- Utilize grid power when available
- Dust Control Plan
- Traffic Control Plan
- Reseeding as appropriate with BLM approved seed mix and county approved seed mix.
- Integrated Pest Management Plan
- Exclusionary fencing
- Inadvertent Discovery Protocol

DECISION

Under the Proposed Action Alternative, Reclamation would approve the implementation of the Tunnel No. 1 and 2 Rehabilitation Project. The activities funded by the Proposed Action would include rehabilitation of Tunnels No. 1 and 2 on existing alignment. In total, the Project area includes approximately 355 acres (188 acres at Tunnel No. 1 and 167 acres at Tunnel No. 2). Additional administrative, maintenance, and staging areas would be located in the Town of Fort Laramie, WY. Major phases of the Proposed Action would include construction access and staffing, site preparation, portal structure modification, tunnel demolition, tunnel reconstruction, and reclamation at both tunnel sites.

Based on the analysis presented in the environmental assessment, Reclamation concludes that a Finding of No Significant Impact (FONSI) is appropriate, and an environmental impact statement is not needed because:

1. The canal is designed to carry water flows of approximately 1,500 cfs but currently runs at a deficit due to temporary repairs at Tunnel No. 2.
2. The Proposed Action is anticipated to return flows through the system to pre-tunnel collapse delivery rates.
3. The Proposed Action would improve the ability of GID and GFLID to manage water allocations with increased reliability due to system improvements.
4. Tunnel rehabilitation would not change the amount of water diverted into the canal at the Whalen Diversion Dam; however, repaired tunnel structures would optimize the maximum flow capacity of the system and the amount of water available to the district shareholders. It is important to note that the Proposed Action would not change existing water rights within the region but is anticipated to uphold existing interstate water rights compacts.

5. Construction associated with the Proposed Action is anticipated to be completed over the span of two non-irrigation seasons (between late September and mid-April) to minimize impacts to water use and water delivery throughout the region.
6. The Proposed Action would have minor to major, long-term beneficial impacts on water rights and deliveries and no adverse effects on water rights or use are anticipated, when compared to the No Action Alternative.

Approved:

Lyle D. Myler
Area Manager, Wyoming Area Office