DEPARTMENT OF ENERGY

Bonneville Power Administration Kootenai River White Sturgeon and Burbot Hatcheries Project Finding of No Significant Impact

Summary

The Bonneville Power Administration (BPA) is announcing its environmental findings regarding the Kootenai River White Sturgeon and Burbot Hatcheries Project (Proposed Action). BPA is proposing to fund the Kootenai Tribe of Idaho (Tribe) to improve their Kootenai River Native Fish Conservation Aquaculture Program (aquaculture program) which BPA has funded since 1991. The aquaculture program currently propagates Kootenai River white sturgeon, which are listed as endangered under the Endangered Species Act (ESA). The Tribe's aquaculture program currently provides the only significant source of recruitment of juvenile white sturgeon in the Kootenai River. The Tribe proposes to improve the program by upgrading its existing Tribal Hatchery and constructing a new hatchery for the production of Kootenai River white sturgeon and burbot.

BPA prepared a Preliminary Environmental Assessment (EA) (DOE/EA-1901) in February 2013 evaluating the proposed action. Public comment on the preliminary assessment was requested. Based on the analysis in the EA, 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. 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. Comments received on the Preliminary EA as well as the responses to the comments are provided in the Final EA.

The attached Mitigation Action Plan (MAP) lists all of the mitigation measures that BPA and the Tribe are committed to implementing as part of the Proposed Action.

Public Availability

The FONSI will be mailed directly to interested parties, a notification of availability will be mailed to potentially affected parties, and the FONSI will be posted on BPA's website.

Project Background

BPA is proposing to fund the Tribe to improve its aquaculture program, as mitigation for the impacts of Libby Dam under the Northwest Power Act. The U.S. Fish and Wildlife Service (USFWS) listed the Kootenai white sturgeon as endangered under the ESA in 1994. Prior to listing, the Kootenai Tribe initiated a Kootenai sturgeon conservation aquaculture program near Bonners Ferry in 1988 to preserve an adequate demographic and genetic base for a healthy future population until ecosystem-based habitat restoration activities could be implemented. BPA has historically been a source of funding for this program.

Following the listing of Kootenai white sturgeon, the USFWS established the Kootenai River White Sturgeon Recovery Team to advise the USFWS in the development and implementation of a recovery plan. The USFWS completed the Kootenai River White Sturgeon Recovery Plan in 1999, which identified a long-term goal of down-listing and delisting Kootenai white sturgeon when the population becomes self-sustaining. Short-term objectives included reestablishing natural recruitment and preventing extinction through conservation aquaculture.

Burbot were proposed for ESA listing in 2000; however, the USFWS determined that this population was not eligible for listing because it did not comprise a Distinct Population Segment. Although burbot was not ESA-listed, the Tribe, along with the USFWS, agency partners, and additional stakeholders, proposed the Kootenai River drainage as a "pilot project" to develop, implement, and evaluate a Conservation Strategy for Lower Kootenai River Burbot (Conservation Strategy). The resulting Conservation Strategy was developed by the Kootenai Valley Resource Initiative Burbot Subcommittee and formalized through a Memorandum of Understanding signed in spring 2005 by 16 agencies and entities (including BPA). The Tribe's proposed program is intended to produce and release sufficient numbers of hatchery-raised burbot to aid reestablishment (see .

Proposed Action

BPA would fund the Tribe to upgrade its existing Tribal Hatchery for the continued production of juvenile Kootenai white sturgeon. BPA would also fund the Tribe to construct a new Twin Rivers Hatchery to provide the physical space necessary to help address the near-term recovery objective for Kootenai white sturgeon of preserving native genetic and life history diversity available in the remaining wild population, as well as to accommodate increased burbot production to aid their reestablishment in the Kootenai River.

The Tribal Hatchery is located on the Kootenai River about 5 miles west of Bonners Ferry, Idaho. The hatchery upgrades would include a new section of floating dock adjacent to existing dock, a 400-square foot addition to existing boat storage structure to store fish feed and boats, improvements to existing crew quarters, an addition to the vehicle shop and storage bays and enclose existing facility, a 10 horsepower water pump, a water supply intake screen cleaning system, a fire protection/alarm system, insulation and lighting upgrades, installation of sanitary wall panels in wet rooms, and isolation walls for the water treatment electric room. All work would be within the footprint of the existing hatchery facility.

The Twin Rivers Hatchery would be built at the Tribe's Twin Rivers Canyon Resort at the confluence of the Moyie and Kootenai rivers about 5 miles east of Bonner's Ferry, Idaho. The hatchery would be a 10-acre facility with a hatchery building, vehicle maintenance and storage building, outdoor rearing tanks, surface water intakes from the Moyie and Kootenai Rivers, two ground water wells, two settling ponds, three tribal residences, a septic system and drain field, as well as improvements to the access road and an upgrade of a 1.5 mile power line serving the site.

The numbers of fish produced and released from the combined hatcheries would be determined by an Annual Program Review (APR) that would be led by the Tribe and would involve comanagers including Idaho Department of Fish and Game, Montana Fish, Wildlife and Parks, and B.C. Ministry of Forests Lands and Natural Resource Operations. The APR would inform decisions for broodstock management, egg collection, production goals, and monitoring and evaluation activities for the coming year. The APR would support development of proposed production targets that would be confirmed prior to the capture of adult broodstock in coordination with the APR participants including the USFWS and the Recovery Team.

No Action Alternative

Under the No Action Alternative, BPA would not fund the Tribe to upgrade the existing Tribal Hatchery or construct a new hatchery for the production of Kootenai white sturgeon and burbot. The Tribe would continue to operate the existing Tribal Hatchery at the current location at the existing level of white sturgeon production and continue with the current level of burbot production. There would be no changes to the physical extent or current configurations of the facility. The Twin Rivers Canyon Resort would also remain unchanged and continue to function as a recreational campground.

Significance of the Potential Impacts of the Proposed Action

To determine whether the Proposed Action or the No Action Alternative has the potential to cause significant environmental effects, the potential impacts of each alternative on human and natural resources were evaluated. This impact analysis for the Proposed Action is presented in Chapter 3 of the EA and summarized below. To evaluate potential impacts from construction, operation, and maintenance activities, four impact levels were used (i.e., high, moderate, low, and no impact). These impact levels are based on the considerations of context and intensity defined in the Council of Environmental Quality regulations (40 Code of Federal Regulations 1508.27). High impacts could be considered significant impacts, while moderate and low impacts would 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.

Land Use and Recreation

Impacts on land use and recreation would be low -to -moderate.

- No change in land use would occur at the Tribal Hatchery, as all work would be within the existing hatchery footprint.
- Construction activities for the Twin River Hatchery would close access and use of the Tribe's Twin Rivers Canyon Resort for one season.
- Although 10 acres of the Tribe's 50-acre Twin Rivers Canyon Resort would be permanently converted to hatchery facilities, the remaining 40-acres would continue to provide camping, river access and recreational uses.

Vegetation and Wetlands

Impacts on Vegetation would be moderate; Wetland impacts would be low.

- No vegetation or wetlands would be impacted by upgrades at the existing Tribal Hatchery.
- Although the Twin Rivers Hatchery would require removal of 66 mature trees, and 5 acres of shrubs and grassy area, the vegetation is typical of the area and 100 saplings and other shrubs would be planted following construction.
- About 0.3 acre of permanent wetland impact and 0.4 acre of temporary impact would occur to a 4.6 acre wetland; erosion control measures to avoid sedimentation in wetlands would be used, permits from the U.S. Army Corps of Engineers (Corps) would be obtained, as appropriate, and work would comply with any mitigation required by the Corps.

Floodplains

Impacts on floodplains would be low.

• No impacts would occur at the Tribal Hatchery and 0.01 acre of floodplain would be impacted for construction of the Twin Rivers Hatchery.

Geology and Soils

Impacts on geology and soils would be low.

- Seismic criteria incorporated into design of both hatcheries would minimize impacts from seismic ground shaking.
- Potential sedimentation impacts due to soil disturbance, vegetation removal and grading would be minimized with mitigation measures and Best Management Practices (BMPs).

Water Quantity and Water Quality

Impacts on water quantity and water quality would be low.

- Potential surface water impacts at either hatchery due to construction activities, such as turbidity or inadvertent spill contamination, would be mitigated with BMPs.
- Surface water withdraws from the Kootenai and Moyie Rivers would be a fraction of average water flows.
- Effluent would be filtered through settling ponds prior to discharge.

Visual Resources

Impacts on visual resources would be low -to -moderate.

- Upgrades to the Tribal Hatchery would be visually consistent with the existing facilities.
- Visual impacts associated with construction equipment and activity at the Twin Rivers site would not be noticeable to recreationists because the resort would be closed during construction.
- Although the hatchery would cause permanent visual changes at the Twin Rivers Resort, recreationists' views would be partially screened by plantings and the facility would not be easily visible from surrounding residences.

Fish and Wildlife

Impacts on fish and wildlife would be low -to -moderate.

- Turbidity, noise, and accidental spills would be minimized with appropriate in-work windows and sediment and spill control mitigations.
- Catching and releasing fish would follow appropriate permit and handing protocols.
- Water pipelines would result in minor in-water habitat loss, including bull trout habitat, in the Moyie and Kootenai rivers.
- Impacts from the release of additional fish into the ecosystem would be managed through monitoring and evaluation conducted by the Tribe, IDFG, BC MFNLRO, and MFWP and USFWS consultation.

- Potential impacts from transporting adult sturgeon to the Twin Rivers Hatchery from the Tribal Hatchery via truck would be minimized by mitigation measures agreed to in the Tribe's Section 10 permit.
- Some loss, modification, and degradation of wildlife habitat would occur from tree and vegetation removal at the Twin Rivers Hatchery site, as well as along the 1.5 mile power line upgrade. However, no ESA-listed wildlife species would be impacted and tree planting would lessen habitat impacts.

Cultural Resources

Impacts on cultural resources would be low.

• No known resources that are eligible for listing in the National Register of Historic Places are located within the project area, and based on inventories conducted, the likelihood of encountering additional unknown cultural sites is low.

Socioeconomics and Environmental Justice

Impacts on socioeconomics and environmental justice would be low.

- Existing temporary lodging would accommodate the approximate 20 construction workers.
- The four additional full-time workers would have little effect on the local population and would likely live out of the project area or at houses at the hatcheries.
- Potential increases in local jobs and local expenditures would provide a slight benefit to the local economy.
- No environmental justice populations would be disproportionately affected.

Noise

Impacts from increased noise levels would be low -to -moderate.

- The closest residences are more than 3,000 feet from the proposed construction zone.
- Impacts to recreationalists from operation of equipment would be mitigated by the use of acoustical enclosures.

Transportation

Impacts on transportation would be low.

- Impacts on transportation from increased traffic generated by construction vehicles carrying construction materials would be minor and temporary, and any traffic delays would be brief and infrequent.
- Daily trips along Highway 2 generated by staff traveling to and from work each day and trips to move adult sturgeon between hatchery sites would be infrequent compared to the high-volume of traffic along Highway 2.

Air Quality

Impacts on air quality would be low.

- Construction activities could increase dust and particulate levels, but effects would be temporary and localized.
- Vehicle emissions from employee traffic and fish transport would be minor and localized.

Climate Change

Impacts on climate change would be low.

- Greenhouse gas emissions from construction and vehicle emissions would occur, but would be a fraction of Council on Environmental Quality's evaluation threshold of 25,000 tons per year of carbon dioxide equivalent.
- Decreases in water supply caused by climate change would be avoided using the multiple water sources available at the site.

Determination

Based on the information in the EA, as summarized here, BPA has determined that the Proposed Action is not a major federal action that significantly affects the quality of the human environment, within the meaning of NEPA, 42 United States Code 4321 *et seq*. Therefore, preparation of an EIS is not required, and BPA is issuing this FONSI.

Issued in Portland, Oregon

/s/ F. Lorrane Bodi 5/15/2013
F. Lorraine Bodi, Vice President Date
Environment, Fish and Wildlife

Summary

This Mitigation Action Plan (MAP) is referenced in the Finding of No Significant Impact (FONSI) for the Kootenai River White Sturgeon and Burbot Hatcheries Project (Department of Energy Environmental Assessment-1901). This MAP includes all of the mitigation measures recommended in the Final Environmental Assessment (EA) to mitigate adverse environmental impacts. It includes some measures that are essential to render the impacts of the Proposed Action not significant and other measures that will decrease impacts that did not reach a level to be considered significant.

Mitigation has and will occur throughout the entire timeframe of the project. Mitigation has occurred during the planning and design phase, and it will continue during pre-construction planning, construction, and after construction is completed (when the site is being stabilized and revegetated). The purpose of this MAP is to explain how and when the mitigation measures were or will be implemented.

The implementation of this project will be overseen by the Kootenai Tribe of Idaho and built by contractors. To ensure that the contractor will implement mitigation measures, the relevant portions of this MAP will be included in the construction contract specifications (the directions to the contractor) for the project. This will obligate the contractor to implement the mitigation measures that relate to their responsibilities during construction and post-construction.

If you have general questions about the project, contact the Project Manager, Jan Brady, at 503-230-4514 or jebrady@bpa.gov. If you have questions about the MAP, contact the Environmental Lead, Ted Gresh, at 503-230-5756 or esgresh@bpa.gov. This MAP may be amended if revisions are needed due to new information or if there are any significant project changes.

Environmental Resource	Mitigation Measures	Timing of Implementation
Land Use and Recreation		
LUR-1	Post a construction schedule in the local newspapers, public places (such as libraries, post offices, and local government buildings), and at the Twin Rivers Canyon Resort to inform recreationists of construction activities and campground closures.	Pre-Construction During Construction
LUR-2	Provide contact information of contractor liaisons and Tribal staff at the construction site for any concerns or complaints during construction.	During Construction
LUR-3	Install permanent signage at the Twin Rivers Canyon Resort describing efforts to help restore the native fish of the Kootenai River.	Post Construction
Vegetation and Wetlands		
VW-1	Plant 100 new trees in and around the Twin Rivers Resort and Hatchery to replace the trees that would be removed.	
VW-2	Restrict activity and traffic to construction areas to limit unnecessary disturbance of native plant communities and reduce the spread of non-native species and noxious weeds.	
VW-3	Identify clearing limits on all construction drawings and on site using high-visibility construction fencing. Design/Pre-Construction	
VW-4	Revegetate temporarily disturbed areas (including wetlands) with appropriate native species using seed mixes that meet the requirements of federal, state, and county noxious control regulations and guidelines.	

VW-5	Take actions to control potential noxious weed infestations (treat known infestations before ground disturbance, ensure construction equipment is free of weeds and weed seeds, clean equipment and vehicles after working in infested areas, maintain weed-free staging areas, implement post-construction noxious weed as-needed).			
VW-6	Implement BMPs during construction to minimize adverse effects on wetlands (e.g., limit wetland disturbance areas; flag or stake wetland boundaries; refuel machinery and store fuels away from wetlands; develop and implement erosion and sedimentation control plan).	During Construction		
Floodplains				
FP-1	Deposit and stabilize all excavated material not reused in an upland area outside of floodplains.	During Construction		
FP-2	Install erosion-control measures prior to work in or near floodplains. During Control measures prior to work in or near floodplains.			
FP-3	Avoid construction within floodplains to protect floodplain function, where possible.	Design/Pre-Construction		
Geology and Soils				
GS-1	Prepare and implement an Erosion and Sedimentation Control Stormwater Pollution Prevention Plan for construction activities to minimize erosion and soil loss (e.g., use silt fences, straw bales, interceptor trenches or other perimeter sediment management devices that would be maintained as necessary throughout construction).	Pre-Construction During Construction		
GS-2	Use proper seismic and septic system location-specific designs.	Design/Pre-Construction		
GS-3	Use appropriate shoring for all excavation conducted during facility construction as required by applicable federal, tribal, state and local regulations.			

GS-4	Conduct peak construction activities during the dry season (between June 1 and November 1), as much as possible, to minimize erosion, sedimentation, and soil compaction.		
GS-5	Locate staging areas in previously disturbed or graveled areas to minimize soil and vegetation disturbance, where practicable. During Constru		
GS-6	Design and construct access roads to minimize drainage from the road surface directly into surface waters and direct sediment-laden waters into vegetated areas.	Design During Construction	
GS-7	Reseed disturbed areas and monitor seed germination and implement contingency measures as necessary until stabilization has been achieved.	Post Construction	
GS-8	Inspect and maintain access roads and other facilities after construction to ensure proper function and nominal erosion levels.	Post Construction	
GS-9	Implement dust abatement during construction.	During Construction	
Water Quantity and Water Quality			
WQ-1	Prepare and implement a Stormwater Pollution Prevention Plan for construction activities to minimize erosion and soil loss (e.g., use silt fences, straw bales, interceptor trenches or other perimeter sediment management devices; maintain as necessary throughout construction).	Pre-Construction During Construction	
WQ-2	Implement measures to prevent stockpile erosion during rain events (e.g., surround piles with compost berms, cover piles with impervious materials or other equally effective methods).	During Construction	
WQ-3	Implement any mitigation measures specified in the Clean Water Act Section 404 permit(s) issued by the U.S. Army Corps of Engineers and the Section 401 water quality certification issued by Idaho Department of Environmental Quality.	During Construction Post Construction	
WQ-4	Follow the Idaho Department of Environmental Quality's Catalog of Stormwater Best Management Practices for Idaho Cities and Counties (IDEQ, 2005).	During Construction Post Construction	

WQ-5	Prevent construction vehicles from tracking sediment offsite or onto roadways.	During Construction		
WQ-6	Install removable pads or mats to prevent soil compaction in all temporary construction access points and staging areas in riparian or wetland areas.	During Construction		
WQ-7	Identify construction and staging areas with orange plastic fencing or similar methods to delineate disturbance areas.	Pre-Construction		
WQ-8	Minimize staging areas to the size necessary to practically conduct the work and locate in previously disturbed areas at least 150 feet from any stream or wetland.	During Construction		
WQ-9	Develop and implement a Spill Prevention, Control and Countermeasure Plan to minimize the potential for spills of hazardous material and protect public safety, which includes provisions for storage of hazardous materials and refueling of construction equipment outside of riparian zones, a spill containment and recovery plan, and notification and activation protocols.	Pre-Construction During Construction		
WQ-10	Store spill containment kits at each work site and the construction crews will be trained in proper use.			
WQ-11	Wash all equipment, prior to mobilizing to the project site, to minimize the introduction of foreign materials and fluids to the project site. All equipment will be free of oil, hydraulic fluid, and diesel fuel leaks.			
WQ-12	Inspect all equipment to ensure it is free of oil, hydraulic fluid, and diesel fuel leaks. Any detected leaks must be repaired in the vehicle staging area before the vehicle resumes operation. Inspections must be documented in a record that is available for review on request.	During Construction		

WQ-13	Locate vehicle staging, cleaning, maintenance, refueling, fuel storage areas, and sanitary facilities, such as chemical toilets, at least 150 feet from streams or wetlands.	During Construction		
WQ-14	Clean all equipment operated instream before beginning operations below the bankfull elevation to remove all external oil, grease and dirt. All power equipment within 150 feet of the water will be inspected daily for fluid leaks.	During Construction		
WQ-15	Diaper any stationary power equipment (e.g., generators) operated within 150 feet of any stream, water body or wetland to prevent leaks.	During Construction		
WQ-16	Store all fuel and lubricants, as well as potentially hazardous materials necessary for hatchery operations, in containers and areas that conform to applicable Tribal, federal, state and local regulations.	During Construction		
WQ-17	Isolate in-water work areas (Kootenai and Moyie intake sites, and pipelines) using bulk bags, floating silt curtains, and sheet pile coffer dams around the work areas.	During Construction		
WQ-18	Fill bulk bags with river sand and gravels from an adjacent upland source.	During Construction		
WQ-19	Ensure that the silt curtains, bulk bags, and sheet pile coffer dams remain in place for the duration of work. Remove to introduce free flowing water in a controlled manner and at low velocities (approximately 3 feet/second) to minimize turbidity.	During Construction		
Visual Resources				
VR-1	Close the Twin Rivers Canyon Resort for one season during the summer of 2013.	During Construction		
VR-2	Restore disturbed vegetation as soon as possible after construction is completed.	Post Construction		
VR-3	Retain as many trees as possible to limit changes in the observable character of the landscape.	changes in the observable During Construction		
VR-4	Paint all new structures a non-reflective color that blends with the natural environment. During Construction			

VR-5	Replant 100 trees around the Twin Rivers Canyon Resort to replace the trees that will be removed. Post Construction		
Fish and Wildlife			
FW-1	Place a wood cushion between any pile and hammer to reduce noise above water, and install a bubble curtain to lessen noise below the surface.		
FW-2	Implement all terms and conditions included in the Tribe's ESA Section 10 Permit issued by the USFWS. Implement required BMPs associated with the Section 404 Clean Water Act permit.	During Construction	
FW-3	Implement the proposed Monitoring and Evaluation Plan which includes the Annual Program Review process.	Operation	
FW-4	Use settling ponds to remove organic waste (i.e., uneaten food and feces) from the proposed hatchery water to minimize discharge of these substances to the receiving waters.		
FW-5	Ensure that the existing and proposed hatchery facilities are operating in compliance with all applicable fish health guidelines and facility operation standards and protocols by conducting annual audits and producing reports that indicate the level of compliance with applicable standards and criteria.	Operation	
FW-6	Plant 100 new trees to replace those that would be removed to accommodate the new hatchery facility.	Post Construction	
FW-7	Avoid clearing native habitats during the avian breeding season (March through July). If clearing cannot be avoided during these times, survey the clearing zone prior to ground-disturbing activity to determine whether any active nests of migratory birds are present. If active nests are detected, develop a plan to avoid impacts until young have fledged.	During Construction	

Cultural Resources		
CR-1	Use appropriate BMPs including the preparation and use of an Inadvertent Discovery Plan, which would establish procedures to deal with unanticipated discovery of cultural resources before and during construction to minimize impacts. The plan, among other provisions, would require immediate work stoppage and appropriate notification in the event of the discovery of previously unknown cultural or historic materials.	Design/Pre-Construction During Construction
Socioeconomics and Environmental Justice		
SEJ-1	Most socioeconomic impacts would be indiscernible and potentially positive and no impacts on environmental justice populations are expected. Therefore, no mitigation for socioeconomics or environmental justice populations is anticipated.	N/A
Noise		
N-1	Employ a liaison, who would be available to provide information, answer questions, and address concerns during project construction.	During Construction
N-2	Schedule all construction work during daylight hours.	During Construction
N-3	Require sound-control devices on all construction equipment powered by gasoline or diesel engines that are at least as effective as those originally provided by the manufacturer.	During Construction
N-4	Operate and maintain all construction equipment to minimize noise generation.	During Construction
Transportation		

T-1	Keep construction activities and equipment clear of residential driveways, to the greatest extent possible.	During Construction	
T-2	Employ traffic control flaggers and post signs along roads warning of construction activity and merging traffic for temporary interruptions of traffic, where needed.	During Construction	
Air Quality			
AQ-1	Transport all vegetation or other debris associated with construction clearing to an approved landfill.	During Construction	
AQ-2	Use water trucks to control dust during construction, as needed.	During Construction	
AQ-3	Ensure that all vehicle engines are maintained in good operating condition to minimize exhaust emissions.	During Construction	
Climate Change			
CC-1	Implement vehicle idling restrictions.	During Construction	
CC-2	Encourage carpooling and the use of shuttle vans among construction workers to minimize construction-related traffic and associated emissions.	During Construction	
CC-3	Locate staging areas in previously disturbed or graveled areas, where practicable, to minimize soil and vegetation disturbance.	During Construction	
CC-4	Encourage the use of the proper size of equipment for each job. During Construct		
CC-5	Use alternative fuels for stationary equipment at the construction sites, such as propane, or use electrical power, where practicable.		
CC-6	Reduce electricity use in the construction office by using compact fluorescent bulbs and turning off computers and other electronic equipment every night. During Constru		
CC-7	Recycle or salvage nonhazardous construction and demolition debris, where practicable. During Construction		