

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

HELENA VALLEY IRRIGATION DISTRICT LEASE OF POWER PRIVILEGE



U.S. Department of the Interior
Bureau of Reclamation
Great Plains Region
Montana Area Office

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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.

FINDING OF NO SIGNIFICANT IMPACT AND DECISION NOTICE

HELENA VALLEY IRRIGATION DISTRICT LEASE OF POWER PRIVILEGE

MT-231-16-01F

BACKGROUND

The Helena Valley Irrigation District (HVID) has requested from the Bureau of Reclamation (Reclamation) approval to develop a hydroelectric project (Project) at the existing Helena Valley Pumping Plant site (Pumping Plant) at Canyon Ferry Dam. Under the Proposed Action, Reclamation would execute a Lease of Power Privilege (LOPP) with HVID. The LOPP would authorize the use of federal lands, facilities, and water to construct, operate, and maintain a 9.4 megawatt (MW) Hydropower Plant facility. Reclamation and Western Area Power Administration (Western) would also issue appropriate agreements to allow the construction, operation, and maintenance of approximately 0.27 miles of overhead 12.5 kV three-phase distribution lines to connect the new facility to the existing electrical grid.

A LOPP is needed to permit a non-federal entity to use a Reclamation facility for electric power generation. The LOPP will ensure that the development of hydropower will be implemented consistent with established authorities, purposes, and water operations for the Canyon Ferry Dam and Helena Valley Unit.

The Final Helena Valley Lease of Power Privilege Environmental Assessment (Final EA) may need to be amended in the future. Western completed an intertie connection study on the Preferred Alternative and the developer has chosen to research other intertie options. The Final EA will be amended if an alternate intertie location is proposed. A new decision document will need to be signed if the Final EA is amended.

FINDING

Based on the analysis of the environmental impacts as described in the Final EA, prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 USC, §4321 et seq.; the Council on Environmental Quality regulations for implementing NEPA, 40 Code of Federal Regulations (CFR), Parts 1500-1508 Department of Interior NEPA procedures (43 CFR Part 46); Reclamation finds that all potentially significant issues and resource impacts have been

identified, evaluated, addressed and resolved. Reclamation has determined that the Preferred Alternative will not have a significant impact on the quality of the human environment and that an Environmental Impact Statement is not warranted.

DECISION

Reclamation has decided to implement the Preferred Alternative as described in the Final EA. Reclamation will execute a LOPP to permit HVID to construct, operate, and maintain a 9.4 MW Hydropower Plant and associated facilities at the Pumping Plant adjacent to the Canyon Ferry Dam to provide green energy to the grid. Under this action, the Purpose and Need of the Federal action will be met and Reclamation will allow the proposed hydropower development to proceed. From an environmental compliance standpoint, implementation of the Proposed Action may take place following completion of appropriate contracting, design review, and permitting requirements.

SUMMARY OF ENVIRONMENTAL EFFECTS

Reclamation has analyzed the effects of the Preferred Alternative in the Final EA. The Final EA was developed from the Draft EA, which included the opportunity for agency and public comment. During the review process, Reclamation received six comments including: a letter of support from the Montana Department of Environmental Quality; a water rights reminder from the Montana Department of Natural Resources and Conservation and a member of the public; a Clean Water Act reminder from the United States Army Corps of Engineers; a request for clarification of water timing to Helena Valley Regulating Reservoir from Montana Fish, Wildlife and Parks; and a letter from the public regarding road maintenance on Eagle Bay Drive (the access road to the Pumping Plant). These comments have been incorporated into the final decision.

The effects of the Preferred Alternative are summarized below. For additional information on each of these resources, please see the Final EA available by phone request at 406-247-7300 or at http://www.usbr.gov/gp/mtao/nepa/helena_valley_final_ea.pdf

Reclamation has determined no significant impacts associated with issuing a LOPP permit and allowing the HVID to develop the Project.

Socioeconomics

Under the Preferred Alternative, a hydropower facility would be constructed at the Pumping Plant and would produce an estimated 13,000,000 kWh of electricity per year. This is expected to provide a long term reliable revenue stream for the HVID and would provide an additional source of renewable energy. This would provide six to ten job opportunities during the construction phase and one full time job created for operating the project benefitting the local economy. Socioeconomic impacts are expected to be positive both short and long term.

This action is in compliance with Executive Order 12898 – Environmental Justice

Water Quality

Under the Preferred Alternative, Canyon Ferry storage, flows to the Missouri River, and flows to the Helena Valley Regulating Reservoir would remain the same in quantity and timing. Water routing through the dam is the only proposed change. There will be no changes to water quality. The existing seasonal low dissolved oxygen levels in Hauser would remain based upon the depth of the penstock in comparison to the stratification induced thermocline that occurs during the late summer months.

Fisheries

There would be no changes to the fisheries in the Missouri River, Hauser Reservoir, Canyon Ferry Reservoir, or Helena Valley Regulating Reservoir as quantity and timing of flows would remain as historic. No impacts are expected under the Preferred Alternative.

Wildlife and Vegetation

Under the Preferred Alternative, approximately 0.375 acres of land would be disturbed during construction activities, with long term disturbance remaining on approximately 0.344 acres. These lands would no longer support vegetation growth, but the size of disturbance is minimal in the landscape.

Wildlife impacts are expected to be minor and temporary due primarily to disturbances during construction or from avian collisions with overhead powerlines. Avian Power Line Interaction Committee Guidelines will be followed for all overhead powerlines to minimize and reduce potential bird collisions.

Impacts to wildlife and vegetation are expected to temporary and/or minor.

Threatened and Endangered Species

Under the Preferred Alternative, there will be no effect to the grizzly bear, Canada lynx, bull trout, black-footed ferret, red knot, Sprague's Pipit or whitebark pine. None of these species or their preferred habitats occur in the project area.

Wetlands and Riparian Habitat

The Missouri River is a Water of the United States as defined by the Clean Water Act. As such, Reclamation will insure that HVID (or their developer) apply for 404 and Section 10 authorizations under the Clean Water Act to allow the U.S. Army Corps of Engineers to make a determination on the applicability of the Clean Water Act. If permits are required, HVID and their developer will follow all stipulations of these permits during construction to minimize impacts to the Missouri River.

The Preferred Alternative is in compliance with Executive Order 11990 – Protection of Wetlands.

Under the Preferred Alternative, there would be no impacts to wetlands and riparian habitats.

Recreation Use

Under the Preferred Alternative a 70-foot tall overhead power line would be constructed over the Missouri River. The 70-foot height is similar to the existing line and is not expected to interfere with bank or boat fishing common in the area. The introduction of the powerline and substation would change the visual landscape in the Riverside Campground and in the area immediately below Canyon Ferry Dam. The outdoor experience for the angler or recreationist will not be significantly compromised with these additions.

Indian Trust Assets

Under the Preferred Alternative, there would be no impacts to Indian Trust Assets.

Environmental Justice

The development, construction, and operation of the Preferred Alternative would produce direct and indirect economic benefits as increased income and employment. Impacts to minority or disadvantaged communities will not occur under the Preferred Alternative.

Cultural and Paleontological Resources

Reclamation has made a determination of no adverse effect for the proposed undertaking.

Air Quality and Greenhouse Gases

Under the Preferred Alternative, there would be short-term dust impacts during excavation work. Best management practices, including water for dust control would be implemented to keep these levels minimal.

As with other hydropower projects, there will be a beneficial offset of emissions of carbon dioxide and other greenhouse gases. With an average annual energy generation of 13,000,000 kWh, the Preferred Alternative would provide enough energy to power 1,652 homes each year, reducing Carbon Dioxide emissions an estimated 26,910,000 to 28,210,000 pounds per year.

Noise

Under the Preferred Alternative, there would be minor noise impacts during the construction phase of the project. Due to the remote location there will be no discernable impact from noise.

Electromagnetic Fields and Safety

Under the Preferred Alternative, the hydropower plant, distribution line and substation would be constructed in accordance with the National Electrical Safety Code which specifies vertical and horizontal clearances to provide safety. There will be no negative human health effects.

Soils

Under the Preferred Alternative, construction will impact approximately 0.375 acres resulting in possible water and wind erosion in construction areas. Any increase in erosion will be short term and minor due to the use of best management practices and reseeded of disturbed areas. Long term disturbance to 0.344 acres of land, primarily associated with the substation, would be permanently disturbed. These impacts are minor and not significant.

Visual Resources

Under the Preferred Alternative, the addition of project features would add structures into the existing view shed. These impacts will be partially mitigated through the design process including: the use of neutral tones consistent with the dam and landscape in construction, placement of the substation near an existing building, and the use of weathered steel poles. These impacts are minor and not significant.

Cumulative Impacts

Under the Preferred Alternative, there would be no cumulative impacts expected.

Executive Orders

Executive Order 11988 – Floodplain Management

Federal agencies shall avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out the agency's responsibilities.

The Proposed Action is in compliance with the Executive Order.

Executive Order 13186 – Protection of Migratory Birds

The United States has ratified international, bilateral conventions for the conservation of migratory birds. These international migratory bird conventions impose substantive obligations on the United States for the conservation of migratory birds and their habitats, and through the Migratory Bird Treaty Act (16 U.S.C. 703-711) (Act) will implement these conventions. This Executive Order directs Federal agencies to take certain actions to further implement the Act.

The Proposed Action is in compliance with this executive order.

Executive Order 13007 – Indian Sacred Sites

Federal agencies shall, to the extent practicable, and not clearly inconsistent with essential agency function; accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites.

The Proposed Action is in compliance with this executive order.

Mitigation Measures and Environmental Commitments

The following measures would be implemented and followed by the Project Sponsors and their contractors. An environmental commitment plan would be prepared as part of the LOPP process to document how environmental commitments and mitigation measures would be implemented during design, construction, and operation of the Project. The following measures will be included in a future LOPP:

- The construction and operation of the Project is required to be operated in a manner that does not interfere with the irrigation water supplies or maintenance of the HVID Pumping Plant.
- Erosion-control Best Management Practices for drainage and sediment control be implemented to prevent or reduce nonpoint source pollution during and following construction.
- All construction equipment shall be power-washed and free of soil and debris prior to entering the construction site to reduce the spread of noxious and unwanted weeds.
- Any topsoil disturbed as part of construction, would be stockpiled for later use in re-vegetation.
- Disturbed areas would be contoured to reduce erosion and facilitate re-vegetation. Disturbed areas would be re-seeded with a Reclamation approved seed mixture. The plan for re-vegetation and related erosion control/re-contouring and implementation would require approval by Reclamation.
- Dust abatement Best Management Practices would be undertaken in all areas disturbed during construction.
- Fuel storage, equipment maintenance, and fueling procedures would be developed to minimize the risk of spills and the impacts from these incidents. A Spill Prevention Control and Countermeasure Plan (SPCC) would be prepared prior to construction.
- All new power lines and power poles would follow the recommended standards as outlined in the *Avian Protection Plan Guidelines* developed by the US Fish and Wildlife Service and Industry (Edison Electric Institute 2012). A copy these standards can be viewed at: http://www.aplic.org/uploads/files/2634/APPguidelines_final-draft_April2005.pdf.
- In the event of discovery of evidence of possible cultural or paleontological resources, the Project sponsors would immediately cease all ground-disturbing activities in the vicinity and notify Reclamation. Work would not be resumed until approved by Reclamation.
- If any additional areas of impact (for example: access roads, borrow pits, or waste areas) not previously cleared are identified during the course of the undertaking, they would be inventoried for cultural resources and consulted on with the SHPO and

Tribal Governments. No construction work would occur at or near the additional impact area until this consultation is completed.

- Power plant and other project components would be non-reflective and painted to blend with the Project area background.
- Compliance with all applicable local, State and Federal permits.

APPROVED

Steve Davies

Steve Davies
Area Manager
Montana Area Office

12/16/2015

Date