Finding of No Significant Impact (FONSI)

Lostine River, Upper Grande Ronde River, and Catherine Creek Spring/Summer Chinook Production Programs As described in the

Environmental Assessment to Analyze Impacts of a NOAA's National Marine Fisheries Service Determination to Issue Section 10 Permits for the Continued Operation of Eight Hatchery Programs within the Tucannon, Grande Ronde,

> and Imnaha River Basins

Bonneville Power Administration DOE/EA-2054 December 2016

SUMMARY

Bonneville Power Administration (BPA) announces its environmental findings for the continued funding of the Lostine River, Upper Grande Ronde River, and Catherine Creek Spring/Summer Chinook Production Programs. On December 24, 2013, the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) issued a final *Environmental Assessment* (EA) to Analyze Impacts of a NOAA Fisheries Determination to Issue Section 10 Permits for the Continued Operation of Eight Hatchery Programs within the Tucannon, Grande Ronde, and Imnaha River Basins. Under the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act, BPA hereby adopts the NOAA Fisheries' EA (DOE/EA-2054) which describes and analyzes BPA-funded activities associated with three of the eight hatchery programs described in the EA under 40 CFR 1506.3. BPA was not a Cooperating Agency; therefore, recirculation of the EA is necessary under 40 CFR 1506.3(b).

BPA proposes to fund spring/summer Chinook hatchery programs in the Grande Ronde basin, which may include funding the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), the Nez Perce Tribe of Idaho (Nez Perce), and Oregon Department of Fish and Wildlife (ODFW) for broodstock collection, spawning, rearing, transportation, acclimation, and monitoring and evaluation (M&E) in support of the hatchery production of about 650,000 juvenile spring/summer Chinook in the Grande Ronde basin (Catherine Creek, Lostine River, and Upper Grande Ronde River).

The BPA-funded program activities are described in the NOAA Fisheries EA as part of the Proposed Action. NOAA issued a Finding of No Significant Impact (FONSI) on the Proposed Action on December 19, 2013. BPA has further determined that the BPA-funded portions of the Proposed Action do not constitute 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 FONSI for BPA's funding of the program activities, which are not the type of actions that normally require preparation of an EIS and are not without precedent.

Required mitigation measures are described in the NOAA Fisheries and US Fish and Wildlife Service's Endangered Species Act (ESA) consultations (NOAA Fisheries consultation number WCR-2013-21; FWS reference 01EOFW00-2015-F-0154) and will be completed by the hatchery operators.

PUBLIC AVAILABILITY

A notification of availability will be mailed to potentially affected parties. The Final EA and this FONSI are available on BPA's project website: *www.bpa.gov/goto/NEORspringchinook*.

PROJECT BACKGROUND

Under the Pacific Northwest Power Planning and Conservation Act of 1980, 16 USC § 839 et seq. (Northwest Power Act), BPA must protect, mitigate, and enhance fish and wildlife affected by the development, operation, and management of federal hydroelectric facilities on the Columbia River and its tributaries. BPA is proposing to fund under the Northwest Power Act parts of the ongoing spring/summer Chinook programs in the Grande Ronde basin. The fish produced under the programs are part of the Snake River spring/summer Chinook Evolutionarily Significant Unit (ESU) that are listed as threatened under the ESA and the project would benefit the conservation and recovery of Snake River spring/summer Chinook salmon.

The project activities were described in three Hatchery Genetic Management Plans (HGMPs), the effects of which were analyzed in NOAA Fisheries' ESA Biological Opinion (issued June 2016) and Section 10 permits issued to the hatchery operators (ODFW, Nez Perce, and CTUIR) (issued August 2016). Further, the program's effects on bull trout were analyzed in a Biological Opinion issued by the US Fish and Wildlife Service that was issued in August of 2016.

PURPOSE AND NEED

BPA needs to respond to requests from the CTUIR, Nez Perce, and ODFW for continued funding for the Catherine Creek, Lostine River, and Upper Grande Ronde River hatchery programs. While meeting this need, BPA seeks to achieve the following purposes:

- Act consistently with all applicable laws, regulations, and policies that guide the agency;
- Support efforts to mitigate for effects of the Federal Columbia River Power System (FCRPS) on fish and wildlife in the mainstem Columbia River and its tributaries under the Northwest Power Act;
- Assist in carrying out obligations related to proposed hatchery actions as part of the 2008 Columbia Basin Fish Accords Memorandum of Agreement specifically, those related to the CTUIR; and

• Seek to fulfill commitments to implement the pertinent Reasonable and Prudent Alternative Actions (RPA Actions 39 and 42) listed for Snake River spring/summer Chinook in the 2014 FCRPS Biological Opinion.

PROPOSED ACTION

Under the Proposed Action, BPA would fund activities of the Grande Ronde Basin Endemic Spring Chinook Supplementation Program as managed by NPT, CTUIR, and ODFW. BPA would fund the production of about 650,000 spring/summer Chinook juveniles.

Funded activities may include the operation and maintenance of the Upper Grande Ronde River Adult Trap and Juvenile Acclimation Facilities, Catherine Creek Adult Trap and Juvenile Acclimation Facilities, the Lostine River Adult Trap and Juvenile Acclimation Facilities, and support activities at Lookingglass Fish Hatchery.

To inform these hatchery actions, M&E activities may also be funded, such as fish tagging; spawning ground and juvenile surveys through electrofishing; fish capture, including rotary screw trap collection, dip net, hook and line, cast netting; snorkel survey; stream walking; and seining in the Grande Ronde River basin. The hatchery programs help supplement the Lostine River, Upper Grande Ronde River, and Catherine Creek spring/summer Chinook salmon populations which are at high risk of extinction because of low abundance and productivity.

NO ACTION ALTERNATIVE

Under the No Action Alternative, BPA would discontinue funding for operation of the three hatchery programs. Hatchery operators could seek program funding from other entities or discontinue the programs. If the hatchery programs were discontinued, it would be expected that the Lostine River, Upper Grande Ronde River, and Catherine Creek spring/summer Chinook salmon populations would continue to be at a high risk of extinction.

SIGNIFICANCE OF POTENTIAL IMPACTS OF THE PROPOSED ACTION

To determine whether the Proposed Action would have the potential to cause significant environmental effects, the potential impacts on human and natural resources were evaluated and presented in Chapter 4, *Environmental Consequences*, of the EA. The Proposed Action would not result in significant impacts. The potential impacts associated with the Proposed Action and the reasons why these impacts would not be significant are summarized below.

WATER QUANTITY

- All facilities have existing water rights, which would remain in place under the Proposed Action; therefore, no increase in water withdrawals would occur.
- All water diverted from waterbodies (minus evaporation) for operation of the Catherine Creek, Lostine River, and Upper Grande Ronde River acclimation facilities and Lookingglass Hatchery is returned after the water circulates through the facility. The portion of the waterbodies that may have reduced water quantity from operation of the

hatchery facilities would be the area between the water intake and discharge structures (between 50 to 1,500 feet, depending on facility).

WATER QUALITY

- Water treatment and disease management protocols would be implemented to limit the introduction of hatchery-related pollutants into receiving waterbodies and hatchery facilities would comply with National Pollution Discharge Elimination System (NPDES) permitting requirements.
- The localized short and long-term discharge of ammonia, nutrients (e.g., nitrogen), suspended solids levels, antibiotics, fungicides, disinfectants, hormones, pathogens, and anesthetics and impacts to other water quality parameters such as biological oxygen demand and pH into Catherine Creek, Lookingglass Creek, Upper Grand Ronde River, and Lostine River would continue under the Proposed Action. The quantity of effluent relative to the quantity of receiving waters would quickly dilute any localized concentration of pollutants and would be consistent with the National Pollutant Discharge Elimination System (NPDES) through a general permit (Permit number 300J) issued by the Oregon Department of Environmental Quality.

FISH LISTED UNDER ESA

- There would be no genetic effects to fall Chinook salmon, steelhead, or bull trout because spring/summer Chinook salmon do not interbreed with these species.
- Hatchery fish competition and predation risks to natural fish listed under the ESA would be minimized because hatchery fish would be released volitionally to promote active outmigration from the system. Further hatchery spring/summer Chinook would be released in areas currently and historically used by the same species, which would minimize species overlap that could lead to interspecies competition and predation.
- Hatchery fish would result in increased abundance of adult returns that would deliver marine-derived nutrients into interior freshwater systems.
- To minimize spring/summer Chinook genetic effects (e.g. changing genetic variability and diversity within and between populations), hatchery managers would manage the proportion of both hatchery- and natural-origin fish in native broodstock and in the wild according to annual abundance of the natural-origin population. Further, hatchery managers would collect adults in a manner that would maintain population structure and run timing, and select broodstock and use mating protocols intended to mimic natural mating proportions. Population monitoring would be used to adjust program management if genetic risks increase over time.
- There would be no natural population status masking because all of the hatchery-origin releases would be marked or tagged such that they are identifiable as hatchery-produced.
- Water intakes at facilities would be properly screened to minimize entrainment and weirs would be adequately staffed so that fish would not remain in the traps for extended periods of time, minimizing stress on the fish and the potential for incidental mortality. Hatchery managers would monitor the weirs to ensure they did not lead to any changes in spawning distribution.
- Adults used in broodstock would be screened for disease and diseased eggs would be culled to minimize transfer of disease from parent to offspring and regular health exams

would be performed on all juveniles in the hatchery. Juveniles would be reared in densities and flows designed to reduce stress and disease susceptibility and protocols would be used to minimize disease transfer between raceways.

• The mortality rate for capture, tagging, and release to support M&E would be less than one percent.

FISH NOT LISTED UNDER ESA

- Hatchery fish releases would increase competition for space and food among freshwater species and would also increase the number of predators for some species.
- Hatchery returns would introduce a food source for some species and increased quantities of marine-derived nutrients into the Grande Ronde basin.

INSTREAM FISH HABITAT

- Instream fish habitat quality may be decreased or fish may be displaced, depending on water flows, between the facility water intakes and outfalls (between 50 feet and 1,500 feet).
- Temporary increases in sedimentation may result from protecting banks from erosion or clearing debris from the water intake structures. Any sediment-generating work would be conducted during the in-water work window to reduce effect on fish habitat.

WILDLIFE AND MARINE MAMMALS

• Spring/summer Chinook hatchery juveniles and adults would be available as a food source for predators and scavengers, including ESA- listed grizzly bear, Steller sea lion, and southern resident killer whale, but would not comprise a large portion of the overall number of salmon consumed of these wildlife and marine mammals.

SOCIOECONOMICS

- Operation of the hatchery programs would result in full time and seasonal positions.
- Workers and sponsors would procure local goods and services, which would contribute to personal income or jobs in the regional economy.
- Hatchery spring/summer Chinook salmon would be available for tribal and non-tribal, recreational harvest in northeast Oregon.

TOURISM AND RECREATION

- Hatchery fish would support fishing trips taken in northeast Oregon because recreational fisheries for salmon and steelhead would be open in northeast Oregon.
- Hatchery tours of Lookingglass Hatchery may be available to local tourists.

ENVIRONMENTAL JUSTICE

• Operation of the hatchery programs would be equally borne by all individuals within the surrounding area and would not disproportionately affect environmental justice populations. Further, fish and angling opportunities would exist for environmental justice community members. Jobs and revenues for the local communities associated with the

increased angling, recreation, and expenditures may benefit environmental justice community members.

DETERMINATION

Based on the information in the EA, as summarized here, BPA has determined that the Proposed Action is not a major federal action that significantly affects the quality of the human environment, within the meaning of NEPA, 42 United States Code 4321 *et seq.* Therefore, preparation of an EIS is not required, and BPA is issuing this FONSI.

Issued in Portland, Oregon

/s/ F Lorraine Bodi

F Lorraine Bodi Vice President Environment, Fish and Wildlife

12/29/2016

Date