

6450-01-P

DEPARTMENT OF ENERGY

Bonneville Power Administration

Melvin R. Sampson Hatchery, Yakima Basin Coho Project

**AGENCY:** Bonneville Power Administration (BPA), Department of Energy (DOE).

**ACTION:** Record of Decision (ROD).

**SUMMARY:** The Bonneville Power Administration (BPA) has decided to implement the Proposed Action as described in the Melvin R. Sampson Hatchery, Yakima Basin Coho Project Final Environmental Impact Statement (EIS) (DOE/EIS-0522, November 27, 2017). Under the Proposed Action, BPA will fund the construction and operation of the Melvin R. Sampson Hatchery (MRS Hatchery) in the Yakima Basin in central Washington. Operation of the MRS Hatchery will involve production of up to 700,000 coho salmon for release in the Yakima River and its subbasin, the Naches River. The hatchery will be owned and operated by the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation) and will be constructed on land owned by the Yakama Nation northwest of Ellensburg in Kittitas County, Washington.

**ADDRESS:** This ROD will be available to all interested parties and affected persons and agencies. It is being sent to all stakeholders who requested a copy. Copies of the Melvin R. Sampson Hatchery, Yakima Basin Coho Project Draft and Final EISs and additional copies of this ROD are available from BPA's Public Information Center, P.O. Box 3621, Portland, Oregon, 97208. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line: 1-800-622-4520, or by accessing the project website at [www.bpa.gov/goto/MelvinSampsonHatchery](http://www.bpa.gov/goto/MelvinSampsonHatchery).

**FOR FURTHER INFORMATION, CONTACT:** Dave Goodman, Bonneville Power Administration – ECF-4, P.O. Box 3621, Portland, Oregon, 97208-3621; toll-free telephone number 1-800-622-4519; fax number 503-230-5699; or e-mail [jdgoodman@bpa.gov](mailto:jdgoodman@bpa.gov).

**SUPPLEMENTARY INFORMATION:**

Background

BPA is a federal agency that markets power generated from the federal hydroelectric facilities on the Columbia River and its tributaries. BPA’s operations are governed by several statutes, including the Northwest Power Act. The Northwest Power Act directs BPA to protect, mitigate, and enhance fish and wildlife affected by the development and operation of those federal hydroelectric facilities. To assist in accomplishing this, the Northwest Power and Conservation Council (Council) makes recommendations to BPA concerning which fish and wildlife projects to fund. The Council gives deference to project proposals developed by state and tribal fishery managers and has a three-step process for reviewing artificial propagation project (i.e., hatcheries). The Yakama Nation’s MRS Hatchery proposal is one of the projects recommended to BPA by the Council (Fritsch 2013) through their three-step review process, which included reviews from the Council’s Independent Scientific Review Panel (ISRP)<sup>1</sup>.

In addition, BPA, U.S. Army Corps of Engineers, and U.S. Bureau of Reclamation signed an agreement in 2008 with the Yakama Nation and other Tribes to

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<sup>1</sup> The Council and the ISRP reviewed the Yakima Subbasin Summer and Fall Run Chinook and Coho Salmon Hatchery Master Plan (Yakama Nation 2012a), providing feedback and recommendations to the Yakama Nation on scientific goals and methods related to the coho program. On October 1, 2013, the Council and the ISRP determined the proposed Master Plan, as related to activities for the MS Hatchery component of the coho program, sufficiently met scientific review criteria to recommend that BPA and the Yakama Nation move to Step 2 of the Council’s process.

work as partners to provide tangible survival benefits for salmon recovery. The 2008 Columbia Basin Fish Accords Memorandum of Agreement includes an agreement to fund the MRS Hatchery contingent on the favorable recommendation from the Council, completion of site-specific environmental review under the National Environmental Policy Act (NEPA), and compliance with other environmental laws.

To meet obligations under NEPA, BPA prepared an EIS in which the Washington Department of Ecology was a cooperating agency. Public scoping for the MRS Hatchery EIS was initiated with the publication of the Notice of Intent in the Federal Register (80 Federal Register [FR] 70770) on November 16, 2015. Concurrent with the publication of the Notice of Intent, BPA mailed a letter and map describing the proposal to neighboring landowners, affected tribes, local, state, and federal government officials, and known interested parties. BPA also held a public scoping meeting in Ellensburg, Washington (19 members of the public attended) and established a website ([www.bpa.gov/goto/MelvinSampsonHatchery](http://www.bpa.gov/goto/MelvinSampsonHatchery)) with information about the project and the EIS process. The public scoping period ran from November 16, 2015 through January 4, 2016. BPA received comments from ten entities.

In March 2017, BPA issued the draft EIS for public review and comment. Notice of Availability for the draft EIS was published in the Federal Register (Volume 82, Number 51) on March 17, 2017. In addition, the EIS or an announcement of its availability was e-mailed or mailed to over 100 entities—individuals, organizations, tribes, and agencies who had previously requested it—and the EIS was posted on the project website. The comment period ran from March 10, 2017 through May 1, 2017 and an open-house public meeting was held in Ellensburg, Washington.

BPA received comments from nine entities on the draft EIS. After consideration of the comments, BPA issued the final EIS in November 2017. The final EIS responded to comments received on the draft EIS and made necessary corrections and revisions to the EIS text. As with the draft EIS, BPA distributed the final EIS to individuals, organizations, tribes, and agencies who had previously requested it, posted it on the BPA project website, and sent out letters announcing its availability to potentially interested parties. A Notice of Availability of the final EIS was published in the Federal Register (82 FR 55831) on November 24, 2017.

### Alternatives Considered

The final EIS considered in detail the Proposed Action and the No Action Alternative. The final EIS also discussed other alternatives that were considered but eliminated from detailed study. The following summarizes the alternatives that were considered in detail in the EIS.

### ***Proposed Action***

Under the Proposed Action, BPA will fund the Yakama Nation for the construction and operation of the MRS Hatchery. The Proposed Action will help transition the Yakama Nation's existing coho restoration program in which broodstock are collected out-of-basin and juveniles are reared out-of-basin, to a program that will use in-basin rearing (at the MRS Hatchery) and the use of out-of-basin broodstock will be phased out as natural-origin broodstock become available.

The Proposed Action will involve construction of a coho hatchery facility on eight acres at the former Holmes Ranch property. Facilities will include a hatchery building; adult holding and spawning ponds; a shop building; three employee houses; intake screens and a surface water pump station to provide Yakima River water via the

existing New Cascade Canal diversion; stoplog supports to allow surface water to be diverted; one existing groundwater well and up to eight new wells; centralized degassing headbox for groundwater treatment and supply; site utilities, including pipes for water intake and discharge (outfall); a waste treatment pond; acclimation ponds and tanks; and site access roads.

Under the Proposed Action, the MRS Hatchery will produce and release up to 500,000 coho parr and up to 200,000 coho smolts as part of the overall coho reintroduction program. Per NMFS consultation (NWR-2011-06509; NMFS 2016a), the production of up to 200,000 smolts and 500,000 parr is authorized. Conversion to an all-smolt release (i.e., 700,000 smolts) is proposed if the parr/smolt release strategy does not meet adult return objectives, or if drought conditions preclude summer parr releases. The goal of the Proposed Action is for in-basin rearing of integrated coho juveniles at the MRS Hatchery using localized broodstock, with a goal to phase out all out-of-basin production. The transition to locally-adapted broodstock will occur at ever-increasing rates as natural-origin broodstock become available.

Up to 1,000 coho adults, including natural- and hatchery-origin, will be collected at Roza Dam for broodstock for the proposed MRS Hatchery. Adults may also be collected at Prosser Dam as a backup source, and possibly in the future at the Cowiche or Wapatox Dams. The broodstock goal is to collect 1,000 fish that will be processed over a four month period.

Prior to release, smolts will be acclimated in ponds adjacent to tributaries in which they will be released to help encourage their return as adults to these locations. A number of existing ponds, including Jack Creek, Hundley, Boone, and Easton will be used to acclimate coho smolts from the MRS Hatchery. Mobile acclimation units will

also be used for a small number of coho smolts in the basin. Juvenile coho propagated at the MRS Hatchery will be released into tributaries that are not currently subject to coho releases, with a goal of seeding more habitats throughout the basin.

Monitoring, research, and evaluation of the overall Yakima-Klickitat Fisheries Project (YKFP) coho reintroduction program is ongoing and would continue under the Proposed Action. Such activities would include coho spawning surveys, snorkel surveys, juvenile collection, and juvenile abundance surveys.

Construction under the Proposed Action will comply with applicable regulatory requirements, permits, and guidance for protection of the environment and human well-being and safety, and will incorporate Best Management Practices such as erosion and dust control, waste management, weed management, fire prevention, and work-hour and noise restrictions. The Proposed Action incorporates special measures such as retaining as much native vegetation as possible, landscaping with native plants, erecting buildings reflective of local character, shielding of facility lighting, and installing water reuse and treatment systems. Instream structures will meet applicable NOAA Fisheries and U. S. Fish and Wildlife Service fish passage design requirements, and construction will be managed to accommodate and reduce impacts on existing fish production and fish use of the affected waters.

Instream work will occur behind temporary cofferdams or other appropriate water diversions and comply with applicable regulations and permits. Solid waste management and hatchery effluent treatment and filtering systems will ensure that discharge will comply with applicable regulations and permit standards.

***No Action Alternative***

Under the No Action Alternative as described in the EIS, BPA would have not funded the construction and operation of the proposed MRS Hatchery. The Yakama Nation would have still expanded juvenile release and acclimation locations, but would have not converted to complete in-basin rearing. The Yakama Nation would have likely continued using a combination of artificial production and habitat improvements to meet natural production and harvest goals, including increasing coho spawning in tributaries, phasing out imported releases of coho in the Yakima Basin, and testing and monitoring new acclimation techniques.

Under the No Action Alternative, a portion of the juvenile coho released into the Yakima River as part of the overall YKFP coho reintroduction program would have continued to be reared out-of-basin. The release of out-of-basin juveniles would have expected to result in reduced survival and adult returns and would have not met the Yakama Nation's goal of providing a self-sustaining coho run throughout its historic range.

#### Comments Received Since Issuance of the Final EIS

Following the issuance of the final EIS, BPA received comments from the U.S. Environmental Protection Agency (EPA) Region 10 in accordance with EPA responsibilities to review EISs under Section 309 of the Clean Air Act. The comments were received in a letter dated December 21, 2017 and in follow-up conversations with EPA staff. These comments can be viewed on-line at [www.bpa.gov/goto/MelvinSampsonHatchery](http://www.bpa.gov/goto/MelvinSampsonHatchery). BPA has reviewed and considered EPA's comments in making its decision about funding the Melvin R. Sampson Hatchery Yakima Basin Coho Project.

Although NEPA does not require written responses to comments received on a final EIS, this section of the ROD summarizes and addresses the EPA comments received since issuance of the final EIS.

EPA's letter stated that the final EIS was responsive to their comments submitted on the draft EIS. EPA also further expanded on comments sent on the draft EIS and requested that BPA conduct additional quantitative analysis of water quality impacts due to hatchery effluent discharge. More specially, EPA requested that various parameters (ammonia nitrogen, dissolved oxygen, and phosphorous, total suspended solids [TSS], turbidity, and biochemical oxygen demand BOD) be considered in the effluent dilution calculations; that effluent dilution calculations be at the point of discharge into the side channel (which flows into the main channel of the Yakima River); that consideration be taken for effluent plumes in the Yakima River if lateral mixing is incomplete; and that BPA provide rationale that the analysis is considering worst-case conditions and rationale that the effluent discharge will achieve water quality standards.

In response to these comments, BPA continued to work with the Washington State Department of Ecology (Ecology), the entity responsible for regulating water quality in the State of Washington, conducted additional waste load calculations, and had further conversations and email exchanges with EPA.

As described in Sections 2.2.3.3, 3.5.1.4.2, 3.5.2.2.4, and 4.1.3.1.2 of the EIS, BPA and the Yakama Nation have worked with Ecology to ensure that the hatchery complies with National Pollutant Discharge Elimination System (NPDES) requirements. Per Washington State Administrative Code (WAC) 173-221A-100, all upland fin fish facilities require wastewater discharge permits requiring compliance with defined effluent standards, and must comply with the applicable Total Maximum Daily Loads



(TMDLs). The TMDLs determine the amount of pollutants that a given waterbody, in this case it is the Yakima River, can receive and still meet or exceed water quality standards. The permit application submitted to Ecology described the hatchery design (size, number of fish, water sources and flow rates, dimensions and volumes of settling ponds, discharge points and receiving waters, solid waste disposal areas, and details about the water condition equipment) and the water quality characterization of the hatchery effluent. The technical memo supporting the permit application and the additional hatchery effluent discharge analysis may be viewed on BPA's project website at [www.bpa.gov/goto/MelvinSampsonHatchery](http://www.bpa.gov/goto/MelvinSampsonHatchery).

The Yakima River 7Q10 flow rate (the lowest 7-day average flow occurring on average once every 10 years) is 1,891 cubic feet per second (cfs), while the volume of discharge from the hatchery will be 4 cfs, 0.002 percent of the river flow. As described in Section 3.5.2.2.4 of the EIS, the effluent limits for general NPDES permit treatment requirements include a net total suspended solids (TSS) maximum concentration of 5 milligrams per liter (mg/l); the calculated TSS concentrations in the hatchery effluent during peak fish feeding (worst case pollutant discharge conditions) is 0.73 mg/l— which is well under the requirements. This TSS limitation requirement is for the end-of-pipe effluent and does not require determinations of lateral mixing or dilution. The hatchery easily meets the TMDL load allocation that has been approved by EPA for the Yakima River.

The additional waste load calculations conducted at EPA's request found that waste load allocations for total ammonia nitrogen (TAN), dissolved oxygen (DO), and total phosphorous associated with hatchery discharge had no-to-minimal influence on the background concentrations (TAN changed background river levels by 0.002mg/l; DO had

no change; total phosphorous changed by 0.0004 mg/l over background levels). As described above, the TSS levels would be well under the TMDL load allocation requirements, and because of the correlation of TSS and turbidity, Ecology determined that, based on the limitations associated with TSS, the facility would not impact the Yakima River turbidity. BOD is not a pollutant of concern with fish hatcheries; there are no BOD limitations in either federal requirements or in the 2015 Upland Fin-Fish Hatchery and Rearing general permit requirements. Therefore, BPA believes it has sufficiently considered the potential impacts of the effluent pollutants on water quality.

Regarding EPA's comment that the side channel dilution rates should be considered, the end-of-pipe effluent that would be discharged into the side channel would meet the water quality standards for the Yakima River, whether it is into the side channel or the main stem itself; dilution is not part of the criteria for meeting the effluent water quality standards. Therefore, BPA believes that further calculations of dilution rates are not necessary or relevant to water quality considerations.

The end-of-pipe effluent water quality also pertains to EPA's comment on whether there would be effluent plumes due to incomplete lateral mixing in the Yakima River. The hatchery operation at full capacity has to meet end-of-pipe discharge limitations that reduce the existing load present in the Yakima River. The WAC sets effluent limitation guidelines for the pollutant of concern to meet water quality standards at the end-of-pipe, not at some point downstream after a mixing zone or dilution factor are taken into consideration. Therefore, because the effluent itself would meet load requirements, there would be no plumes within the river due to the effluent and further consideration of lateral mixing is not necessary or relevant.

Ecology is poised to issue an NPDES permit for the hatchery and has stated that it is satisfied that the hatchery effluent would clearly meet all water quality criteria. As such, BPA believes it has a sufficient understanding of the impacts of the hatchery effluent on water quality, that the final EIS provides appropriate consideration and analyses of these impacts to meet the requirements of NEPA, and that the additional calculations do not alter the conclusions made in the final EIS about potential water quality impacts.

#### Rationale for Decision

In making its decision to implement the Proposed Action, BPA has considered and balanced a variety of relevant factors. BPA considered how well the Proposed Action and the No Action Alternative would fit with BPA's statutory missions and relevant policies and procedures. BPA also considered the environmental impacts described in the final EIS, as well as public comments received throughout the NEPA process for the Project.

Another consideration was the extent to which each alternative under consideration would meet the following BPA purposes (i.e., objectives) identified in the final EIS:

- Support efforts to mitigate for effects of the development and operation of the Federal Columbia River Power System on fish and wildlife in the mainstem Columbia River and its tributaries under the Northwest Power Act.
- Assist in carrying out commitments related to proposed hatchery actions that are contained in the 2008 Columbia Basin Fish Accords Memorandum of Agreement with the Yakama Nation and others.

- Implement BPA's Fish and Wildlife Implementation Plan EIS and Record of Decision policy direction, which calls for protecting weak stocks, while sustaining overall populations of fish for their economic and cultural value.
- Minimize harm to natural and human resources, including species listed under the Endangered Species Act.

After considering and balancing all of these factors, BPA has decided to fund the Melvin R. Sampson Hatchery, Yakima Basin Coho Project. The Proposed Action was recommended to BPA for funding by the Northwest Power and Conservation Council and is consistent with the Council's Columbia River Basin Fish and Wildlife Program. Providing funding for the construction of the Proposed Action will help mitigate for the effects of the FCRPS on fish and wildlife by restoring natural coho spawning in the Yakima Basin. In addition, the Proposed Action is consistent with commitments contained in the 2008 Columbia Basin Fish Accords, as well as with BPA's Fish and Wildlife Implementation Plan policy direction for protecting weak stocks, while sustaining overall populations of fish for their economic and cultural value.

In planning and designing the hatchery, BPA, the Yakama Nation, and other project designers worked to minimize environmental and social impacts through project design, consultation with regulatory entities, and development of mitigation measures. Impacts considered and fully disclosed in the final EIS, include disturbance of soils, vegetation removal, conversion of habitat, groundwater and surface water impacts on aquifers and floodplains, impacts of hatchery effluent discharge, impacts of hatchery construction and juvenile coho releases on species such as bull trout and steelhead, and visual changes associated with new structures.

#### Mitigation

All mitigation measures described in the final EIS and the project Biological Assessment with the US Fish and Wildlife Service have been adopted. A complete list of these measures is presented in the project Mitigation Action Plan, available on the project website. All practicable means to avoid or minimize environmental harm are adopted.

Issued in Portland, Oregon on April 10, 2018.

*/s/Elliot E. Mainzer* *April 10, 2018*

Elliot E. Mainzer

Date

Administrator and

Chief Executive Officer