

St. Mary Diversion Dam Replacement Project

Finding of No Significant Impact

Introduction

The Bureau of Reclamation (Reclamation) has prepared this Finding of No Significant Impact (FONSI) to comply with the Council on Environmental Quality's (CEQ) regulations for implementing procedural requirements of the National Environmental Policy Act (NEPA). The St. Mary Diversion Dam Replacement Project, Environmental Assessment (EA) documents the Proposed Federal Action, alternatives considered, a summary of environmental effects, and minimization measures aimed at reducing potential impacts, while the FONSI documents findings of that analysis. The St. Mary Diversion Dam Replacement Project EA is incorporated by reference.

Project Location

The proposed St. Mary Diversion Dam Replacement project can be found within Section 27, Township 36 North, Range 14 West, Glacier County, MT. The St. Mary Diversion Dam and Canal Headworks are within the confines of the Blackfeet Indian Reservation.

Proposed Federal Action

Reclamation, Montana Area Office, proposes to replace the St. Mary Diversion Dam and Canal Headworks with a low head diversion dam and rock ramp with a low flow channel for energy dissipation and upstream fish passage, a new headworks structure, an in-canal fish screen, and a fish bypass to return fish to the river. The proposed action includes the modernization of facilities to include control buildings for operations and maintenance (O&M), and other appurtenant structures critical to project operations. All concrete and reinforcement on the existing dam, bridge, and headworks would be demolished and removed up to 1.5 feet below final grade.

Purpose and Need

The St. Mary Unit facilities have been in operation for over 100 years with only minor repairs and improvements. The facilities are at the end of their expected service life and require replacement or face catastrophic failure. Maintaining the key features of the water infrastructure has become more costly due to the increased need for facility rehabilitation, replacement, and extraordinary maintenance. In addition, the only population of threatened bull trout on the east side of the Continental Divide in Montana can be found within the project area.

The purpose of the Proposed Action is to continue the viable and effective operation of the St. Mary Unit of the Project, to improve fish passage for bull trout and other native fish, and to prevent fish entrainment in the St. Mary Canal.

The Proposed Federal Action is needed to:

- To replace aging infrastructure to ensure the delivery of St. Mary Unit water to Milk River Project water users, as authorized.
- To provide passage for bull trout (*Salvelinus confluentus*) and other native fish species at the St. Mary Diversion Dam and minimize entrainment in the St. Mary Canal.

Bipartisan Infrastructure Law

The **Bipartisan Infrastructure Law (BIL)** was signed into law on November 15, 2021. The law authorizes infrastructure spending for “new” investments and programs. The BIL provides \$100 million in non-reimbursable funding to address the aging water infrastructure at the St. Mary Unit.

Summary of Environmental Effects

Based on the evidence presented in the St. Mary Diversion Dam Replacement Project EA, Reclamation has drawn the following conclusions about the potential impacts of the Proposed Action:

Geology and Soils

Construction activities could result in short-term increased erosion and sedimentation from exposure of soils on areas cleared for temporary work sites. Clearing activities would include tree removal and clearing and grubbing of mixed shrub vegetation. The use of heavy equipment for project activities would likely increase soil compaction and surface water runoff, increasing the potential for erosion. With the implementation of the minimization measures, effects on soil resources would be both short-term and minor in nature.

Hydrological Resources

Construction activities (vegetation clearing, excavation from borrow areas, construction of temporary haul routes) could result in the introduction of pollutants and sediment into stormwater runoff. Dewatering system installation, operation, and removal may also cause a slight increase in turbidity in the river, although this would be short term and within required limitations provided in the Contract Documents. There may be short-term impacts on water quality in the St. Mary River during and after the removal of the existing diversion dam and canal headworks and during construction of the new weir and rock ramp. Turbidity may increase both during and for a short time after the removal. Prior to construction Reclamation would obtain and implement the following permits:

- Blackfeet Ordinance 117 Aquatic Lands Permit
- Section 401 of the CWA-Water Quality Certification
- Section 404 of the CWA – Permitting discharges of dredge or fill material.

Impacts on water resources would be short-term for the duration of the construction period. Overall, the proposed project will provide long-term benefits to water resources by providing a more reliable system.

Climate Change

The St. Mary Diversion Dam Replacement Project will promote more efficient water use, storage, and reliable use of Project water to be more responsive to future climate change. The Proposed Action Alternative will produce minor, short-term greenhouse gas emissions associated with construction equipment. Impacts are expected to be minimal and temporary for the five-year construction period; minimization measures will offset these effects.

Socioeconomics

Replacement of the St. Mary facilities will have a positive economic impact on the Blackfeet Reservation, Glacier County, and Montana through local hiring, purchasing, and spending. Rebuilding the facilities would have a substantial positive impact on the counties that primarily benefit from the Milk River Project. The four counties of Hill, Blaine, Phillips, and Valley and the Fort Belknap Reservation comprise the area most directly affected by the Proposed Federal Action.

Benefits provided by the Project include reliable irrigation water supply, municipal and industrial (M&I) water supply, fish and wildlife enhancement, flood control, and recreation. Other benefits associated with St. Mary's diverted water are considered "ecosystem values."

No adverse natural resource or socioeconomic impacts adversely affecting minority and low-income populations have been identified, therefore there are no environmental justice impacts.

Air Quality and Noise

Construction activities will produce minimal impacts from particulate matter generation and noise from equipment. Noise levels are expected to increase during the five-year construction period which may negatively impact the enjoyment of quiet spaces and nearby residential areas. Work periods will be limited to Monday through Saturday with 10-hour workdays except for the removal and control of water activities. Once construction activities are completed, the project area will return to preexisting levels of air quality and noise levels.

Cultural Resources

In compliance with section 106, Reclamation consulted with the Blackfeet Nation Tribal Historic Preservation Office (THPO). There will be an adverse effect resulting from the removal and replacement of the St. Mary Diversion Dam. A Memorandum of Agreement between the THPO and Reclamation, signed April 28, 2023, will remain in effect for the duration of construction for the protection of cultural resources. A Blackfeet Tribal monitor will be onsite during construction of the diversion dam replacement project.

Indian Trust Assets

The project area is located entirely within the boundaries of the Blackfeet Reservation. Reclamation reserved the right on these lands to access, operate, maintain, and replace as necessary to meet the contractual water delivery needs (PL 50-864).

During construction, Reclamation will use and access lands along both sides of the St. Mary River. Per the Act of Congress, approved August 28, 1937, 50 Stat. 864, the Bureau of Reclamation letter dated July 1943, and the Bureau of Reclamation letter dated September 1946, Reclamation intends to exercise reserved rights to construct the St. Mary Diversion Dam Replacement Project using the relinquished lands around the dam site.

Lands and Vegetation

The overall construction use area would be approximately 55 acres (including the river) and would require 15 acres of clearing and grubbing of vegetation (grass, forbs, shrubs, and trees). This will require the removal and replacement of about 2 acres of trees and shrubs. A relatively small portion of the construction area would be permanently impacted by the construction of the project features and would be precluded from the establishment of vegetation following construction. Surrounding impact areas will provide an opportunity for re-establishment of native vegetation. The riparian plantings, once established, will hold the soil together through their extensive root systems, increasing streambank stability at high flows and provide shade for the river and aquatic species. This will minimize erosion and establishment of invasive species and will reestablish habitat for plants and wildlife.

Short-term impacts include soil and vegetation removal, compaction caused by construction equipment, and vehicle traffic use. A land use and landscape rehabilitation plan will ensure the success of revegetation, ensure plant production, and deter the spread of invasive plant species. No negative long-term impacts are anticipated.

Wildlife

Construction noise could temporarily displace terrestrial wildlife in the construction area. Small animals and birds are the most susceptible to this type of displacement. Larger animals such as deer are expected to avoid construction areas. Displaced wildlife will likely find suitable habitats in surrounding areas with similar vegetation. Temporary, minor habitat loss will occur with the removal of vegetation during construction activities. Some amphibians may be lost in the construction zone of the project area since equipment would be working in the riparian zone.

The range, magnitude, and duration of the construction activities would be short-term. Essentially, upon completion of the project the area would be returned to prior conditions but with improved features. Following the construction and replacement of the St. Mary Diversion Dam and Headworks, operation and maintenance of the structures and canal would continue but with greater efficiency and protection measures for the threatened bull trout and other fish species. The fisheries community will benefit from the project in the long term.

Endangered Species Act

Section 7 of the Endangered Species Act (ESA) of 1973 (16 USC 1531-1544) requires that, through consultation with the US Fish and Wildlife Service, federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of critical habitat. The St. Mary Diversion Dam Replacement Project Biological Assessment (BA) analyzes the potential effects of the Project on bull trout (*Salvelinus confluentus*), grizzly bear (*Ursus arctos horribilis*), and Canada lynx (*Lynx canadensis*). Species determinations are as follows:

Threatened and Endangered Species Determination of Effects

| Common Name | Scientific Name | Determination of Effects |
|--------------|--------------------------------|--|
| Bull Trout | <i>Salvelinus confluentis</i> | May Effect, Likely to Adversely Affect |
| Grizzly Bear | <i>Ursus arctos horribilis</i> | Not likely to Adversely Affect |
| Canada Lynx | <i>Lynx canadensis</i> | No Effect |

Bull Trout

Based on the above information and implementation of specified conservation measures, The St. Mary Diversion Dam Replacement Project **May Affect, Likely to Adversely Affect** bull trout.

Rationale:

- The proposed actions have the potential to affect fish that are moving through the system concurrently with dam construction and removal activities since migratory bull trout are known to use the St. Mary River as a migratory corridor.
- In-river construction has the potential to trap, injure, or kill bull trout, and has the potential to create a temporary disturbance barrier that prevents fish from passing upstream or downstream to preferred habitats.
- The proposed action will result in short-term degradation of water quality in bull trout waters during the five year construction period: however, measures to minimize sediment inputs to the river and the low probability of bull trout occurrence, reduces the impacts from potential elevated sediment levels associated with construction.
- The effects of this fish passage improvement project will not alter the hydrologic condition in the St. Mary River but would affect instream habitat conditions during construction. A small amount of vegetation will be removed along the river corridor (grass, forbs, shrubs, and trees), potentially reducing shoreline and channel complexity, increasing the water temperature, and reduce substrate quality. The migratory corridor would be temporarily affected while construction activities occur.

Grizzly Bear

The St. Mary Diversion Dam Replacement Project is Not Likely to Adversely Affect the grizzly bear.

Rationale:

- Vegetation control/removal would be limited to within the footprint of the St. Mary Unit. There would be no change to the ecological system that would result in long-term habitat alteration.
- Associated construction activities would be located within the NCDE, PCA, Zone 1, Blackfeet Reservation BMU for grizzly bears. It is likely that a bear could be found within this area but would relocate due to human activity.
- Noise and disturbance associated with construction activities have the potential to extend outward up to one mile from the project footprint. It is likely that grizzly bears in the area would perceive the noise and likely leave the area.
- No new permanent roads would be constructed within the footprint of the St. Mary Unit.
- Direct, indirect, and cumulative effects of proposed actions would be discountable.
- Conservation Measures (above) will be implemented to avoid potential conflicts due attractant storage.

Canada Lynx

The St. Mary Diversion Dam Replacement Project would have *No Effect* on Canada lynx.

Rationale:

- There is no anticipated harm of Canada lynx caused by the Proposed Action within the footprint of the St. Mary Diversion Dam and Headworks.
- Direct, indirect, and cumulative effects of the Proposed Action would be discountable.
- The Proposed Action would not result in changes to ecological systems resulting in altered predator/prey relationship.
- There are no documented lynx occurrence records in the Action Area.
- The Proposed Action would not increase the project footprint or human presence in the Action Area.

Cumulative Effects

Reclamation has examined the potential for significant environmental effects to geology and soils, hydrological resources, climate change, socioeconomics, air quality and noise, cultural resources, Indian trust assets, lands and vegetation, and wildlife. Federal, State, and Tribal regulations designed to protect fish and wildlife resources, important habitats and sensitive areas, cultural resources, human health and safety, and the public interest provide the legal basis for the evaluations. Reclamation's consideration of mitigation would not extend to mitigating impacts of non-Reclamation actions.

Under the Proposed Action Alternative, temporary direct impacts would include increased, traffic, noise, dust, and vehicle emissions. Land disturbing impacts associated with removal of the existing features could cause erosion and sedimentation. BMPs would be employed to reduce the short-term impacts. Construction noises may temporarily displace wildlife that inhabit the area, but they would return to favorable conditions upon completion of construction activities. The Proposed Action would provide long-term improvements for water delivery. The fish bypass would eliminate entrainment in the canal, while the rock ramp would allow for fish passage both upstream and downstream of the diversion dam during the irrigation season. The minor, short-term impacts would be offset by the long-term benefits of the Proposed Action.

The collective impacts of past, present, and reasonably foreseeable future actions will be similar to the impacts of the Proposed Action and primarily result from construction activities. The temporary nature of construction, as well as the incorporation of standard BMPs, regulatory compliance, environmental commitments, and minimization measures into the Proposed Action (identified as minimization measures for each resource area), would ensure that adverse impacts are minimized to the extent possible.

Consultation, Coordination, and Public Involvement

The St. Mary Diversion Dam Replacement Project was developed in coordination with the Blackfoot Tribe, the Milk River Joint Board of Control (MRJBC), and the US Fish and Wildlife Service (Service).

Over the past 20+ years Reclamation's Technical Service Center (TSC), Reclamation's Montana Area Office (MTAO), the Service, The Blackfoot Nation, Montana Department of Natural Resources and Conservation (DNRC), MRJBC, St. Mary Rehabilitation Working Group (SMRWG), and many other stakeholders have joined in a collaborative effort to help protect the threatened bull trout at the St. Mary Unit.

Reclamation and the Service have had a long history of discussions regarding the effects of the project on bull trout in the St. Mary system since the time of their listing (1999). A Biological Opinion was issued to Reclamation in September 2020 for the continued operation and maintenance of the St. Mary Unit, which allows for continued operation until 2025. Current consultation for the St. Mary Diversion Dam Replacement Project includes the potential impacts on grizzly bears, Canada lynx, and bull trout. Consultation and coordination are ongoing.

In compliance with Section 106 of the National Historic Preservation Act of 1966 (as amended in 1992), Reclamation consulted with Blackfoot Nation THPO. A Memorandum of Agreement (MOA) between Reclamation and the THPO provides measures to minimize potential effects of the proposed Federal undertaking on historic properties

In accordance with Federal Acquisition Regulation 15.201- Industry Day was held September 7th, 2022, at 9:00 am via TEAMS to discuss the: St. Mary Diversion Dam Replacement Project. Reclamation invited companies with technical expertise in heavy civil construction related to dam or water delivery infrastructure.

A press release was initiated on March 29, 2023, to inform the public of the availability of the Draft EA. In addition, the Draft EA was posted to the Bureau of Reclamation website located at: <https://www.usbr.gov/gp/mtao/stmary/index.html>. A public meeting was held in Browning, MT on April 19, 2023, at 6:00 pm at the Glacier Peaks Hotel conference room. One comment letter was received during the 30-day public review period.

The final EA meets the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the document can be accessed by those with disabilities using accessibility software tools.

Environmental Commitments

Environmental commitments for the protection of resources will consist of the following actions:

- Irrigation diversion flow shall be 650 cubic feet per second (cfs) and must be maintained throughout construction, typically from April to October each year.
- In-water activities including cofferdam construction, in-water excavation, and concrete placement in the wet, etc. cannot occur from December 31 to July 15.
 - The only exception would include maintenance/emergency repairs of the cofferdam (year 2 through 4).
- For fish passage, minimum flow depths along the length of the in-river cofferdam shall be a minimum of six inches for flows of 150 (cfs) and higher.
- Any in-river cofferdam construction or other work that blocks flow through the existing sluiceway shall not remain in place longer than 16 months unless provisions are made for alternate fish passage.
 - Alternate passage would include notching the existing diversion dam to allow fish passage during the non-irrigation season.
- Equipment may not remain in the river outside of work hours, or overnight.
- Work shall be limited to Monday to Saturday with 10-hour workdays except for the removal and control of water activities.
- Reclamation will have a monitoring plan in place during construction for monitoring of bull trout. This will be coordinated with the Blackfeet Fish and Game.
- Standard construction BMPs such as straw wattles, silt fences, straw bales, sediment basins, earthen berms, erosion control blankets, surface roughening, seeding, check dams, preserving natural vegetation, and diversion ditches would be implemented to prevent potential pollution sources from entering the St. Mary River.
- A nest inventory shall be completed outside of the eagle nesting period (Feb-August) prior to construction. If a nest is found, Reclamation would work with the Service to determine appropriate protection measures.
- If grizzly bears are present in or near the construction zone, all work would stop until the bears leave the area.
- Bear-resistant containers must meet the most current Interagency Grizzly Bear Committee (IGBC) Certified Bear-Resistant Products list.

- During nighttime hours, all attractants shall be stored in a bear-resistant manner unless it is in immediate control, being prepared for eating, being eaten, being transported, or being prepared for storage.
- Promptly clean up any project-related spills, litter, garbage, and debris.
- It is known that anthropogenic food, garbage, and other attractants associated with resource management activities increase the risk of grizzly bear mortality. To ensure there are no adverse effects to grizzly bears all Reclamation staff and contractors would be required to comply with the Blackfeet Nation, Fish and Wildlife Code Chapter 3, Section 17. The Blackfeet Nation implements and monitors compliance with attractant storage regulations in areas normally occupied by grizzly bears. All residents and visitors in “normally occupied” grizzly bear habitat are required to store attractants in a bear-resistant manner. Purchasers, all employees, contractors, and subcontractors must store trash in bear-resistant containers, remove trash daily, and refrain from feeding wildlife. Regulations are enforceable by Tribal wardens and Tribal police.
- A Blackfeet cultural monitor will be on-site during the construction of the St. Mary Diversion Dam Replacement Project.
- If a site is located, Reclamation and the THPO shall record any site features and artifacts in place.
- Reclamation and the THPO may conduct shovel testing and/or test excavation if allowed by the allotment owners.
- If avoidance of a site is not possible to complete the undertaking, Reclamation and the THPO shall determine the mitigation of the site pursuant to 36 C.F.R. part 800.
- Any artifacts located on the allotment are owned by the allottees. Any artifacts recovered by testing during inventory or monitoring during the undertaking construction shall be returned to the allottees.
- If potential historic properties are discovered or unanticipated effects on historic properties are found, work will halt in the vicinity of the discovery until the historic properties have been evaluated and addressed as appropriate, under the post-review discoveries procedures outlined in 36 CFR Part 800.13b.

Regulatory Compliance

The St. Mary Diversion Dam Replacement Project is compliant with the following acts, laws, and policies:

- American Indian Religious Freedom Act of 1978 (PL 95-341)
- Archaeological and Historic Preservation Act (PL 93-291)
- Archaeological Resources Protection Act of 1979 (PL 96-95)
- Bald and Golden Eagle Protection Act (16 USC 668-668d)
- Blackfeet Ordinance 117 – Aquatic Lands Protection Act

- Blackfeet Tribal Employment Rights Ordinance and Safety Act of 2010
- Clean Air Act of 1963 (42 USC 7401) and Amendments
- Clean Water Act of 1972 (33 USC 1251 et Esq.), Sections 401, 402, and 404
- Consultation and Coordination with Indian Tribal Governments 2000 (EO 13175)
- Council on Environmental Quality's regulations at 40 CFR 1500-1508.
- Environmental Justice of 1994 (EO 12898)
- Federal Decision Framework for Environmental Review 2017 (EO 13807)
- Flood Plain Management 1977 (EO 11988).
- Indian Sacred Sites 1996 (EO 13007)
- Indian Trust Responsibilities 1995 (512 DM Chapter 2)
- Invasive Species 2016 (EO 13112)
- Migratory Bird Treaty Act of 1918 (16 USC 703-712)
- Native American Graves Protection and Repatriation Act of 1990 (PL 101-601)
- National Environmental Policy Act of 1969 (42 U.S.C. §4321 et seq)
- National Historic Preservation Act of 1966 (PL 89-665; 80 Stat. 915; 16 USC 470)
- Protection and Enhancement of the Cultural Environment of 1971 (EO 11593)
- Responsibilities of Federal Agencies to Protect Migratory Birds 2012 (EO 13186)
- Wetland Protection Act of 1977 (EO 11990)

Based on the analysis of the environmental impacts as described in the St. Mary Diversion Dam Replacement Project EA, Reclamation finds that all potentially significant issues and resource impacts have been identified, evaluated, addressed, and resolved. This FONSI serves to document the reasons why the Proposed Federal Action will not have a significant effect on the human environment; therefore, an Environmental Impact Statement will not be prepared. Implementation of the Proposed Federal Action may take place following approval of this decision document and completion of required contracting actions.

Approved:

Ryan Newman
 Area Manager
 Montana Area Office
 Missouri Basin Region

Date