

## Johnson Creek Artificial Propagation Enhancement Program

### Finding of No Significant Impact

#### Bonneville Power Administration

DOE/EA-2083

March 2022

## Introduction

Bonneville Power Administration (BPA) announces its environmental findings for its proposal to provide funds to the Nez Perce Tribe of Idaho (Nez Perce Tribe) under the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) for continued operation of the Johnson Creek Artificial Propagation Enhancement (JCAPE) hatchery program

On September 22, 2021, National Marine Fisheries Service (NMFS) issued *Snake River Basin Hatcheries Final Environmental Assessment*. The environmental assessment (EA), for which BPA was a cooperating agency, evaluated Snake River Basin hatchery programs, including the Proposed Action, a No Action Alternative, and a Reduced Production Alternative in which 50 percent of the production levels described in the Hatchery Genetic Management Plan (HGMP) would be funded for the JCAPE hatchery program. The EA was released for a 60-day public comment period June 28, 2019 to August 28, 2019. No public comments were submitted that pertained to the JCAPE program.

BPA hereby adopts the EA, and based on its analysis and public comments received, 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. The Proposed Action is not the type of action that normally requires preparation of an EIS and is not without precedent.

## Public Availability

The FONSI will be posted on BPA's project website: <https://www.bpa.gov/environmental-initiatives/efw/project-reviews/johnson-creek-artificial-propagation-enhancement-program-doe-ea-2083>

## Proposed Action (Alternative 2)

Under the Proposed Action, BPA would continue to fund the Nez Perce Tribe for ongoing operation and maintenance of the JCAPE program to use indigenous stock only to provide for the restoration of summer Chinook salmon in Johnson Creek. The program is an integrated recovery program for mitigation and is managed to recover and sustain the population and to provide harvest opportunities in years of abundant returns.

The hatchery program would include multiple components: a temporary adult Chinook salmon trap and weir; adult holding and spawning at the South Fork Salmon River Satellite; egg incubation and juvenile rearing of JCAPE fish at McCall Fish Hatchery; transportation of broodstock, eggs, and smolts between facilities; the direct release of smolts into Johnson Creek; and monitoring and evaluation (M&E) in support of production. BPA would also fund a production increase of 50,000 summer Chinook salmon juveniles, from 100,000 smolts increased to 150,000 smolts. Routine (and semi-routine) maintenance activities of hatchery facilities would include sediment/gravel removal/relocation from intake or outfall structures (or both), pond cleaning, pump maintenance and debris removal from intake and outfall structures.

To inform these hatchery actions, research, monitoring and evaluation (RM&E) activities would also be funded to track survival and growth within the hatchery and sampling outside of the hatchery to assess the effects of hatchery fish on population, productivity, genetic diversity, run and spawn timing, spawning distribution, and age and size at maturity. RM&E activities would include stream temperature monitoring, adult and juvenile trapping (picket weirs, screw trapping, etc.), spawning ground surveys, and PIT tagging.

## **Other Alternatives**

### **No Action Alternative (Alternative 1) and Program Termination (Alternative 4)**

Under the No Action Alternative and Program Termination Alternative, BPA would no longer provide funding to the Nez Perce Tribe for the JCAPE program. The Nez Perce Tribe could seek program funding from other entities or discontinue the program. If the hatchery program were discontinued, it would be expected that the Johnson Creek summer Chinook salmon population would continue to be at a high risk of extinction.

### **Reduced Production Alternative (Alternative 3)**

Under a Reduced Production Alternative, BPA would fund 50 percent of the production levels described in the Hatchery Genetic Management Plan (HGMP) under the JCAPE hatchery program.

## **Significance of Potential Impacts of the Proposed Action**

To determine whether the Proposed Action has the potential to cause significant environmental effects, the EA analyzed the potential impacts of the proposal on human and natural resources and presented them in Chapter 4, *Environmental Consequences*. The potential impacts associated with the Proposed Action are summarized below. The Proposed Action would have no significant impacts. The following discussion provides a summary of the Proposed Action's potential impacts and the reasons these impacts would not be significant.

### **Water Quantity**

Impacts to water quantity would not be significant.

- There would be no change in the quantity of water used. The McCall Fish Hatchery would continue to draw water from reservoirs, having a relatively small effect on water sources before water is returned to rivers below the reservoirs.
- Although JCAPE would increase broodstock collection numbers and juvenile releases from 100,000 to 150,000, no increase in surface water use is proposed.

## **Water Quality**

Impacts to water quality would not be significant.

- There would be no change in effluent discharge associated with adult collection and juvenile release activities. Hatchery discharges would continue to be managed under a National Pollutant Discharge Elimination System permit to protect the water quality of receiving waters.

## **Salmon and Steelhead**

Impacts to salmon and steelhead would not be significant.

- There would be no change in effects on natural genetics as the JCAPE program produces Chinook salmon that are genetically similar enough to the natural population to be included in the same Evolutionarily Significant Unit (ESU).
- Smolts would continue to be marked and thus masking, which occurs when unmarked hatchery-origin salmon are included in population counts of natural-origin fish, is unlikely to occur.
- The program would be operated with the same disease management protocols as under current conditions, so no change in disease effects on other salmon and steelhead species would be expected.
- There would be no change in population viability of the Snake River Spring/Summer Chinook Salmon ESU as the JCAPE program uses hatchery-origin fish spawning naturally, thus increasing abundance and providing a benefit to population viability.
- No change in effects on salmon and steelhead species from facility operations would be expected, including adult collection, surface water diversion, effluent discharge, and routine instream maintenance activities.
- RM&E activities that are currently part of the hatchery programs would be operated the same as under current conditions, so no change in effects on salmon and steelhead would be expected.
- NMFS expects no change in effects on critical habitat or Chinook or coho salmon Essential Fish Habitat (EFH) compared to current conditions because no increase in surface water use is proposed.

## **Fisheries**

Impacts to fisheries would not be significant.

- Because the JCAPE program plays an important role in the implementation and management of fisheries, the program would continue to provide a low-beneficial effect on recreational and tribal fisheries for summer Chinook salmon.

## **Other Fish Species**

Impacts to other fish species would not be significant.

- Although the JCAPE program would increase broodstock collection numbers and juvenile releases from 100,000 to 150,000, there would be no detectable effects to other fish species because an increase in 50,000 smolts is a small fraction compared to all of the other smolts released in the Salmon River Subbasin.

- Competition, predation and disease effects would continue to be negligible-adverse. Fish species would continue to indirectly benefit from nutrient cycling of carcasses and predation.
- Facility operations would continue to have negligible-adverse effects because the program facilities minimize any impediment to fish movement.
- RM&E activities would continue to have a negligible-adverse effect on fish species other than salmon and steelhead. Individuals would continue to be incidentally collected in traps and during surveys, and may suffer increased stress and minimal mortality. Any resulting take of ESA-listed species that may occur during these activities would be consistent with the program's ESA Section 7 consultation with US Fish and Wildlife Service.

### **Wildlife**

Impacts to wildlife would not be significant.

- There would be no change in impacts to wildlife species, including prey enhancement, diseases present in hatchery-origin fish, nutrient enhancement from carcasses, predator deterrence, and temporary disturbances associated with human presence and noise at hatchery program facilities.

### **Socioeconomics**

Impacts to socioeconomics would not be significant.

- There would be no change in recreational expenditures, employment opportunities, or the local procurement of goods and services related to hatchery operations.

### **Cultural Resources**

Impacts to cultural resources would not be significant.

- There would be no change in the survival and abundance of salmon and steelhead. The tribes would continue to harvest hatchery-origin fish and would benefit through the long-term potential for salmon and steelhead populations to increase in size.

### **Environmental Justice**

Impacts to environmental justice would not be significant.

- There would be no change in socioeconomics, tribal cultural resources, or fish distribution affecting the environmental justice communities of concern.

### **Human Health and Safety**

Impacts to human health and safety would not be significant.

- There would be no change in the level of risks to hatchery facility and weir operators. Continued use of best safety practices and use of personal protective equipment would minimize risk.

### **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.

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