Bird Track Springs Fish Habitat Enhancement Project

Finding of No Significant Impact

DEPARTMENT OF ENERGY
Bonneville Power Administration
June 2018

Summary

Bonneville Power Administration (BPA) announces its environmental findings on funding of the Bird Track Springs Fish Enhancement Project. BPA proposes to fund the Confederated Tribe of the Umatilla Indian Reservation (CTUIR) to improve salmonid habitat along the Grande Ronde River in Union County, Oregon. Implementation of the project would take place on private (6,149 acres), State (14 acres) and U.S. Forest Service (138 acres) land.

The BPA and the U.S. Forest Service (USFS) La Grande Ranger District, Wallowa-Whitman National Forest, prepared a document titled, "Bird Track Springs Fish Habitat Enhancement Project Environmental Assessment" (EA). The EA evaluated the Proposed Action and the No Action Alternative. The comments received on the Draft EA and responses to the comments are included in the Final EA.

Based on the analysis in the EA, BPA has determined that the Proposed Action is not a major federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 et seq.). Therefore, the preparation of an Environmental Impact Statement (EIS) is not required and BPA is issuing this Finding of No Significant Impact (FONSI) for the Proposed Action.

Public Availability

The Final EA and FONSI will be posted on BPA's project website:
https://www.bpa.gov/efw/Analysis/NEPADocuments/Pages/BirdTrackSprings.aspx

Background

Within the Upper Grande Ronde River watershed, multiple historical practices have contributed to riparian and instream habitat degradation that has negatively affected spring/summer Chinook salmon, steelhead, and bull trout habitat within the proposed project area. Currently, within the project reach, high water temperatures, low stream flows, simplified habitat, and limited off-channel habitat availability are of greatest concern for these native salmonid populations. These habitat limitations are the result of several historical anthropogenic disturbances that include, but are not limited to, systematic removal of beavers, historical logging practices and use of splash-dams, railroad and road embankment construction,

vegetation clearing, and placer mining. Although many of these practices have been reduced or eliminated in recent years, their physical effects persist throughout the project reach.

In addition to channel changes, the floodplains within the project reach have been altered, negatively affecting off-channel habitats and floodplain water storage. The most prevalent historical feature within the floodplain includes remnants of the Mount Emily Logging Company Railroad Grade. The grade has been breached and removed in a few locations, but still acts as a barrier to natural floodplain inundation within the reach.

The need for the Proposed Action is to re-establish hydraulic conditions to create a mosaic of diverse habitat types, improve channel-floodplain interactions to increase connectivity to dissipate high-water flows and resolve winter ice issues; and improve riparian vegetation condition and vitality, streambank stability, and nutrient cycling within this reach of the Grande Ronde River. There is also a need to protect existing infrastructure such as campgrounds, roads, and private property, while enhancing recreational and educational opportunities. Restoration of physical processes would lead to meeting the desired condition for long-term recovery of salmonids and resident fish within the Grande Ronde River system.

In meeting the need for action, BPA seeks to mitigate for effects of the development and operation of the FCRPS on fish and wildlife, pursuant to the Northwest Power Act. Funding this project would help BPA meet its obligations under the Endangered Species Act by fulfilling commitments to implement Reasonable and Prudent Alternative 35 in the 2008 FCRPS Biological Opinion, as supplemented in 2010 and 2014, which calls for identifying tributary habitat restoration projects (NMFS 2008, 2010, 2014).

Proposed Action

The Proposed Action is approximately 10 air miles west of La Grande, Oregon along approximately 1.9 miles of the Grande Ronde River along State Highway 244. The area consists of 1.2 miles of river on National Forest system lands, 0.1 miles along state lands, and 0.6 miles on privately-owned lands along the reach beginning from just upstream of Bird Track Springs Campground (at river mile 146.1) downstream to river mile 144.2.

The following types of activities are proposed within the Bird Track Springs project area under the Proposed Action:

- Alter existing channel and construct new stream channel to improve channel geometry and reduce width-to-depth ratios through large wood placement, channel fill, and bar construction.
- Place large wood structures throughout the mainstem channel to provide habitat and channel control.
- Place floodplain wood and plant native shrubs to reduce overland velocities and trap ice.
- Increase channel/floodplain interactions by removing topographical features that inhibit overland flows (historical railroad grade).
- Increase connectivity of existing channel features (swales) and enhance fish cover.

- Re-meander channel in appropriate locations to reconnect to floodplains and existing swale networks while improving channel form and function.
- Improve alcove connectivity to mainstem and enhance fish cover.
- Enhance and protect existing functional juvenile fish-rearing habitats.
- Improve connectivity of spring-fed side channels, wetlands, and alcoves to provide additional summer and winter rearing habitats.
- Plant native vegetation to improve riparian and floodplain conditions and to shade the stream.
- Reduce risk of erosion and ice damage to highway embankments through strategic placement of log structure treatments, rock, and graded features.

Channel reconstruction would include both instream work (wood placement and fill) to the existing channel and extensive channel construction activities. New channel construction would be focused on relocating all or a portion of the river channel to the south floodplain to allow it to re-engage with several historical channel swales and desired pond features. Large wood features would be added throughout the project reach. Additionally, selective removal of floodplain fill including portions of the historic Mount Emily Railroad grade is proposed. Additional excavation to enhance side channels and alcove features at historical channel meander features and depressions throughout the floodplain area would occur as needed to maintain and achieve appropriate grade.

Wood structures are a combination of root wads, cut log boles, and slash material. Large wood structures would be embedded in the bed and banks of the channel and floodplain to provide stability and to resist ice forces. Logs would be trucked or helicopter transported to the project site, stored in pre-established staging areas and then transported to their project locations by off-road dump truck or helicopter depending on site conditions and environmental constraints. Excavators would be used for final large wood placement and construction of large wood structures.

Constructed channel features would include pools, riffles, and bars made from gravel and cobble sources from local project excavation. Channel features would be constructed to mimic natural river channel development. Floodplain features including side channels and alcoves would be re-shaped and wood strategically placed to improve connectivity with the mainstem of the river and enhance fish cover.

Existing boulder-rock weirs would be removed and boulders re-purposed as habitat features or structural ballast. Abandoned reaches of the existing channel would be filled utilizing excavated material from constructed channel segments. Existing riparian vegetation, topsoil, shrubs, and trees that require removal would be salvaged and re-used in the floodplain. At this time, no native materials are planned for removal from the project site. Non-native materials (trash, noxious weeds, etc.) would be removed if found during construction.

The Proposed Action was modified and reduced to not include activities proposed on the Bear Creek Ranch parcel of land and on NFS lands adjacent to this parcel. These activities will be dropped from consideration in the Bird Track Springs Fish Enhancement.

Significance of Potential Impacts of the Proposed Action

The EA describes the affected environment and the current conditions of the project area and the environmental impacts of the Proposed Action. The current conditions were used to evaluate and predict the effects of implementing the Proposed Action in comparison to the No Action alternative. The environmental consequences of the two alternatives present the potential effects on the physical, biological, and socioeconomic environment.

The following discussion provides a summary of the potential impacts from the Proposed Action and the reasons these impacts would not be significant.

Fisheries and Aquatic Resources

Construction of the Proposed Action would include short-term effects to instream water quality for fish. However, the impacts would be minimized because in-water work would occur within the Oregon Department of Fish and Wildlife in-water work window, a time when stream flows are low, conditions are dry, and fish species are in their least vulnerable life stages. Further, construction would be isolated, fish and mollusks would be removed and placed upstream, erosion control measures would be incorporated in construction, and water quality would be monitored.

The Proposed Action would improve instream and riparian habitat for all aquatic species, including those listed as threatened and endangered under the Endangered Species Act. These improvements would contribute to improved growth and survival of individual fish through enhanced spawning, incubation, rearing, and migration for fish species.

Incorporating existing cool water sources and improving exchange and capture of water would aid in moderating stream temperatures. In addition, creation of beaver dam analogs would result in increased deep slow velocity habitat where the water column has vertical temperature stratification providing stable and highly suitable overwintering habitat for juvenile salmonids.

Benefits to adult and juvenile salmonids and habitat from the addition of large wood under the preferred alternative include increased channel complexity, increased cover for protection, increased pool frequency and quality, improved off-channel habitat, increased frequency of inundation of water on the floodplain and retention of organic materials.

Hydrology, Floodplains, and Wetlands

Hydrologic changes would be local and low since the project area and Proposed Action are not large enough to influence regional hydrologic processes. Changes in flow patterns through the reach from the proposed changes in channel length (an increase of 1,100 feet), sinuosity (an increase of 0.13), slope (a 0.05 percent decrease), and floodplain connections would result in

slower flows through the reach, increasing ponding, hyporheic flows, and groundwater infiltration.

Approximately 42 acres, or 14 percent of the active project area, would be used for access roads, staging, and storage areas. All access roads, staging, and storage would be obliterated at project completion, and if any of these features occur in wet areas they would be obliterated by the end of the in-water work window. All disturbed areas would be restored and revegetated with native plants. Ultimately, the increased frequency of inundation would result in deposition of additional sediment and soils, increased moisture retention, and increased vegetation establishment.

Increases in soil erosion during construction activities would be short term, while bank stabilization and native vegetation plantings would reduce the current stream bank erosion over the long term.

Soils

Proposed construction of channel and habitat structures would cause short-term increases in sediment delivery and associated turbidity to the Grande Ronde River in the project area. Excavators would work in the channel and from the banks to dig pools, construct habitat structures such as beaver analogs, and excavate new or realigned channels.

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Increases in soil erosion during construction activities would be short term, while bank stabilization and native vegetation plantings would reduce the current stream bank erosion over the long term. Vegetation binds soil particles together with roots, and vegetative cover—including biological crust and duff/surface material—protects the soil surface from raindrop impact and dissipates the energy of overland flow.

Wildlife Resources

A biological evaluation for wildlife proposed, endangered, threatened, and sensitive (PETS) species indicates that this project received a “no impact" determination for the “sensitive” gray wolf, and “may impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species for “sensitive” Northern bald eagle, Columbia spotted frog, Lewis’ woodpecker, California wolverine, Johnson’s hairstreak, and western bumblebee.” Canada Lynx received a “no effect” determination (Wildlife Biological Evaluation, Analysis File).

The riparian area along the Grande Ronde River currently provides habitat for neotropical migrants. Stream channel reconstruction would remove some habitat and would result in short-

term disturbance (two years). However, creating new side channels and connecting the channelized streams with their associated floodplains along with the addition of cottonwood and willow cuttings along the new stream banks would result in additional and higher quality habitat for species such as the yellow-billed cuckoo and the Lewis' woodpecker.

Short-term losses of vegetation do not include a reduction of any unique or important habitats of ESA-listed species. In addition, all disturbed areas would be revegetated with native plants.

Botany

The biological evaluation for PETS plants indicates that project activities may impact individuals or habitat of ten sensitive plant species (seven species of moonwort, mountain grape-fern, Cordilleran sedge, and dwarf phacelia) but would not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species. There would be no impact on three other PETS species (Clustered lady's slipper, Bolander's spikerush, and ground cedar) which may have potential habitat within the project area.

Some trees would be removed from the less than a half-acre forested area, as necessary, to facilitate levee removal (RM 27.5) along with accessing the log structure sites within the reconstructed side channel. Many of the trees removed during the implementation of the project would be incorporated into the constructed log features. These losses would be off-set by the planned re-vegetation of the disturbed sites with native trees, grass, forbs, and shrubs propagated from locally collected seed.

Overall, the project would benefit the native plant communities in the riparian area by increasing the amount of moist/wet riparian habitat available, increasing the cover of native plants along the streambanks, and providing more large wood substrates for mosses and lichens. This beneficial effect would be long term and would offset the short-term damage from construction-related activities.

Invasive Species

Specific mitigation measures and required standards would reduce the chances of new introductions, establishment, and spread of invasive non-native plants. Cleaning of all equipment prior to entering the project area, pre- and post-treatment of invasive plants already in the project area, and monitoring of disturbed areas for new invaders would minimize the establishment and spread of invasive plants due to the proposed action.

There would be establishment and spread rate of invasive species at the upper end of the natural level, or about 6-8% for Proposed Action.

Heritage Resources

This project proposal does not affect any unique geographical characteristics such as parklands, prime farmlands, wild and scenic rivers, or ecologically critical areas. Impacts on cultural

resources have been assessed and consulted on with CTUIR, Nez Perce Tribe (NPT) and Oregon State Historic Preservation Office.

The preferred Alternative retains and improves access to the area maintaining opportunities for tribal members to practice traditional uses and implements activities to improve to water quality and fish habitat – resources that are highly valued by the Tribes. Specifically, the improvements to water quality and fish habitat will enhance First Foods opportunities important to the CTUIR and restoration of habitat for endangered steelhead and Chinook salmon important to the NPT and CTUIR alike.

The Mount Emily Lumber Railroad Grade, which runs the length of the Area of Potential Effect (APE), would experience temporary and relatively minor permanent impacts as a result of project activities. There shall be several breaches and leveling of the grade that throughout the project area under the preferred alternative, however, these affects would not significantly alter the significant characteristics of the railroad grade that qualify the property for inclusion in the National Register of Historic Places.

Other known cultural sites in the project area would be avoided and protected from the proposed restoration work. Cultural sites inadvertently discovered during construction would be addressed by an Archaeological/Cultural Resources Inadvertent Discovery Plan. USFS would monitor project impacts on sites that are or may be eligible for listing on the National Register. In the short term, the project would have a low impact on known cultural resources because the majority of sites would be avoided and because the impact to the Mt. Emily Lumber Railroad Grade would be temporary or minor. In the long term, indirect effects to this segment of the railroad grade could be considered as a diminishment of its overall physical and historic integrity, and could encourage more complete documentation and preservation of other intact segments outside this APE.

Recreation

Recreationists using and traveling through the project area would experience short-term (1-2 seasons) impacts from construction-related activities which would result in smoke, noise, the need for traffic control, and dust in and adjacent to the Bird Track Springs campground. These impacts would occur primarily during daylight hours during the summer months while the projects are being implemented. Long-term benefits from all of these projects would result from increased stand resiliency within the campground, reduced noise and dust, interpretation opportunities related to the benefits of the project, and improved fishing and viewing along the river for fishermen and hikers.

Scenic Resources

The Grande Ronde River Road (Highway 244) runs through the project area. In the short term, there would be visual impacts from active river realignment, instream enhancement, and associated activities, both on private and USFS lands. Heavy machinery, dust, slash and log piles,

temporary river crossings, and disturbed ground would be visible to travelers along Highway 244 and to recreationists within the project area.

In the long term, large wood placements, beaver dam analogs, and substantial revegetation after 2-5 years would promote a more natural appearance. Temporary parking areas and staging sites would be rehabilitated or absorbed into new recreational features at the conclusion of the project.

Determination

Based on the information in the EA, as summarized here, BPA determines that the Proposed Action is not a major federal action significantly affecting the quality of the human environment within the meaning of NEPA (42 USC 4321 *et seq.*). Therefore, an EIS will not be prepared and BPA is issuing this FONSI for the Proposed Action.

Issued in Portland, Oregon

/s/ F. Lorraine Bodi — *June 5, 2018*

F. Lorraine Bodi
Vice President
Environment, Fish and Wildlife

Date