

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Evaluate the Relative Reproductive Success of Hatchery-Origin and Wild-Origin Steelhead Spawning Naturally in the Hood River

Project No.: 2003-054-00

Project Manager: Maureen Kavanagh

Location: Hood River County, OR

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B3.3 Research related to conservation of fish, wildlife, and cultural resources

Description of the Proposed Action: The Bonneville Power Administration (BPA) proposes to fund Oregon Department of Fish and Wildlife (ODFW) to conduct research that would identify selection pressures in the hatchery that cause rapid domestication, and what aspects of hatchery culture exacerbate that selection. To do this, ODFW would pursue three lines of research:

1) Test effects of modifying hatchery rearing conditions:

Vary environmental conditions in the hatchery (e.g., density, feeding methods, environmental complexity) to test whether the modified conditions produce fish that show less variation among families in performance in the hatchery than do the standard conditions.

(2) Identify trait variation among families that correlates with their performance in the hatchery:

Test behavioral and physiological traits to determine which ones have the potential to enhance fish growth.

(3) Genome scans:

Conduct genome-wide scans of wild fish and first-generation hatchery fish in order to identify genes that may have responded to selection. Two types of genome scans would be used: gene expression analysis and genome-wide association studies. No additional trapping or hatchery broodstock would be collected to facilitate this project beyond what would be conducted to support existing hatchery programs that would occur regardless of this project.

These actions would support conservation of ESA-listed species considered in the 2020 ESA consultations with National Marine Fisheries Service on the operations and maintenance of the Columbia River System, while also supporting ongoing efforts to mitigate for effects of the FCRPS on fish and wildlife in the mainstem Columbia River and its tributaries pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) (16 U.S.C. (USC) 839 et seq.).

Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

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Project Site Description

Steelhead samples would be collected at Parkdale Hatchery. All laboratory work and genetics data analysis would be conducted at Oregon State University's Aquatic Animal Health Lab and experimental work would be conducted at the Oregon Hatchery Research Center (OHRC), an ODFW facility run in partnership with Oregon State University.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: BPA has determined the proposed activities would have no potential to cause effects to historic properties. The proposed activities would not result in ground disturbance that could potentially impact archaeological resources. No modifications to existing historically built resources are proposed.

2. Geology and Soils

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to geology and soils.

3. Plants (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to vegetation.

4. Wildlife (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to wildlife.

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to water bodies, floodplains, or fish. All research would be conducted on fish that are a part of the normal hatchery production and there would be no additional impact to fish beyond that of the underlying hatchery production activities.

6. Wetlands

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to land use.

9. Visual Quality

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to visual quality.

10. Air Quality

Potential for Significance: No

Explanation: All activities would occur indoors so would not result in any effects to air quality.

11. Noise

Potential for Significance: No or No with Conditions

Explanation: All activities would occur indoors so would not result in any effects to noise.

12. Human Health and Safety

Potential for Significance: No

Explanation: Workers conducting research activities are trained in proper equipment management techniques. This activity is not considered hazardous nor does it result in any health or safety risks to the general public.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation: N/A

Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: All activities would occur at existing facilities; the Oregon State University's Aquatic Animal Health Lab and at the OHRC, an ODFW facility run in partnership with Oregon State University.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: /s/ Ted Gresh January 14, 2021
Ted Gresh, ECF-4 Date
Environmental Protection Specialist