

# Categorical Exclusion Determination

Bonneville Power Administration  
Department of Energy



**Proposed Action:** Kelt Reconditioning and Reproductive Success Evaluation Research

**Project No.:** 2007-401-00

**Project Manager:** Tracy Hauser

**Location:** Benton, Garfield, and Kittitas counties, WA, and Clearwater County, ID

**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:** BPA proposes to fund the Columbia River Inter-Tribal Fish Commission (CRITFC) to implement the Kelt Reconditioning and Reproductive Success Evaluation Research program. To supplement low steelhead populations, the program proposes to evaluate methodologies to produce viable artificially-reconditioned repeat steelhead spawners and to determine the productivity of repeat spawners. Work occurs in both the Yakima and Snake River basins. Steelhead kelts are collected at juvenile bypass facilities in Prosser and Lower Granite dams, and at Dworshak National Fish Hatchery. Experiments are conducted to better understand the survival and rematuration process and investigate optimum management scenarios for reconditioned fish. Project partners include the The Confederated Tribes and Bands of the Yakama Nation, University of Idaho, and the Nez Perce Tribe.

Major components of the action include the following:

***Collection:*** Sample sizes would be somewhat dependent upon run size but the following are forecasted:

- Yakima River – collect 1,000 kelt steelhead at the Chandler irrigation diversion and rear at Prosser Hatchery (Benton Co., WA).
- Yakima River – collect 600 rainbow trout and 900 juvenile steelhead at three locations in Yakima River tributaries for genotype tissue analysis (Yakima Co., WA).
- Snake River – collect 1,000 kelt steelhead primarily at Lower Granite Dam and rear 400 at Nez Perce Tribal Hatchery (Garfield Co., WA) and 600 for the Snake River Kelt Reconditioning Implementation program.
- Clearwater River – collect and rear 200 kelt steelhead at Dworshak National Fish Hatchery for physiology studies (Clearwater Co., ID).

***Collect Biological Data and Tissue Sampling:*** Data such as length, weight, condition, marks present and tag code would be stored in a database. Tissue and blood samples would be stored in vials filled with preservatives for genotyping.

***PIT Tag Adult Steelhead:*** All adult steelhead collected, including kelts, would be scanned for Passive Integrator Transponders (PIT) tags. A PIT tag would be inserted in the fish's pelvic girdle if not present and recorded in a database for identification and biological data cross-referencing.

**Recondition Kelt Steelhead for Long-Term Treatments:** Wild kelt steelhead would be reared at Prosser and Nez Perce Tribal Hatcheries while hatchery fish would be reconditioned at Dworshak National Fish Hatchery. Feed additives such as cyclopeeze and fish oil would be evaluated for their ability to increase fish condition and maturation. Long-term reconditioned fish would be released late in the calendar year, approximately October, to coincide with the equilibrium of hatchery well water temperature and river water temperature.

**Collect Survival, Condition, and Rematuration Data on Reared Kelt Steelhead:** Biological data would be collected from each specimen at the conclusion of rearing to aid in evaluation of the treatment. These data include blood collection, fork length, mid-eye to hypural length, weight, PIT tag number, condition, maturation status, and gender.

**Genotype Tissue Samples from Steelhead and Resident *O. mykiss*:** Because resident trout can contribute to the anadromous cohort from a stream, it is important to attempt to account for juveniles with undetermined lineage by surveying resident populations. Rainbow trout and juvenile steelhead would be collected at three locations in Yakima River tributaries located in Yakima County, WA via backpack electrofishing, seining, trapping, or other suitable means. Scale pattern analysis would be used to estimate age or length frequency analysis would be used to infer age of individuals sampled. Samples would be processed at the Hagerman Fish Culture Experiment Station in Hagerman, ID.

**Collect and Interpret Gamete and Progeny Viability Data from Kelt Steelhead:** Using a treatment group of up to 50 reconditioned steelhead from Dworshak Hatchery, parameters and variables would be measured to assess and compare egg viability from the same experimental fish following maiden and repeat spawning. Additional work would be done in the Cle Elum spawning channel (Kittitas County, WA) where reconditioned kelts would be placed in the channel and allowed to spawn. Spawning success would be evaluated by assigning progeny to adults using genotypes. Data would be interpreted to test the hypothesis that reconditioned kelt steelhead have gamete and progeny viability similar to first spawn fish.

**Implement Snake River Kelt Reconditioning Plan:** The physiology and endocrinology of steelhead kelts would be studied to evaluate the feasibility and success of several research strategies for rehabilitating and handling of steelhead captured at Lower Granite Dam (in Garfield County, WA) or other sites during their downstream migration in the Snake River System. Protocols would be developed and tested that can be used to enhance the collection and transporting of spent spawners, and rehabilitation, to determine the most effective period of time to maximize their ability and contribution to the next spawning generation.

**Findings:** In accordance with Section 1021.410(b) of the Department of Energy's (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, July 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

- (1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
- (2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
- (3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Jennifer Snyder

Jennifer Snyder  
Contract Environmental Protection Specialist  
Flux Resources, LLC

Reviewed by:

/s/ Gene Lynard FOR

Chad Hamel  
Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel

Sarah T. Biegel  
NEPA Compliance Office

Date: July 13, 2018

Attachment(s): Environmental Checklist

# 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.

## Proposed Action: Kelt Reconditioning and Reproductive Success Evaluation Research

### Project Site Description

Kelt steelhead collection, reconditioning (rearing), and research activities would take place within existing hatcheries and man-made channels on the Yakima River in Benton County, WA (Chandler diversion, Prosser Hatchery), on the Snake River in Garfield County, WA (Lower Granite Dam and Nez Perce Tribal Hatchery), and the Clearwater River in Clearwater County, ID (Dworshak National Fish Hatchery). Spawning research would occur within the wetted perimeter of the Cle Elum River in Kittitas County, WA. Both steelhead and rainbow trout would be collected for research purposes from three Yakima River tributaries located in Yakima County, WA.

### Evaluation of Potential Impacts to Environmental Resources

Environmental Resource Impacts	No Potential for Significance	No Potential for Significance, with Conditions
1. <b>Historic and Cultural Resources</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> The project does not involve new construction or excavation of soils. Therefore, no potential to affect historic properties.		
2. <b>Geology and Soils</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Soil disturbance would be minimal, limited to potential minor sedimentation when walking in rivers and streams.		
3. <b>Plants</b> (including federal/state special-status species)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> The project would not remove or disturb vegetation. Therefore, no potential to affect plants.		
4. <b>Wildlife</b> (including federal/state special-status species and habitats)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> The project would increase noise and visual disturbance only temporarily and minimally above ambient levels and would not disturb soil or vegetation. Therefore, negligible effects on wildlife.		

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



Explanation: Effects to water bodies would be negligible, limited to temporary, low-level sedimentation while walking in rivers or streams, and during hatchery water diversion and discharge. The following listed fish occur in the affected area and existing ESA coverage includes:

- Snake River Steelhead, Chinook and Sockeye Salmon (Idaho): ESA Sec 7(a)(2) BO and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) Consultation. "Nine Snake River Steelhead Hatchery Programs and one Kelt Reconditioning Program in Idaho." NMFS determined that the proposed action is not likely to jeopardize the continued existence of the Snake River Basin Steelhead DPS, the Snake River Fall Chinook Salmon ESU, the Spring/Summer Chinook Salmon ESU, or the Sockeye Salmon ESUs, or destroy or adversely modify their designated critical habitat. NMFS Consultation No. WCR-2017-7286, dated December 12, 2017.
- Middle Columbia River and Upper Columbia River Steelhead: NMFS determined that take associated with the study, "Kelt Reconditioning and Reproductive Success Evaluation Research" is permitted in 2018 under the 2014 FCRPS Supplemental Biological Opinion. Determinations by the FCRPS Branch for this research during the 2018 fish passage season and beyond would be made on an annual basis. NMFS Determination of Take for Research Purposes (13-18-CRITFC-49) letter dated February 6, 2018.
- Bull trout are not typically present during collection activities which occur during the summertime because of low-flow conditions and high water temperatures. If a bull trout is captured, it would be immediately released.

6. **Wetlands**



Explanation: None present.

7. **Groundwater and Aquifers**



Explanation: The project would not result in an increase in groundwater use. The work would not change the hydrological regime and therefore, would not affect groundwater discharge.

8. **Land Use and Specially Designated Areas**



Explanation: Land use would not change. The project is not located in a specially designated area or Wild and Scenic River.

9. **Visual Quality**



Explanation: Effects to visual quality would be negligible, and consist of temporary, short-term field activities. There is no new construction, disposal of spoils, or removal of vegetation.

10. **Air Quality**



Explanation: A negligible amount of temporary dust and vehicle emissions could be generated during temporary, short-term field activities.

11. **Noise**



Explanation: The project activities do not involve any new construction or new use of heavy equipment. A negligible amount of temporary dust and vehicle emissions could be generated during temporary, short-term field activities.

12. **Human Health and Safety**



Explanation: The project activities would not mobilize previously undisturbed soils. Therefore, project activities would not uncover contaminated earth, mobilize fuel or chemical leaks, or disturb underground storage tanks.

### **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, if necessary:

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

Explanation, if necessary:

- 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, if necessary:

- 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, if necessary:

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### **Landowner Notification, Involvement, or Coordination**

Description: Where project activities are on public land or facilities (e.g. hatcheries), work is done in coordination with land/facility managers. No special permissions required for work on partnering Indian Reservation lands. If private lands are to be accessed, work would occur only after obtaining landowner approval.

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

Signed: /s/ Jennifer Snyder  
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Flux Resources, LLC

Date: July 13, 2018