NWFSC Earthen Drainage Channel, Burley Creek Hatchery

Finding of No Significant Impact

Bonneville Power Administration

May

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SUMMARY

Bonneville Power Administration (BPA) announces its environmental findings for its proposal to fund the Northwest Fisheries Science Center's (NWFSC) Earthen Drainage Channel, Burley Creek Hatchery Project. The project would involve construction of an earthen drainage channel at the Burley Creek Hatchery in Kitsap County, Washington. This facility is managed by the NWFSC, one of six regional science centers for the National Oceanic and Atmospheric Administration (NOAA), and the proposed upgrade would facilitate increased discharge of treated effluent from the hatchery facility into the adjacent Burley Creek.

NOAA, in cooperation with BPA, prepared an environmental assessment (EA) evaluating the Proposed Action and the No Action Alternative. As a cooperating agency, BPA has adopted the 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. NOAA has prepared its own agency-specific FONSI for the project.

The comments received on the Draft EA and responses to the comments are included in the Final EA. The Final EA also identifies changes made to the Draft EA.

PUBLIC AVAILABILITY

This FONSI will be mailed directly to individuals who previously requested it, a notification of availability will be mailed to other potentially affected parties, and the Final EA and FONSI will be posted on BPA's project website http://efw.bpa.gov/environmental_services/Document_Library/Burley_Creek/

PROPOSED ACTION

Under the Proposed Action, NWFSC would construct an earthen drainage channel to support increases in effluent from the hatchery to Burley Creek. BPA would fund the project as part of its efforts to mitigate for the effects of the Federal Columbia River Power System on fish and wildlife in the mainstem Columbia River and its tributaries as part of its duty under the Northwest Power Act.

The project would include increasing ground water withdrawals and treated effluent releases by 1 cfs, constructing a new drainage channel and outlet to Burley Creek, and enhancing on-site wetlands to mitigate for impacts.

Construction is expected to last from June 2014 through November 2014, although work may need to be spread out over two seasons due to work timing restrictions protecting fish and wildlife. Details of the

Proposed Action are presented in Chapter 2 of the EA.

NO ACTION ALTERNATIVE

Under the No Action Alternative, NWFSC would not construct the earthen drainage channel and BPA would not provide funding for the proposal. Hatchery operations would continue using the existing infrastructure, but would not be able to expand sockeye eyed-egg rearing due to the limited capacity of the current effluent discharge system.

SIGNIFICANCE OF POTENTIAL IMPACTS OF THE PROPOSED ACTION

To determine whether the Proposed Action has the potential to cause significant environmental effects, the potential impacts on human and natural resources was evaluated and presented in Chapter 5 of the EA. The Proposed Action would have no significant impacts. The following discussion provides a summary of the Proposed Action's potential impacts.

LAND USE

There would be no changes to land use.

- The project would not change fish hatchery land use on the site.
- Other than construction of the earthen drainage channel, no additional site development, expansion, or re-zoning activities would occur.

GEOLOGICAL RESOURCES

There would be no seismic impacts, and impacts to soils would be minor.

- Soil disturbance would be limited and mitigation measures (use of sediment barriers, stormwater controls etc.) would minimize the risk of erosion during construction and aid in soil recovery.

AIR QUALITY

Impacts to air quality would be minor.

- Impacts would be limited to temporary, localized impacts during construction that would be mitigated through the use of dust control best management practices (BMPs).

WATER RESOURCES/HYDROLOGY

Impacts to surface water and groundwater quantity and quality would be minor.

- The increase of treated effluent from 1 cfs to 2 cfs into Burley Creek would be approximately 3-percent of Burley Creek average annual flows. During summer low creek flow, effluent would be about 8 percent of creek flow and would have a minor positive effect on water levels and quality.
- During high flows or storm events, contributions of effluent to overall Burley Creek flows would be a minor. In addition, effluent released would be slowed to help lessen downstream flows.

- Erosion at the outfall into Burley Creek would be minimized through flow control and energy dissipation features.
- Physical or chemical changes to the effluent water are expected to be similar to existing operations: wastes from the few hundred pounds of fry on site would be eliminated in the settling basin; maturing adult fish on site do not generate feed waste, excrete solids, or produce soluble waste at levels that might adversely affect water quality; and, the amount of fish would be well below the 20,000-pound permit threshold established for fish hatchery operations under Washington Department of Ecology's National Pollutant Discharge Elimination System program.
- Temperatures of effluent are expected to be slightly lower than Burley Creek temperatures during summer releases, and would have a limited positive effect on ambient water temperature immediately downstream from the outfall.
- Increases in groundwater withdrawals of 1 cfs would result in minor, localized decreases in groundwater levels around the hatchery. However, neighboring wells would likely not be affected because they are shallower by about 90 to 100 feet than the hatchery wells.
- Impacts to groundwater recharge would be minimized because the earthen drainage channel would be above ground and would be constructed with porous soils allowing for water infiltration.

RECREATIONAL RESOURCES

The Proposed Action would have no effect on recreational resources.

CULTURAL RESOURCES

The Proposed Action would likely have no effect on any known cultural resources.

- No historic or archaeological resources were found during project surveys. Mitigation measures to stop work if cultural materials are revealed during construction would lessen potential impacts to unknown sites.

VEGETATION

Impacts to vegetation would be minor.

- Although some native pasture grasses would be removed for the earthen drainage channel, all areas would be reseeded with a native grass seed mixture.

FISH AND WILDLIFE

Impacts to fish and wildlife would be minor.

- Construction-related activities could cause localized, short-term disruptions to general wildlife in the project areas.
- The conversion of upland habitat to riparian, wetland, and open-water habitat would improve local wildlife habitat.
- Use of erosion control mitigation measures would minimize or eliminate the delivery of sediments from project activities into Burley Creek.
- Construction during Washington Department of Fish and Wildlife's in-water work windows would help avoid potential impacts to migrating juvenile and adult salmonid species.

- Release or escapement of local non-ESA listed fish temporarily held in the channel for educational purposes could result in a minor increase in fish use in Burley Creek.
- Installation of a fish barrier on the outlet to Burley Creek would prevent fish present in Burley Creek from entering the earthen drainage channel.

WETLANDS AND FLOODPLAINS

Impacts to wetlands and floodplains would be minor.

- The channel was planned to minimize impacts to onsite wetlands and was designed as a naturalized meandering channel to complement the surrounding riparian area and enhanced wetland area.
- For the approximately 1,545 square feet of permanent wetland impact and 579 square feet of temporary impact, about 14,676 square feet of onsite wetlands would be enhanced through planting native vegetation (likely 181 trees and 408 shrubs).
- Although the outlet channel would intersect the 100-year floodplain of Burley Creek, the outlet was designed to minimize permanent impacts (approximately 361 square feet) and no structures or features would block movement of water across the floodplain.
- The potential for sediment and erosion to affect wetlands in the project area would be mitigated through the use of appropriate erosion control measures during construction, as described in the project's stormwater pollution prevention plan.

COASTAL ZONE MANAGEMENT

The project is situated outside of the coastal zone management area, and therefore would not adversely affect the coastal zone or coastal zone resources.

FARMLANDS

The earthen drainage channel would not be constructed on active farmland and would not impact farmlands.

NOISE

Impacts to noise would be minor.

- Noise from construction vehicles would temporarily contribute to existing traffic noise on local roads, but would not likely result in a substantial increase in average traffic noise levels.

TRANSPORTATION

Impacts to transportation would be minor.

- Traffic impacts from construction on the adjacent Bethel-Burley Road would be localized and temporary, and would result in less than one percent increase in traffic volume.

ESSENTIAL FISH HABITAT

There is no essential fish habitat (EFH) in the project vicinity; therefore there would be no impacts to EFH.

UTILITIES AND SOLID WASTE

The project would not require an increase in usage of utilities, and would not result in a change in current

utility or solid waste use. Therefore, there would be no impacts to utilities and solid waste.

VISUAL/AESTHETIC RESOURCES

Impacts to visual quality would be minor.

- The conversion of a portion of the on-site pasture to an above-grade berm containing the earthen drainage channel would be visible to adjacent landowners, but impacts would be reduced through plantings of native vegetation along the edges of the channel.
- Visual impacts during construction would be temporary and localized.

HAZARDOUS MATERIALS

Impacts to public health and safety would be minor.

- No federal- or state-listed cleanup sites are documented within 2,000 feet of the Burley Creek Hatchery, and no hazardous materials that require reporting are maintained on site.
- No hazardous materials would be used for the construction and operation of the earthen drainage channel.

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 Date: May 27, 2014

F. Lorraine Bodi
Vice President
Environment, Fish and Wildlife

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