

Categorical Exclusion Determination

Bonneville Power Administration

Department of Energy



Proposed Action: Freshwater Mussels Research Program

Project No.: 2002-037-00

Project Manager: Debbie Docherty

Location: Multiple counties (see text below)

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 Confederated Tribes of the Umatilla Indian Reservation (CTUIR) to implement the Freshwater Mussels Research Program. The program proposes to (1) artificially propagate freshwater mussels for reintroduction into the Umatilla River basin and (2) monitor and evaluate the program. Major components of the action appear below.

Mussel Surveys: CTUIR proposes to conduct foot surveys to identify remaining freshwater mussel populations, chiefly in the Umatilla River and tributaries. Additionally, surveys may occur in all counties in CTUIR Ceded Territory in Oregon (Baker, Grant, Morrow Malhuer, Umatilla, Union, Wallowa, Wheeler, and Gillaim Counties), Washington (Asotin, Benton, Columbia, Garfield, Walla Walla, Franklin, and Klickitat Counties), and Idaho (along the border of Canyon, Payette, Owyhee and Washington Counties). Initial survey work will identify sites with mussel presence and potential restoration areas. Follow-up surveys will include quantitative sampling of population size or demographics.

Broodstock Collection: Gravid adult female mussels from the genera *Anodonta*, *Gonidea*, and *Margaritifera* would be collected by hand while snorkeling or wading from various locations on CTUIR ceded land. Female *Margaritifera* or *Anodonta* will be transported CTUIR's Water and Environmental Center (WEC) wet lab in Walla Walla, Washington. Viable glochidia (larvae) will be extracted from *Gonidea* females by non-lethal methods, and the females returned to their original locations.

Mussel Propagation: Larval mussels will be grown on host fish at CTUIR's existing WEC wet lab in Walla Walla. To avoid exposure to pathogens, mussels will be kept in clean well water. After metamorphosis to juvenile stage, mussels will be moved to CTUIR's facility in Mission, Oregon, where they will culture in Umatilla River water for several months to 1 year prior to release into the Umatilla River.

In Situ Survivorship Trials: Propagated juveniles will be placed in the Umatilla basin either in marked quadrats or in small mussel silo cages (diameter 10-12 inches, height 6-8 inches). Silos will be deployed from May to October. For the 2018 field season, the CTUIR proposes to release 10s or possibly a few hundred of any freshwater mussel species into the Umatilla subbasin; however, exact numbers are impossible to predict due to the novelty of mussel cultural methods.

Mussel Salvage and Translocation: Mussel salvage and translocations would occur prior to construction of planned restoration projects or other actions that involve channel dewatering. CTUIR proposes to collect mussels and relocate them to an in-basin site containing similar habitat, following freshwater mussel Best Management Practices (Blevins et al. 2017). CTUIR will evaluate the condition of translocated mussels annually.

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/ Michelle Guay

Michelle Guay
Contract Environmental Protection Specialist
Cor-Source Technology Group

Reviewed by:

/s/ Chad J. Hamel

Chad J. Hamel
Supervisory Environmental Protection Specialist

Concur:

/s/ Stacy L. Mason

Stacy L. Mason
NEPA Compliance Officer

Date: May 1, 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: Freshwater Mussels Research Program

Project Site Description

Mussel surveys, broodstock collection, and mussel salvage and translocation will take place within the wetted perimeter of various streams within the Columbia basin. In situ survivalship trials will also take place within the wetted perimeter of streams, chiefly in the lower and middle Umatilla River. Propagation activities will all take place inside of existing facilities, either at the WEC lab in Walla Walla, Washington or at the mussle culture facility in Mission, Oregon.

Evaluation of Potential Impacts to Environmental Resources

Environmental Resource Impacts	No Potential for Significance	No Potential for Significance, with Conditions
1. Historic and Cultural Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> The project does not involve new construction, or excavation or disposal of soils. Therefore, no potential to affect historic properties.		
2. Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Earth disturbance will be minimal, limited to minor sedimentation when walking in rivers or streams.		
3. Plants (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 effect on plants.		
4. Wildlife (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 minimally above ambient levels, and will not disturb earth or vegetation. Therefore, negligible effects on wildlife. U.S. Fish and Wildlife Service concurred with this determination on May 1, 2018.		
5. Water Bodies, Floodplains, and Fish (including federal/state special-status species and ESUs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Explanation:</u> Effects to water bodies would be minimal, limited to temporary, low-level sedimention while walking in rivers or streams. Listed fish occur in the affected area; however, in a Biological Opinion dated 02/28/2018, National Marine Fisheries Service determined that the action is would not jeopardize listed fish due to the low numbers of mussels released and the low potential for disease transmission or parasitism. Likewise, in a letter of concurrence dated May 1, 2018, U.S. Fish and Wildlife Service concurred that the action is not likely to adversely affect listed bull trout. In-stream work would cause brief, temporary disturbance to listed fish, but not		

to the level of causing injury or death. The action could potentially have a beneficial effect on water bodies and fish, because mussels filter pollutants from the water column. However, this effect would be low, due to the low number of mussels released.

6. **Wetlands**



Explanation: None present.

7. **Groundwater and Aquifers**



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

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 very negligible. There is no new construction, disposal of spoils, or removal of vegetation. The only potential visual impact would be the placement of mussel silos, which measure at most 12 inches wide by 8 inches tall and are installed with no ground disturbance. This would be a negligible, temporary visual impact.

10. **Air Quality**



Explanation: A negligible amount of temporary dust and vehicle emissions could be generated during the work.

11. **Noise**



Explanation: The action does not involve any new construction or new use of heavy equipment. Therefore, there would be only negligible increase in ambient noise.

12. **Human Health and Safety**



Explanation: The work is not likely to mobilize previously undisturbed soils. Therefore, the action 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:

Landowner Notification, Involvement, or Coordination

Description: Where projects are on public land, work is done in coordination with land managers. On private land, CTUIR would access project areas or perform work only after obtaining landowner approval. No special permissions required for work on the Umatilla Reservation.

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

Signed: /s/ Michelle Guay

Michelle Guay

Contract Environmental Protection Specialist

Cor-Source Technology Group

Date: May 1, 2018