

DEPARTMENT OF ENERGY
Bonneville Power Administration
Springfield Sockeye Hatchery Project
Finding of No Significant Impact

Summary

The Bonneville Power Administration (BPA) is announcing its environmental findings regarding the decision to fund the Springfield Sockeye Hatchery Project (Proposed Action). BPA is proposing to fund the Idaho Department of Fish and Game (IDFG) to modify and operate an existing hatchery facility located near the town of Springfield in Bingham County, Idaho. IDFG would convert this hatchery into a facility that would be capable of rearing up to 1 million Snake River sockeye salmon (*Oncorhynchus nerka*) smolts for release into the Sawtooth Basin.

BPA has prepared an environmental assessment (EA) (DOE/EA-1913) to evaluate the Proposed Action and its alternative. Based on the analysis in the EA, BPA has determined that, with the use of mitigation measures, the Proposed Action is not a major federal action that significantly affects the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969. 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. Comments received on the Preliminary EA as well as the responses to the comments are provided in the Revision Sheet for the EA.

The attached Mitigation Action Plan (MAP) lists all of the mitigation measures that BPA and IDFG are committed to implementing as part of the Proposed Action.

Public Availability

The FONSI will be mailed directly to interested parties, a notification of availability will be mailed to potentially affected parties, and the FONSI will be posted on BPA's website.

Project Background

BPA is proposing to fund the IDFG to implement the Springfield Sockeye Hatchery Project, which IDFG is proposing to help promote the recovery of Upper Snake River sockeye salmon, an endangered species under the Endangered Species Act (ESA). The Proposed Action would involve converting the existing hatchery into a facility that would be capable of rearing up to 1 million Snake River sockeye salmon juveniles to the full-term smolt stage of development. These smolts would then be released in the Upper Salmon River subbasins and the Sawtooth Basin in Custer County and Blaine County, Idaho. The Proposed Action is part of the IDFG and National Oceanic and Atmospheric Administration (NOAA Fisheries) Snake River Sockeye Captive Broodstock Program (Program) and the subject of the 2010 *Springfield Sockeye Hatchery Master Plan for the Snake River Sockeye Program* (Springfield Master Plan).

BPA is directed by the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) to implement protection, mitigation, and enhancement actions for fish and wildlife, as well as their habitats, affected by the construction and operation of the Federal

Columbia River Power System (FCRPS) (16 United States Code [USC] 839b(h)(10)(A)). To assist in accomplishing this, the Northwest Power Act requires BPA to fund fish and wildlife protection, mitigation, and enhancement actions consistent with the Northwest Power and Conservation Council's (NPCC's) Fish and Wildlife Program. The Springfield Sockeye Hatchery Project has been favorably reviewed by NPCC, and BPA's funding of the Proposed Action will help BPA meet its Northwest Power Act obligations. In addition, funding the Proposed Action will help BPA fulfill the conditional commitments outlined in the 2008 Columbia Basin Fish Accords Memorandum of Agreement with the State of Idaho (Idaho Fish Accords) and the 2008 FCRPS Biological Opinion, as amended by a Supplemental Biological Opinion in 2010.

Proposed Action

BPA is proposing to fund the modification of an existing IDFG trout hatchery near Springfield, Idaho, to provide a facility that would be capable of rearing up to 1 million Snake River sockeye salmon juveniles. Modifications would include demolishing several existing structures, constructing new hatchery facilities in the same footprint, constructing three new residences for hatchery personnel northwest of the hatchery site, and constructing up to six pumps at existing wellheads and a piping system to convey water to hatchery facilities. Recreational use of Crystal Springs Pond would continue, similar to existing conditions. Once the hatchery is operational, broodstock would continue to be collected at existing facilities as part of the ongoing Snake River Sockeye Captive Broodstock Program, and fertilized eggs would be transported to the Springfield Hatchery for rearing. Fish produced at the hatchery would be transported and released to lakes located in the Upper Salmon River Basin of central Idaho, including Redfish and Pettit lakes and their associated outfalls, each spring. As adult run size increases, the goal is to eliminate redundant facilities (e.g., those needed for captive broodstock) and determine when the Program should transition to the next phase of implementation.

No Action Alternative

Under the No Action Alternative, BPA would not fund the Springfield Sockeye Hatchery Project; therefore, the Proposed Action would most likely not be implemented. IDFG would continue to operate the Program without supplementing fish production at the Springfield Hatchery. Achieving the target of increasing production to between 500,000 and 1 million smolts, as established in the basin-wide guidance documents (FCRPS Biological Opinion, Idaho Fish Accords), would take longer. As a result, under the No Action Alternative, achieving the interim recovery criteria established by NOAA Fisheries in the Proposed Recovery Plan for Snake River Salmon would be delayed. Also, without additional space to expand the Program, there is an increased risk of domestication and a further loss of fitness in the sockeye population over time.

Significance of the Potential Impacts of the Proposed Action

To determine whether the Proposed Action or the No Action Alternative has the potential to cause significant environmental effects, the potential impacts of each alternative on human and natural resources were evaluated. This impact analysis for the Proposed Action is presented in Chapter 3 of the EA and summarized below. To evaluate potential impacts from construction, operation, and maintenance activities, four impact levels were used (i.e., high, moderate, low, and no impact). These impact levels are based on the considerations of context and intensity defined in the Council of Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] 1508.27). High impacts could be considered significant impacts, while moderate and low impacts would not. 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.

Land Use and Recreation

Impacts on land use and recreation would be low to moderate.

- Recreationists at Crystal Springs Pond would be only temporarily disrupted during construction.
- Crystal Springs Pond water quality would be maintained for recreational fishing because IDFG would monitor water quality. Recreationists at American Falls Reservoir would not be disrupted because the hatchery discharge would be required to comply with the terms of IDFG's National Pollutant Discharge Elimination System permit.
- The proposed land uses are consistent with the surrounding land uses, applicable land use plans, and zoning and would not result in substantial long-term impacts on adjacent land uses.
- Land use or recreational opportunities at Redfish or Pettit lakes would not be disrupted because outstocking activities would occur over a period of a few weeks each year. Furthermore, additional recreational fishing opportunities could occur as adult sockeye salmon return to spawn.

Visual Resources

Impacts on visual resources would be low to moderate.

- Visual changes associated with construction equipment and activity would be temporary but may disproportionately affect recreationists at Crystal Springs Pond.
- Construction of the hatchery and associated staff residences would permanently change the visual resources at the site of the existing facility. However, the majority of the changes would not be visible to sensitive viewers, such as recreationists at Crystal Springs Pond or neighboring landowners.

Vegetation

Impacts on vegetation would be low.

- Permanent and temporary direct impacts would generally affect two vegetation communities: disturbed grassland areas and developed/disturbed lands. Direct impacts on native plant communities would be temporary and limited.
- Mitigation measures would address indirect impacts by reducing the spread of noxious weeds, erosion, and sedimentation.
- BPA consulted with the U.S. Fish Wildlife Service (USFWS) under Section 7 of the ESA regarding impacts of the Proposed Action on Ute ladies'-tresses. USFWS concluded that the Proposed Action would not adversely affect the orchid.

Water Quality and Quantity

Impacts on water quality and quantity would be low.

- Surface water and groundwater quality impacts from construction would be reduced by mitigation measures and best management practices.
- Crystal Springs Pond water quality would be maintained because water quality within the pond would be monitored, and water use at the hatchery would be modified to provide more flow if necessary.
- Disease outbreaks at the hatchery would be minimized and controlled, and no discharges to waters that support ESA-listed anadromous salmonids would occur.
- Groundwater drawdown would be localized, and the aquifer would recharge after the cessation of pumping each year.

Wetlands and Floodplains

Impacts on wetlands would be low to moderate; there would be no impacts on floodplains.

- All appropriate permits from the U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (Corps) would be obtained, and all work would comply with the mitigation required by EPA and the Corps.
- Erosion control measures to avoid sedimentation in wetlands and streams would be used.
- Minor wetland loss may result around the edge of or along adjacent stream channels of Crystal Springs Pond if IDFG reduces inflow to the pond.

Soils and Geology

Impacts on soils and geology would be low.

- Erosion and sedimentation would be minor with the use of best management practices related to controlling erosion and the timing of the disturbance.
- Proper design of the proposed hatchery office building and the on-site residences would reduce potential impacts on soils.

Fish and Wildlife

Impacts on fish and wildlife would be low.

- Construction noise and increased human presence would be low, temporary, and limited to the construction area and immediately adjacent habitats. Noise, traffic, and human activities associated with hatchery operations could result in temporary wildlife displacement during high activity periods, such as during spring smolt outstocking. No special-status fish or wildlife species are located in proximity to the hatchery site.
- There would be no impacts related to competition for space and prey for any of the salmonid species in the Salmon, Snake, and Columbia rivers, including those that are federally listed under the ESA (i.e., Snake River Chinook fall run [*O. tshawytscha*], Snake River Chinook spring/summer run [*O. tshawytscha*], and Snake River steelhead summer run [*O. mykiss*]), nor would there be any impacts related to protected habitat (e.g., essential fish habitat or critical habitat) as a result of the proposed outstocking activities.
- Potential impacts associated with genetic interactions between anadromous fish species, including those that are listed under the ESA, would be addressed and reduced through the implementation of the Draft Genetic Hatchery Management Plan.
- Since the listing of Snake River sockeye salmon in 1991, IDFG has been authorized by NOAA Fisheries under an ESA Section 10 direct take permit (#1120) to operate the existing supplementation program and a Section 6 ESA permit to conduct associated research activities on Snake River sockeye salmon. Potential effects on bull trout (*Salvelinus confluentus*) associated with these activities are also covered under these permits.
- With respect to activities unique to the Proposed Action, BPA consulted with USFWS under Section 7 of the ESA regarding the impacts of the Proposed Action on bull trout and its critical habitat. USFWS determined that the Proposed Action would not adversely affect bull trout or its critical habitat. The proposed activities may enhance the bull trout population by re-establishing a historic prey item (Snake River sockeye salmon smolts) for the bull trout within the river, and returning adult salmon may incrementally add to the nutrient budget of Sawtooth Valley lakes.
- There would be no impacts on natural fall Chinook production in the Upper Snake or Salmon River basins because fall-run Chinook do not occupy the Upper Snake or Salmon River basins, and there is no designated critical habitat.
- There would be no significant impacts on natural spring/summer Chinook production in the Salmon, Snake, and Columbia rivers because sockeye smolts would migrate relatively quickly downstream after release. Returning adults would not adversely affect juvenile spring/summer Chinook during Chinook smolt migration because sockeye salmon smolts would be migrating at a different time of year.
- There would be no significant impacts on Snake River summer-run steelhead because the sockeye salmon smolts would migrate relatively quickly downstream after release. Competition or density-dependence effects would be minimal. Returning adults would not negatively affect juvenile summer-run steelhead during steelhead smolt migration because sockeye salmon smolts would be migrating at a different time of year.

Cultural Resources

Impacts on cultural resources would be low.

- No known resources that are eligible for listing in the National Register of Historic Places (NRHP) are located within the project area, and based on the inventories conducted, the likelihood of encountering additional unknown cultural sites is low.

Transportation

Impacts on transportation would be low.

- Daily traffic volumes on existing roadways would increase only temporarily during construction activities and would not substantially degrade traffic operations on the local roads.
- The transporting of sockeye salmon smolts to outstocking locations during hatchery operations would be limited to about 40 trips each spring. Additional trips related to hatchery operations would also be easily accommodated by the highways and roads in the area.

Noise and Public Health and Safety

Impacts from increased noise levels would be low to moderate.

- Although pipeline trenching activities during construction would be noticeable and potentially disruptive to recreational fisherman at Crystal Springs Pond, impacts would be temporary and consistent with state noise regulations.
- Potential health and safety risks due to construction activities would be minimized through the development and implementation of a safety plan prepared by the contractor.

Socioeconomics and Environmental Justice

Impacts related to socioeconomics and environmental justice populations would be low.

- Because construction activities would be temporary (several phases over a total of about 16 months), it is not anticipated that construction would induce any permanent changes to the population in the study area.
- Although direct and indirect expenditures from project construction would be beneficial, expenditures would represent only a small proportion of the total annual income in the study area.
- Increases in sales tax revenue to the state from purchases by construction and hatchery workers would be minimal.
- Although there would be a potential increase in employment due to hatchery operations, it would not have a discernable long-term effect on the labor market in the study area.
- The economic well-being of people who are dependent on the fishing industry in the area could improve to the extent that the increased fish populations could improve the long-term health and resilience of Idaho's Snake River sockeye runs.
- Operation of the Proposed Action would be equally borne by all individuals within the surrounding area and would not disproportionately affect environmental justice populations. In addition, the Shoshone Bannock tribes would benefit from the increased production of fish.

Public Facilities and Energy

Impacts on public facilities and energy would be low.

- Increases in the level of demand for local law enforcement and emergency service providers during construction would most likely be low and within their service abilities.
- The amount of waste that would be generated by the project can be accommodated by local landfill sites and transfer stations.
- Impacts on water supply and water treatment services would be low because potable water would be provided via an existing artesian well, consistent with IDFG's water right; hatchery sewage would be treated via an on-site treatment and disposal system; and hatchery effluent would be treated on site prior to discharge, consistent with the requirements of the National Pollutant Discharge Elimination System permit.
- Energy consumption would be low relative to existing supply and would be further reduced through the implementation of energy-reducing measures.

Air Quality

Impacts on air quality would be low.

- Minor increases in emissions due to construction would be temporary and would occur in localized areas that are in compliance with the National Ambient Air Quality Standards.
- Small amounts of organic, potentially odorous wastes generated during hatchery operations would have a low potential to affect neighboring homes because the closest homes would be roughly 2,000 feet from the proposed hatchery.
- Forecast long-term greenhouse gas emissions generated by the project would be only a small fraction of the CEQ's evaluation threshold of 25,000 tons per year of carbon dioxide equivalent.
- Potential impacts on hatchery operations from future climate change would be low because the hatchery would have feasible options for compensating for potential decreases in water supply.

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 USC 4321 et seq. Therefore, preparation of an EIS is not required, and BPA is issuing this FONSI.

Issued in Portland, Oregon, on May 3, 2012.

/s/ F. Lorraine Bodi
F. Lorraine Bodi
Vice President
Environment, Fish, and Wildlife