# Upper Columbia Spring Chinook and Steelhead Acclimation Program
# Finding of No Significant Impact

Bonneville Power Administration
DOE/EA-2006
July 2017

## SUMMARY

Bonneville Power Administration (BPA) announces its environmental findings for its proposal to fund the Yakama Nation's Upper Columbia Spring Chinook and Steelhead Acclimation Program. Under the program, the Yakama Nation would place existing hatchery-raised spring Chinook and steelhead into acclimation ponds before their release into the Methow and Wenatchee river basins in Okanogan and Chelan Counties, Washington. This proposal would include construction of a new acclimation pond, as well as the co-use of six ponds that are used for acclimation of coho salmon.

BPA prepared an environmental assessment (EA) evaluating the Proposed Action and No Action Alternative. A draft of this EA was released for public comment in September 2016 - no public comments were received. Based on the analysis in the EA and the lack of public comment, 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.

The attached Mitigation Action Plan identifies the mitigation measures that BPA and the Yakama Nation are committed to implementing as part of the Proposed Action.

## PUBLIC AVAILABILITY

This FONSI will be mailed to individuals who previously requested it; a notification of availability will be mailed to other potentially affected parties; and the EA and FONSI will be posted on BPA's project website: *www.bpa.gov/goto/ChinookSteelheadAcclimation*

## PROPOSED ACTION

Under the Proposed Action, BPA would fund the Yakama Nation to acclimate hatchery-raised spring Chinook salmon and steelhead in ponds adjacent to rivers and streams prior to their release into those waterbodies. The acclimation program would include:

- Use of six acclimation sites that the Yakama Nation currently uses, or is planning to construct, for acclimating coho salmon
- Construction of one new pond to be named the "Powerline" acclimation site
- Acclimation operations
- Routine pond maintenance

- Monitoring and evaluation

The acclimation ponds would help spring Chinook and steelhead raised at numerous hatcheries in the region acclimate to the natural environment and imprint on waters to which they would be expected to return as adults to spawn. The Proposed Action would not change the number of spring Chinook and steelhead that are currently being produced and released into the Methow and Wenatchee watersheds; it would just provide for acclimation of those fish prior to release.

This program would use four sites currently being used for acclimation of coho salmon: the Chewuch Acclimation Facility, Goat Wall, Gold Creek, and Rolfing sites; and two, to-be constructed coho acclimation sites (Early Winters and Trinity).

The new Powerline acclimation pond would be located within a BPA transmission line easement on privately owned land in an undeveloped rural area in Chelan County Washington. The 5,900 square-foot earthen pond would be connected to a small unnamed tributary of Nason Creek. Details of the Proposed Action are presented in Chapter 2 of the EA.

## NO ACTION ALTERNATIVE

Under the No Action Alternative, BPA would not fund the Yakama Nation for its proposed program for acclimation of hatchery-reared spring Chinook or steelhead, nor would BPA fund construction of a new acclimation facility at the Powerline site in the Wenatchee River watershed. However, the Yakama Nation could seek funding from other sources to implement the program. Under the No Action Alternative, the use of the existing ponds for coho acclimation would continue unchanged.

## 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 were evaluated and presented in Chapter 3 of the EA. To summarize potential impacts, four impact levels were used - high, moderate, low, and no impact. These impact levels are based on the considerations of context and intensity defined in the Council on Environmental Quality regulations for implementing NEPA (40 CFR 1508.27). High impacts could be considered significant impacts, if not mitigated, while moderate and low impacts are 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. Many of the effects discussed below would be minimized through the application of mitigation measures identified in the Mitigation Action Plan.

### GEOLOGY AND SOILS

Impacts to geology and soils would be low.

- Soil disturbance impacts and potential erosion from the construction of the new pond at the Powerline site would be temporary and minimized with mitigation measures and best management practices.
- Annual acclimation operations have no ground-disturbing activities.

## WATER RESOURCES

The impacts to water resources would be low.

- Potential impacts on water quality due to erosion and sedimentation or accidental hazardous material spills or leakage during construction at the Powerline site would be minimized through use of mitigation measures and best management practices.
- Phosphorus discharges into water bodies due to food and fish waste would generally be less than 1 percent of existing phosphorus loads in those water bodies; and fish foods used would be low in phosphorus content or have highly-digestible phosphorus.
- There would be no change in stream flows. Water for the Powerline acclimation pond would be a flow-through diversion with no consumptive use and there would be no change in water use at the existing ponds. The yet-to-be-constructed acclimation ponds require no consumptive use.

## VEGETATION

The impacts to vegetation would be low.

- About 0.3 acres of shrubs would be removed within the existing managed transmission line right-of-way for construction of the Powerline pond.
- There would be no impacts on special-status plants—none are present.
- Implementation of a revegetation management plan would improve riparian vegetation along Nason Creek shoreline and would prevent establishment of invasive plants.
- Acclimation operations would not impact vegetation since no modifications of the existing and to-be-constructed acclimation sites are proposed.

## WETLANDS AND FLOODPLAINS

There would be no impacts to wetlands or floodplains.

- There would be no construction in wetlands or floodplains for the Powerline acclimation pond site.
- There would be no actions within wetlands or floodplains for operational acclimation activities at any of the acclimation ponds.

## FISH

The impacts to fish would be low.

- Elevated sediment levels associated with construction at the Powerline site would be minimal and temporary, with no sediment-related impacts to spawning areas.
- Acclimation operations would have no impact on fish or fish habitat through entrainment or surface water withdrawals,
- Acclimated smolts would volitionally leave the acclimation ponds when they are ready to migrate and would therefore quickly leave the river basins providing limited, if any, competition with native salmonids for rearing habitat.
- Existing populations of native Endangered Species Act (ESA)-listed spring Chinook and steelhead are low, so competition for breeding habitats and food resources between these native fish and returning adult acclimated hatchery fish in these under-utilized habitats would be low.

- Adult spring Chinook and steelhead have minimal overlap of habitat and food preferences with bull trout, so there is expected to be minimal competition between these species in the short term. As the Chinook and steelhead populations increase there is expected to be increasing competition over time, but also an increase in prey abundance for bull trout.
- Because acclimated fish released would be from existing hatchery production that is currently released further downstream in the basins, total numbers of hatchery-origin fish in each basin and competition in downstream areas would be unchanged from current conditions.
- With monitoring and adaptive management, the future Proportionate Natural Influence (i.e. the relative genetic influence of native fish versus hatchery fish) and related genetic status conditions within these fish populations would likely be improved over current conditions.
- There would be long-term increases in returning spawning numbers and an expanded distribution of spawners in the Methow and Wenatchee watersheds of spring Chinook and steelhead.

## WILDLIFE

Impacts to wildlife would be low.

- There would be only 0.3 acres of shrub habitat converted to pond and riparian habitat. This is a minor loss of shrub habitat for which there is hundreds of acres remaining nearby.
- This project does not modify in-stream habitats, thus there would be no impacts to critical habitat for listed species or identified priority habitats.
- Construction noise and human disturbance associated with construction activities would be temporary and short-term.
- Human disturbance associated with acclimation operations would be minimal, infrequent, and of short duration each year.

## TRANSPORTATION

Impacts to transportation and infrastructure would be low.

- There would be negligible temporary interference with existing transportation activity from short-term increases in construction-related traffic at the Powerline site.
- Fish hauling and routine worker transportation would create an imperceptible increase in traffic on local roads with minimal or no impacts on existing transportation facilities.

## LAND USE AND RECREATION

Impacts to land use and recreation would be low.

- Use of the Powerline site as an acclimation facility would be compatible with existing land uses: it creates a new pond with a short unpaved spur in a rural and commercial forest setting which is expected to be consistent with applicable land use plans and regulations.
- Acclimation activities would create no noise, dust, air, vegetation, or traffic effects sufficient to affect land uses of adjacent properties or recreational uses.

- There could be disturbance of adjacent landowners and local recreationists from the noise and human activity associated with construction of the Powerline site, but it would be minor, temporary, and localized.

## VISUAL RESOURCES

Impacts to visual resources would be low.

- The addition of a pond and a short spur road at the Powerline site is consistent with the existing type and level of land-use modifications and transportation infrastructure visible along White Pine Road.
- The human activities associated with acclimation operations at the existing and to-be-constructed acclimation sites are consistent with those currently occurring on adjacent private and public lands.

## AIR, NOISE, AND PUBLIC HEALTH AND SAFETY

Impacts to air, noise, and public health and safety would be low.

- The application of mitigation measures would limit the amount of temporary fugitive dust, vehicle/equipment emissions, and noise from construction at the Powerline site, and during acclimation operations.
- Vehicle traffic associated with annual operational activities would be of limited duration, and, for all but three facilities, occurs on paved roads with no potential for dust. For the others, the dust potential would be limited by the naturally wetted road conditions common during the late-winter and spring time acclimation period.
- The limited extent and impacts of construction and operation of the sites would create no additional demands on the capacity of existing medical, emergency and public safety services.

## CULTURAL RESOURCES

Impacts to cultural resources would be low.

- Discovery or damage to cultural resources from construction activity at the Powerline site would be unlikely, given the previous disturbance that has occurred in the transmission line right of way. Surveys were conducted in 2015 of the construction site and no cultural resources were found.
- Mitigation measures to mark avoidance areas and to stop work if cultural materials are revealed during construction would lessen potential cultural resource impacts.

## SOCIOECONOMICS

Impacts to socioeconomics would be low.

- No construction workers are expected to temporarily relocate for construction at the Powerline site; there would therefore be no permanent changes in the local population, infrastructure or community service demands.
- There would be a small, temporary increase in economic activity from expenditures associated with construction, and the annual acclimation operations.

- Anadromous fish populations, a significant natural and cultural resource for the tribes, would be increased.

## CLIMATE CHANGE

Impacts to climate change would be low.

- The limited scale and duration of facility construction and acclimation operations would create only minimal, temporary, and localized greenhouse gas emissions associated with climate change.

## 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* *July 13, 2017*

F Lorraine Bodi
Vice President
Environment, Fish and Wildlife

Date

# Upper Columbia Spring Chinook and Steelhead Acclimation Project Mitigation Action Plan

## MITIGATION ACTION PLAN

This Mitigation Action Plan is part of the Finding of No Significant Impact (FONSI) for the Upper Columbia Spring Chinook and Steelhead Acclimation Project. This project would construct and operate one pond for primarily steelhead acclimation and use six coho salmon acclimation sites to acclimate hatchery-raised spring Chinook and steelhead before being released into the Methow and Wenatchee river basins in Okanogan and Chelan Counties, Washington.

The Mitigation Action Plan is for the Proposed Action and includes all of the integral elements and commitments made in the Environmental Assessment (EA) to mitigate any potential adverse environmental impacts.

The BPA and Yakama Nation (and its contractor) would be responsible for implementing the mitigation measures during various phases of project work. Relevant portions of this Mitigation Action Plan would be included in the construction contract specifications. This would obligate the contractor to implement the mitigation measures identified in the Mitigation Action Plan that relate to contractor responsibilities during construction and post-construction.

If you have any general questions about the project, contact the Project Manager, Roy Beaty: toll-free telephone 800-282-313, direct telephone 503-230-5213, or email rebeaty@bpa.gov.

The Mitigation Action Plan may be amended if revisions are needed due to new information or if there are project adjustments.

## MITIGATION MEASURES

Minimization and mitigation measures have been identified to reduce potential impacts associated with the Proposed Action, and are provided below in Table 1.

### Table 1 Mitigation Action Plan

| Mitigation Measure | Implementation |
|---|---|
| **Geology and Soils** | |
| Install and maintain all temporary erosion controls downslope of applicable project activities until site restoration is complete. | Before and during construction (Contractor) |
| Segregate topsoil from subsoil and store during excavation for use in site reclamation. | During construction (Contractor) |
| Grade and cover disturbed areas and areas of excavated soils with at least 2 inches of compost. | During construction (Contractor) |
| Restore damaged banks to a natural slope pattern and profile that is suitable for establishment of permanent woody vegetation. | After construction (Contractor) |
| Implement Best Management Practice erosion and sediment control measures during construction. | Before, during, and after construction (Contractor) |
| **Water Resources** | |
| Follow project-specific Clean Water Act permit protection measures. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Use sediment barriers such as fences, weed-free straw matting/bales, or fiber wattles, as necessary, in all work areas sloping toward Nason Creek to intercept any surface flow that might transport sediment to the creek. | Before, during, and after construction (Contractor) |
| Limit or prevent discharge of sediment during pond construction by installing a temporary barrier to prevent backwater from entering the work area. | During construction (Contractor) |
| Pump any sediment-laden water from the pond construction work area through a filter medium prior to release of water into the new pond. | During construction (Contractor) |
| Line new water channels for the Powerline site with gravel and rock, installed to withstand peak flows of unnamed tributary. | During construction (Contractor) |
| Fill the Powerline pond slowly to avoid suspending and mobilizing sediments, such that when flow is returned to the active channel, the sediment plume would not be visible above background turbidity 150 feet downstream of the project. | During construction (Contractor) |
| Pump sediment-laden waters that accumulate on the construction site onto upland sites, not into new pond, streams, or riparian areas to discharge such water. | During and after construction (Contractor) |
| Ensure materials for spill containment and cleanup are available onsite during pre-construction, construction and restoration phases of the project. | Before, during, and after construction (Contractor) |
| Use only hydraulic fluids certified as non-toxic to aquatic organisms in equipment used to work in the water. | During construction (Contractor) |
| Locate vehicle staging, cleaning, maintenance, refueling, and fuel storage areas a minimum of 150 feet from waterbodies. | Before and during construction (Contractor) |
| Apply 'diapers' to all stationary power equipment such as generators, cranes, or stationary drilling equipment operated within 150 feet of waterbodies to prevent leaks, unless suitable containment is provided to prevent potential spills from entering the water. | During construction (Contractor) |

| Mitigation Measure | Implementation |
|---|---|
| Implement methods to re-use water during pond operations to maintain minimum instream flows during extreme low-flow periods, including the use of portable pumps to recirculate the pond water. | During acclimation operations (Yakama Nation) |
| Wash heavy equipment before delivery to project site to remove oils, fluids, grease, etc.; inspect and clean equipment regularly. | Before construction (Contractor) |
| Inspect machinery daily for fuel or lubricant leaks. | Before, during, and after construction (Contractor) |
| Perform all non-emergency maintenance of equipment off site. | Before, during, and after construction (Contractor) |
| **Vegetation** | |
| Develop a detailed revegetation plan for the site to restore native riparian vegetation along shorelines of the creek and pond and prevent establishment of invasive plants. | Before and after construction (Contractor) |
| Cover all temporarily disturbed areas with at least 2 inches of compost and replant with native vegetation. | During construction (Contractor) |
| Seed disturbed areas with a native erosion control grass seed mix to prevent future erosion, stem the invasion of noxious weeds, and provide wildlife benefit. | After construction (Contractor) |
| Install only clean, angular, certified weed-free rock when importing bank stabilization material. | During construction (Contractor) |
| Pull noxious weeds by hand or treat with herbicide approved for application in wetlands. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Protect plantings from deer, beaver, rodents, etc. | After construction and during acclimation operations (Contractor and Yakama Nation) |
| Water and weed plantings regularly, with proper maintenance, until they are established. Replace plantings as necessary for a period of at least 3 years to achieve a minimum of 80 percent survival by the end. | After construction and during acclimation operations (Contractor and Yakama Nation) |
| **Fish** | |
| Apply protective measures resulting from consultation with US Fish and Wildlife Service and National Marine Fisheries Service and permit actions of other agencies. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Coordinate timing and methods of construction with resource agencies to minimize disturbance to ESA-listed species and life stages. | Before, during, and after construction (Contractor and Yakama Nation) |
| Follow established protocols (legal or scientific) for handling ESA-listed species. | Before, during, and after construction; and during acclimation operations (Yakama Nation) |

| Mitigation Measure | Implementation |
|---|---|
| Follow the US Fish and Wildlife Service (2010) *Best Management Practices to Minimize Adverse Effects to Pacific Lamprey.* | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Isolate the construction area by the placement of cofferdams at the inlet and outlet using gravel-filled bags and plastic sheeting to prevent water and fish from entering the work area. | Before and during construction (Contractor) |
| Immediately re-install any in-stream habitat structures that must be moved (large rocks or large woody debris) up or downstream of the disturbance, at a similar depth and location such that it would continue to provide comparable aquatic habitat function in the new location. | During construction (Contractor) |
| Use barrier nets for containment purposes at acclimation sites where ESA-listed fish are present to prevent premature escape of hatchery spring Chinook and steelhead and competition with native fish during acclimation period. | During acclimation operations (Yakama Nation) |
| Use seine nets at acclimation sites to partition off a portion of a waterbody while allowing free upstream and downstream passage of native ESA-listed fish to available habitat. | During acclimation operations (Yakama Nation) |
| Use fine seine mesh to exclude fry from enclosed areas to minimize predation in areas where emergent spring Chinook or bull trout fry could be present. | During acclimation operations (Yakama Nation) |
| Install seines in a manner that excludes fry from the acclimation area by moving out from the bank to encapsulate the rearing area. | During acclimation operations (Yakama Nation) |
| Snorkel enclosed areas to verify that no ESA-listed fish are present before hatchery spring Chinook or steelhead are added. | During acclimation operations (Yakama Nation) |
| Remove seine or barrier nets when spring Chinook salmon and steelhead reach a size that ensures most are ready to migrate (typically when 90 percent show signs of smolt color). | During acclimation operations (Yakama Nation) |
| Monitor populations of native ESA-listed fish species to establish baseline conditions and continue to monitor to determine if their numbers are decreasing. If they are decreasing due to competition from acclimated and released spring Chinook and steelhead, then assess and adjust program and operations to avoid this impact. | During acclimation operations (Yakama Nation) |
| **Wildlife** | |
| Coordinate timing and methods of construction with resource agencies to minimize disturbance to ESA-listed species and life stages. | Before construction (BPA and Yakama Nation) |
| Apply protective measures resulting from consultation with USFWS, if any. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| **Transportation** | |
| Repair damage to roads and trails that may occur through project construction. | During and after construction (Contractor) |
| **Land Use and Recreation** | |
| Limit construction activity to normal workday hours or 8:00 AM to 5:00 PM to minimize impacts to nearby landowners and recreationists. | During construction (Contractor) |
| **Visual Resources** | |
| Remove all temporary structures, devices, materials, and equipment from the site upon completion of all construction activities; and dispose of all excess spoils and waste materials in compliance with federal, state, and local regulations. | After construction (Contractor) |

| Mitigation Measure | Implementation |
|---|---|
| **Air, Noise, Public Health, and Safety** | |
| Use flaggers and safety signage as necessary to avoid vehicle and other conflicts. | Before and during construction (Contractor) |
| Use the least noise-generating equipment and methods as much as possible. Comply with environmental noise regulations (Washington Administrative Code Chapter 173- 60 of the Noise Control Act of 1974). (e.g. use noise-muffling enclosures for pumps and generators if used during facility operations) | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Apply dust control measures (e.g. watering trucks, low speeds, apply gravel to access roads, etc.) as needed. Minimize dust generation during excavation of the pond and construction of the short access road by watering and using dust suppression equipment. Sequence and schedule work to reduce the amount of bare soil exposed to wind erosion and potential fugitive dust production. | Before and during construction (Contractor) |
| Dispose of cleared vegetation and other debris in a manner other than burning, to avoid or minimize air quality impacts. Transport all such material to an approved composting or landfill facility, as appropriate. | During and after construction (Contractor) |
| Prepare a Spill Prevention, Containment and Control Plan prior to construction start. Include measures to reduce/recycle hazardous and non-hazardous wastes, notification procedures, specific cleanup and disposal instructions for different products, quick response containment and cleanup measures, proposed methods of disposal of spilled materials, and employee training on spill containment. | Before construction (Contractor) |
| Develop and follow the protocol for dealing with hazardous substances inadvertently discovered during project activities. Conduct all project-related activities in compliance with regulations and guidelines for use, handling, storage, and disposal of toxic and hazardous substances. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Dispose of non-hazardous wastes in approved landfills. | Before, during, and after construction; and during acclimation operations (Contractor and (Yakama Nation) |
| Dispose of hazardous wastes according to applicable federal and state laws. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| Conduct all project-related activities in compliance with regulations and guidelines for use, handling, storage, and disposal of toxic and hazardous substances. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |
| **Cultural Resources** | |
| Mark known cultural resource sites as avoidance areas on construction drawings and flag as no-work areas in the field prior to construction. | Before construction (BPA, Yakama Nation, and Contractor) |

| Mitigation Measure | Implementation |
|---|---|
| Protect any unanticipated cultural resources discovered during construction as follows:<br>• Stop all work; cover and protect find in place.<br>• Notify Project Manager and agency cultural resources specialist immediately.<br>• Implement mitigation or other measures as instructed by agency cultural resource specialist. | During construction (BPA, Yakama Nation, and Contractor) |
| **Climate Change** | |
| Maintain motorized equipment used for construction and operation to minimize emissions. | Before and during construction (Contractor) |
| Regularly inspect, maintain, and replace (if defective) mufflers and other emission control devices on all construction equipment. | Before, during, and after construction; and during acclimation operations (Contractor and Yakama Nation) |