Finding of No Significant Impact

Lower Jocko J Diversion Area Improvements

Flathead Indian Reservation, Lake County, Montana

This Finding of No Significant Impacts (FONSI) describes the U.S. Bureau of Indian Affairs (BIA) findings regarding the significance of environmental impacts from a proposed Confederated Salish and Kootenai Tribes (CSKT) project to replace the Lower Jocko J Diversion, implement other irrigation and piping improvements at the Lower Jocko J Canal, and address degraded habitat in the area through restoration and habitat enhancement strategies. This FONSI also provides the BIA's decision regarding the Proposed Action Alternative. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (Title 40, Code of Federal Regulations (CFR), 1501.5), an environmental assessment (EA) was prepared for the proposed Lower Jocko J Diversion Area Improvements within the Flathead Indian Reservation. The proposed project area is found in Section 31 of Township 18 North, Range 20 West on the Ravalli, Montana, U.S. Geological Survey 7.5-minute topographic series map.

The current Lower Jocko J Diversion structure is a low head diversion of rail and timber construction, creating a log crest across the Jocko River. The crest controls the river water surface elevation, causing water to flow into a long forebay approach channel upstream of the canal headworks. Flathead Indian Irrigation Project (FIIP) releases water into the Lower Jocko J Canal at the headworks by opening the headgate. The existing configuration results in fisheries concerns, debris accumulation near the head of the forebay, and sediment deposition upstream of the diversion and in the forebay. The Lower Jocko J Canal in the project area also has capacity constraints and is hydraulically inefficient. Additionally, previous land management practices (e.g., farming, grazing, and mining activities) have resulted in substantial changes to habitat communities within the area, deposition of mine waste within the floodplain, changes in topography, and are contributing to Jocko River bank erosion. The project is needed to reduce capacity constraints and hydraulic inefficiencies, improve passage for a wide variety of fish species and life stages in the Jocko River, resolve the operational deficiencies of the fish screen, improve debris and sediment transport in the Jocko River, and to accommodate other aquatic and terrestrial habitat restoration and enhancements in the diversion area.

The EA considered two alternatives: the Proposed Action Alternative (replacement of the existing Lower Jocko J Diversion with a rock ramp, construction of a new headworks structure along the southwest bank of the river, replacement of the existing fish screen with a new in-river screen, placement of the existing Lower Jocko J Canal within a new pipeline on a new alignment, and aquatic and terrestrial habitat restoration and enhancement) and the No Action Alternative (Section 3.1 of EA). Other alternatives, including (1) Gravity Diversion, (2) River Realignment, (3) Pumped Diversion, and (4) Pressure Distribution Pipe were considered but eliminated from detailed study (Section 3.2 of EA). The Proposed Action Alternative involves:

- Removal and replacement of the existing Lower Jocko J Diversion with a grouted rock ramp diversion (approximately 120 feet in length with a grade of 2.5 percent) at a new location slightly downstream of the existing diversion to improve debris management and allow for passage of a wider variety of fish species and life stages by providing more diverse hydrologic conditions.
- Removal and replacement of the existing Lower Jocko J headworks with a new concrete headworks structure along the southwest bank of the Jocko River, adjacent the new rock ramp. A sluiceway with an opening near the upstream end of the rock ramp and a gate would be installed as part of the new headworks structure to control the water level and divert flows through a fish screen and pipe manifold connected to the new irrigation pipeline.
- Replacement of the existing in-canal fish screen with a new in-river hemi screen built into the new headworks structure. The hemi screen mesh would be sized in accordance with the most stringent National Oceanic and Atmospheric Administration parameters for fish screening to prevent fish and other debris from entering the irrigation system.
- Placement of the existing Lower Jocko J Canal within a 48-inch diameter pipeline on a new alignment.
- Reconfigure approximately 960 linear feet of the abandoned canal to provide a low-gradient side-channel with floodplain benches including habitat structure, a new inlet, and reconfiguration of the side-channel to flow northwest (designed for connectivity at roughly the 2-year flood event).
- Plug and fill the existing canal pipe under the Montana Rail Link (MRL)/Burlington Northern Santa Fe (BNSF) railroad and develop a backwater area adjacent the side-channel by leaving a 345-linear foot section of the open canal in place.
- Construction of a new electrical building (with three-phase power service) near the proposed headworks, with connection to an existing electrical line south of the railroad tracks through a short power service extension.
- Acquisition of a portable backup power generator, which would be stored off-site but could be brought to the site in the event of power failure to ensure continued operation.
- Placement of a hardened riprap revetment along the southern bank of the Jocko River, extending upstream from the new rock ramp diversion and tying into existing riprap along the railroad embankment.
- Placement of localized, hardened riprap revetments along the outer extents of the new rock ramp and headworks that would tie the new ramp/headworks facility into the existing bank of the Jocko River.
- Removal of the existing gabion structures along the north bank and replacement with brush bank treatments, which would improve bank stabilization and habitat complexity.

- Excavation of high ground to construct new wetland areas east and west of the newly developed section of backwater channel, supported via hydrologic input from the reconstructed canal and backwater feature from shallow groundwater.
- Improve floodplain connectivity on the north side of Jocko River through grading.
- Implement native brush bank treatments on the Jocko River, both downstream and upstream of the new rock ramp.
- Removal of approximately 600 cubic yards of mine waste rock, which contains heavy metals, from the existing floodplain north of the Jocko River and riverbank and transport it to an upland location within the project area outside of the 100-year floodplain.

Finding of No Significant Impact (FONSI)

Based on the analysis discussed in the August 2024 EA and supporting documents, the BIA Flathead Agency has made the determination that implementation of the Proposed Action Alternative does not constitute a major federal action which would significantly affect the quality of the human environment, individually or cumulatively, with other actions in the general area. None of the environmental effects identified meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Therefore, in accordance with NEPA of 1969, as amended, an Environmental Impact Statement (EIS) is not required and will not be prepared (40 CFR 1508.13).

Finding

This FONSI describes the reasons why an action will not have a significant effect on the human environment and why preparation of an EIS is not required (40 CFR 1508.13).

The BIA determination, as noted above, is supported by the following findings:

1. The EA describes the Proposed Action Alternative (preferred) and the No Action alternatives (Section 3.0 of the EA), as well as the respective environmental consequences (Section 4.0 of the EA). The EA discusses the reasons for the choice of the two alternatives (Sections 3.0 and 4.0 of the EA).

2. Mitigation measures, as described in Section 5.0 of the EA, will be implemented to mitigate potential impacts of the Proposed Action Alternative, and comply with local, tribal, and federal regulatory requirements. Potential impacts to resources, mitigation implemented, and the reasons why the impact is not significant are summarized below.

Resource	Impact identified in the EA	Considerations and reason not significant
Topography (4.2.1 of the EA, page 19)	The Proposed Action Alternative would require 2.802 acres of excavation and fill material placement that would affect topography. This includes the construction of the new headworks, diversion, and filling of the forebay; reconstruction of the side channel, to include floodplain benches and excavated channel inlet and outlet points along the Jocko River bank; wetland creation south of the Jocko River; and permanent topographic change within the Jocko River to construct the new rock ramp.	While excavation and fill are proposed, these changes to the general topography are anticipated to be moderate, permanent, direct impacts, with changes expected to be beneficial over the long-term by addressing irrigation inefficiencies, habitat impairments, contamination associated with the mine waste rock, and increasing floodplain connectivity.
Soils (4.2.2 of the EA, page 19)	Approximately 15.66 acres of ground disturbance would occur due to the removal and replacement of the existing diversion and headworks, constructing a new side channel and wetland, river bank improvements, floodplain restoration, and mine waste rock removal. Soil erosion may also occur following the completion of construction activities until final stabilization occurs.	Ground disturbance activities would remove heavy metals from the floodplain and reduce bank instability. Disturbed areas would be stabilized through erosion control measures, including seeding, after construction activities are completed. Following construction, minor erosion may still occur during rain and wind events until disturbed areas have stabilized. Overall, the Proposed Action Alternative would have moderate, direct, long-term beneficial impacts on soils with some negligible, adverse indirect impacts following construction.

Resource	Impact identified in the EA	Considerations and reason not significant
Surface Waters and Wetlands (4.3.1 of the EA, page 20)	Approximately 0.329 acre of wetlands and 0.654 acre (1,664 linear feet) of waterways would be permanently impacted due to placement of fill material. Approximately 0.111 acre of wetlands and 0.059 acre (38 linear feet) of waterways would be temporarily impacted.	While placement of fill within wetlands and waterways can be considered a negative impact, these impacts are needed to help reduce capacity constraints and hydraulic inefficiencies associated with the Lower Jocko J Canal. These impacts are also needed to help restore and enhance natural functions and processes of the river and wetland systems by improving debris and sediment transport in the Jocko River, establishing, restoring, and enhancing wetlands, re-establishing bank vegetation, providing improved fish passage, and improving floodplain connectivity. The bank stabilization and floodplain and aquatic resource restoration and enhancement activities outlined in the Proposed Action Alternative would be used as compensatory mitigation to offset wetland and waterway impacts associated with the irrigation diversion infrastructure. Overall, the Proposed Action Alternative would have both direct and indirect long-term beneficial impacts on surface waters and wetlands in the area.

Resource	Impact identified in the EA	Considerations and reason not significant
Surface Water Quality (4.3.2 of the EA, page 23)	Improvements to the Lower Jocko J Diversion would not permanently produce or increase potential water quality impairments within the Jocko River. The new rock ramp would eliminate the conditions contributing to the existing scour hole and tail-out bar downstream of the existing Lower Jocko J Diversion, reducing downstream sediment transport resulting from erosion within the Jocko River. Identified mine waste rock containing heavy metals would be removed to prevent potential leaching and/or mobilization into the river, and banks would be reconstructed using native brush bank treatments to reduce erosion. Additionally, enhancing existing wetlands and establishing new wetlands would improve nutrient capture and filtering of contaminants before reaching the Jocko River.	Minor temporary impacts to water quality may occur during construction. However, the use of best management practices (BMPs) would help to reduce these impacts. To minimize turbid water within the Jocko River during construction, in-channel work would be accomplished by constructing a temporary bypass channel around the work area using a series of cofferdams and rock weir steps. Overall, the Proposed Alternative would have a moderate, long-term, beneficial impact on water quality.
Groundwater (4.3.3 of EA, page 24)	The placement of a portion of the existing Lower Jocko J Canal within pipeline on new alignment, would reduce seepage, and result in possible localized changes to groundwater. However, proposed restoration and enhancement efforts would improve groundwater recharge within the project vicinity through enhanced floodplain connectivity, floodplain benches to capture high flow, and new wetland areas.	The Proposed Action Alternative is not anticipated to produce and/or increase contaminants that may enter and impair groundwater wells and aquifers. Overall, the Proposed Action Alternative would have a minor, direct and indirect, long-term beneficial impact on groundwater.

Resource	Impact identified in the EA	Considerations and reason not significant
Water Rights (4.3.5 of the EA, page 25)	During construction, in-channel work would occur between September 30th and March 15th when the existing Lower Jock J Canal headgate is closed. Stock water would not be perpetuated during construction, and any service disruptions to stock water users would be coordinated by FIIP. Stock water use would resume upon completion of the project.	Scheduled in channel work would ensure that no direct or indirect impacts to irrigation water users are anticipated. Stock water use would resume upon completion of the project. Improvements would eliminate the existing capacity limitations, add flow measurement capabilities, and provide improved flow controls, allowing FIIP to better serve the irrigators within the Lower Jocko J Canal service area. Overall, the Proposed Action Alternative would have minor, direct, temporary impacts to stock water users associated with the Lower Jocko J Canal.
Floodplains (4.3.6 of the EA, page 25)	As part of the Proposed Action Alternative, over 3,450 cubic yards of fill material and riprap would be placed within and adjacent to the Jocko River. The Proposed Action Alternative would reconnect historic flood-prone areas on the north and south sides of the Jocko River reactivating approximately 3,000 linear feet of disconnected flood channels. In addition, approximately 300 feet of berm associated with the Duncan McDonald ditch would be removed to allow irrigation return flows from the ditch system to free flow to existing/historic wetland swales and floodplains.	The Proposed Action Alternative would improve floodplain connectivity on the north and south sides of the Jocko River. Re-establishing floodplain hydrology would enhance existing wetlands and support woody vegetation establishment. Overall, the Proposed Action Alternative would have a direct long-term beneficial impact to floodplains and floodplain functions.

Resource	Impact identified in the EA	Considerations and reason not significant
General Terrestrial and Aquatic Species (4.5.2.1 of the EA, page 28)	Approximately 5 acres of terrestrial and aquatic habitat may be temporarily or permanently impacted, including impacts to wetland habitat, upland habitat, and aquatic (river) habitat. Construction-related impacts to terrestrial wildlife would primarily include the temporary or permanent loss of habitat and displacement of resident wildlife from the construction area, possible injury or death to smaller animals, and noise disturbance. Construction-related temporary impacts to aquatic species include increased sediment and potential entrainment during dewatering activities.	To minimize potential construction-related impacts to wildlife habitat, work would be confined to the defined construction limits to the extent practicable, with designed vegetation preservation and salvage areas noted on design plan sheets. BMPs would be installed during construction to limit impacts to wildlife and habitat, and seeding in temporarily disturbed areas would occur following construction. Vegetation is anticipated to return after completion of the project. The Proposed Action Alternative improvements would allow for improved year-round fish passage and reduce or eliminate short-term fish entrainment, resulting in direct, long-term benefits to aquatic species. Improvements to floodplain connectivity, wetland enhancement, and removal of mine waste would result in long-term, moderate benefits for terrestrial and aquatic wildlife species.
Migratory Birds (4.5.2.2 of the EA, page 29)	Active nests are likely to occur within the project limits, and construction has the potential to impact nesting birds protected under the Migratory Bird Treaty Act (MBTA) if tree and shrub removal, ground-clearing activities, and equipment maneuvering occur during the bird-breeding season (April 15 to August 16). Vegetation clearing would be necessary for the power service extension.	Compliance with MBTA guidance would be required, and disruption to nesting birds and disturbance of active nests avoided. Conservation measures to protect any nesting migratory birds, their eggs, hatchlings, or fledglings would be implemented to avoid impact during construction. All vegetation clearing would occur outside of breeding season; however, should work need to occur need to occur during breeding season, areas to be disturbed would be cleared for migratory species nesting by a qualified biologist. Overall, the terrestrial rehabilitation efforts would improve or create suitable avian habitat within the project area and result in minor, long-term benefits to migratory birds.

Resource	Impact identified in the EA	Considerations and reason not significant
Vegetation (4.5.4 of the EA, page 32)	Approximately 5 acres of existing vegetation may be temporarily or permanently impacted to implement diversion and restoration improvements.	While some wetland and riparian vegetation would be lost as a result of the Proposed Action Alternative, the intent of the improvements is to increase the functional lift of existing wetlands; expand the size of existing wetlands or provide new wetland areas; provide floodplain connectivity that supports natural floodplain process; and install woody bank treatments to restore bank vegetation lost to previous land use changes. To limit the extent of potential impacts to vegetation, work would be confined to the defined construction limits to the extent practicable. Vegetation is anticipated to return after completion of the project. Overall, the Proposed Action Alternative would have moderate, long-term beneficial impacts on vegetation in the area by increasing species diversity, addressing habitat degradation related to previous land uses, and restoring a more diverse vegetative structure along the Jocko River.
Employment and Income (4.7.1 of the EA, page 35)	The Proposed Action Alternative would result in beneficial impact by providing a small number of temporary job opportunities for local residents as part of the labor force necessary to complete the proposed improvements. In the long-term, replacing the Lower Jocko J Diversion and piping the canal would allow for more reliable operation and distribution of irrigation water for downstream users.	Temporary employment opportunities for Tribal members would be prescribed and coordinated through the Tribal Employment Rights Ordinance office. The Proposed Action Alternative would have minor, short-term and long-term, beneficial effects on the local economy and income.

Resource	Impact identified in the EA	Considerations and reason not significant
Community Infrastructure (4.7.2 of the EA, page 35)	Potential brief interruptions to electrical service may occur to tie the new overhead power line into the existing electrical grid. The Proposed Action Alternative may temporarily affect local transportation, depending on where materials and construction equipment are coming from. The existing gravel access road to the diversion would be extended to allow direct access for maintenance.	A utility license agreement with MRL/BNSF would be required, and any notification of service interruptions would be the responsibility of the appropriate utility owners. Therefore, the Proposed Action Alternative would have a negligible, short-term, direct impact on utilities. An encroachment permit from the Montana Department of Transportation and a utility license agreement from MRL/BNSF would be required. These impacts are anticipated to be short-term and minor. No indirect impacts are anticipated.
Hunting, Fishing, and Gathering (4.8.1 of the EA, page 36)	Approximately 5 acres of land may be permanently or temporarily impacted during the improvements to the Lower Jocko J Diversion. This would include impacts to upland, wetland, and open water habitat on the Jocko River.	The Proposed Action Alternative improvements would improve fish passage within the Jocko River and eliminate predation in the Lower Jocko J Canal forebay. Floodplain and wetland enhancements may also improve habitat suitable for a wide variety of plant and wildlife species that are important to the CKST for hunting and gathering. Overall, the Proposed Action Alternative is expected to have a minor, permanent beneficial impact on hunting, fishing, and gathering.
Agriculture (4.8.2 of the EA, page 37)	No agricultural land would be impacted within the project area; however, improvements to the Lower Jocko J Diversion would eliminate existing capacity limitations and provide flow measurement for more effective operation and control of irrigation water throughout the FIIP.	Improved operation and control have the potential to increase agricultural productivity in the area. Therefore, moderate, long-term beneficial impacts to agricultural lands and operations in the project vicinity are anticipated under the Proposed Action Alternative, due to more effective operation and control of irrigation water throughout the FIIP.

Resource	Impact identified in the EA	Considerations and reason not significant
Recreation (4.8.3 of the EA, page 37)	Opportunities for hiking, bird watching, and a small amount of recreational fishing would be temporarily disrupted during construction. The southern access to the site may be eliminated, as the approach would be permitted as an MRL/BNSF private approach for irrigation purposes, and CSKT and/or FIIP may enforce this controlled access point.	The enhancements on wetlands, riparian vegetation, and the overall floodplain could attract various bird species and other wildlife species to the area, potentially improving the experience for those hiking or bird watching within the project area. In addition, other recreation opportunities can be found elsewhere along the Jocko River. Additionally, access to the site would still be provided east of the project area near the power substation. Overall, the Proposed Action Alternative would have a long-term, minor, beneficial impact on recreation.
Land Use Plans (4.8.4 of the EA, page 38)	Irrigation diversion improvements and restoration activities would help the CKST meet the various long-term objectives found in identified management plans.	The Proposed Action Alternative would provide more effective distribution of irrigation water within FIIP and enhance and establish aquatic and terrestrial habitat. Therefore, the Proposed Action Alternative would have minor, long-term, beneficial impacts on land use.
Visual Resources (4.9.1 of the EA, page 38)	The visual character of the project area would be altered by the proposed irrigation improvements and restoration efforts, which would convert the project area to a more natural state.	The Proposed Action Alternative would have long-term, minor impacts in the immediate area, as the improvements would be visually evident to individuals that visit the area. However, individuals familiar with the area would recognize these improvements as normal within the context of the FIIP, with improved natural habitat enhancing the visual character of the site.

Resource	Impact identified in the EA	Considerations and reason not significant
Climate Change (Greenhouse Gases) (4.9.2 of the EA, page 39)	Construction activities may cause a temporary increase in Carbon Dioxide emissions from equipment exhaust and workers' vehicles. In addition, the Proposed Action Alternative would provide more resiliency during flood events.	The resulting greenhouse gas concentrations generated from construction activities at the site would be beneath the EPA's mandatory reporting threshold. The increase in emissions would be temporary and cease once construction is complete. Overall, impacts to climate change and greenhouse gas emissions would be short-term and negligible. Improvements made by the Proposed Action Alternative would allow for more reliable operation and distribution of irrigation water within the Lower Jocko J Canal delivery area. Long-term direct impacts on climate change would not be anticipated.
Indian Trust Assets (4.9.3 of the EA, page 40)	Within the project area, the Lower Jocko J Diversion, headworks, canal, and associated infrastructures are considered Indian Trust Assets (ITAs). The Proposed Action Alternative would replace the existing Lower Jocko J Diversion and associated infrastructure.	Improvements made by the Proposed Action Alternative would have a moderate, long-term beneficial impact on ITAs by eliminating existing flow constrictions, improving safety features, and incorporating flow measurements, and enhancing the land through habitat restoration.
Waste and Hazardous Materials Management (4.9.4 of the EA, page 40)	During construction, some hazardous materials, such as oil and gas, would be used by construction equipment near wetlands and waterways. The mine waste rock would also be removed from the floodplain and disposed of in an appropriate, upland location in accordance with applicable regulations.	Hazardous materials from construction would be limited in quantities and managed according to standard best practices. Overall, the Proposed Action Alternative would have long-term, moderate benefits for waste and hazardous materials management.

3. The Biological Assessment Report and Biological Opinion provided by US Fish and Wildlife Service (Appendix C of the EA) determined that the Proposed Action Alternative would have the following impacts on Threatened and Endangered Species:
   a. ***No effect*** on Canada lynx (*Lynx canadensis*) and Spalding's catchfly (*Silene spaldingii*)
   b. ***May affect, but is not likely to adversely affect*** the North American wolverine (*Gulo gulo luscus*), yellow-billed cuckoo (*Coccyzus americanus*), or grizzly bear (*Ursus arctos horribilis*)
   c. ***May affect, likely to adversely affect*** bull trout (*Salvelinus confluentus*) and bull trout critical habitat.

While the Proposed Action Alternative is likely to adversely affect bull trout and bull trout critical habitat, the long-term benefits would improve habitat connectivity for bull trout at variable flows, minimize entrainment and fish loss, provide the addition of off-channel habitat, and improve bank stabilization, riparian corridor, and habitat complexity.

The Biological Assessment Report and Biological Opinion did not review Monarch butterfly; however, the EA determined the Proposed Action Alternative is not likely to jeopardize the continued existence of the monarch butterfly, as long-term permanent impacts are not anticipated (4.5.3 of the EA, page 32).

4. One cultural resource and several cultural plants were identified within the project area. To avoid impacts to the cultural site, the CKST Tribal (Historic) Preservation Department (TPD) has requested that a 30-foot buffer be shown on the design plan sheets indicating work restrictions near the cultural site. In addition, cultural plants would be preserved, where possible. The CKST TPD has also requested that a TPD staff member be present during all ground-disturbing activities. With these mitigation measures in place, ***no historic properties would be affected*** (4.6 of the EA, page 34). The TPD cultural concurrence letter is found in Appendix D of the EA.

5. When considering the disturbance size and scope of the Proposed Action Alternative, along with other past, present, and reasonably foreseeable future actions, the Proposed Action Alternative would likely result in minor, beneficial cumulative impacts on wetlands, surface waters, threatened and endangered species, vegetation, and hazardous materials management (4.10 of the EA, page 41).

6. The Proposed Action Alternative is in compliance with the Clean Air Act. A general conformity determination is not required because the project is located in an attainment area for all U.S. Environmental Protection Agency's priority pollutants (4.4 of the EA, page 26). Overall, the amount of dust generated would not exceed what is currently generated in the project vicinity.

7. Public and agency scoping was conducted. No comments related to the implementation of the project were received (Appendix A of the EA).

Decision and Rationale

Based on the subject EA, and considering the proposed project plans, cumulative effects, the FONSI above, and other information available, the BIA authorizes the proposed Lower Jocko J Diversion Area Improvements project. Anticipated environmental impacts from the Proposed Action Alternative, as described in the EA, are negligible to moderate. The Proposed Action Alternative, as described in the EA, would provide both irrigation improvements and habitat restoration and enhancement in the project vicinity.

Approved by: Shane R. Hendrickson Digitally signed by Shane R. Hendrickson Date: 2024.08.28 14:50:50 -06'00' **Date:** _____

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