

**Walla Walla Basin Spring Chinook Hatchery Program
Mitigation Action Plan
August 2018**

Implementation plans, monitoring, mitigation	Project phase	Responsibility		
		BPA	Contractor	CTUIR
General				
Meet all applicable permit regulations. Incorporate industry standard Best Management Practices (BMPs) for erosion control, hazardous material handling, waste management, water quality control, dust control, weed management, fire prevention, and work-hour and noise considerations. Incorporate measures such as retaining vegetation and landscaping with native plants.	Design and construction	X	X	
Comply with applicable regulations and permits [Clean Water Act, National Pollutant Discharge Elimination System (NPDES), Floodplain Development, surface water right permits, etc.]	Design, construction, operations	X	X	X
Water Supply				
Install a flow meter to ensure surface water diversions are consistent with the hatchery's water rights.	Design, construction, operations	X	X	X
On a daily basis, electronically monitor flows as recorded at a new gauge planned to be installed by OWRD near Harris Park. Operate the pumpback system as needed to return hatchery process water to the intake/discharge structure in amounts sufficient to maintain mandated instream flows.	Operations			X
Curtail operation of the juvenile fish bypass during the few days per year when flows are low enough that use of the pumpback system would not maintain minimum instream flows.	Operations			X
Water Quality				
For the in-water work, install a temporary cofferdam, remove and relocate fish, and de-water the work area as necessary.	Construction	X	X	X
Limit work within the stream channel to the in-water work period (July 1 through August 15) established by ODFW.	Construction	X	X	
To the extent possible, conduct ground-disturbing construction activities during the dry season (between June 1 and November 1).	Construction	X	X	
Minimize the size of the construction disturbance area and the amount of vegetation removed to the greatest extent possible.	Design and construction	X	X	
Visibly mark staging areas and clearing or disturbance limits with orange plastic fencing or similar methods.	Construction	X	X	
Maintain consistency with the turbidity standards outlined in Oregon Administrative Rule 340-041-0036 through the use of erosion control methods such as filter bags, sediment traps or catch basins, vegetative strips, berms, jersey barriers, fiber blankets, bonded fiber matrices, geotextiles, mulches or compost, wattles and silt fences.	Construction	X	X	
Keep temporary erosion controls that are identified on project drawings in place until construction is completed and the site is restored.	Construction	X	X	
During construction, visually inspect all erosion controls daily to ensure they are working adequately. If inspection shows that the erosion controls are ineffective, mobilize work crews immediately to make repairs or to install replacements or additional controls as necessary.	Construction	X	X	
Remove sediment from control devices once it has reached one-third of the exposed height of the control.	Construction		X	

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Implement a spill prevention and response plan that requires storage of fuel and other potential pollutants in a secure location at least 150 feet from water bodies; ensures that spill containment and cleanup materials are readily available on site and restocked within 24 hours, if used; and ensures that, in the event of a spill, contractors are trained to immediately contain the spill, eliminate the source, and deploy appropriate measures to clean and dispose of spilled materials in accordance with federal, state, and local regulations.	Construction	X	X	
Do not operate machinery, construction vehicles, or equipment in the river unless specifically authorized by a permit.	Construction	X	X	
Use eco-friendly hydraulic fluids in vehicles used for instream work.	Construction	X	X	
Inspect all equipment daily for fuel, oil, or hydraulic leaks, and maintain vehicles to prevent any of these fluids from entering the river.	Construction	X	X	
Restrict refueling and servicing operations to locations where any spilled material would not enter natural or human-made drainage conveyances, and that would be at least 150 feet from the river.	Construction	X	X	
Use pumps, funnels, absorbent pads, and drip pans when fueling or servicing vehicles.	Construction	X	X	
Store, fuel, and maintain vehicles and equipment in designated staging areas located a minimum of 150 feet from the river.	Construction	X	X	
Monitor discharges from the hatchery for temperature, total suspended solids, formalin, dissolved oxygen, and other parameters as required by conditions of any applicable NPDES permit, and report results as specified in the permit.	Operations			X
Store chemicals in areas designed to contain the chemical in the event of a spill.	Operations			X
Dispose any used absorbent materials containing controlled chemicals consistent with the Material Safety Data Sheet and applicable federal, state, and local regulations.	Operations			X
Train staff in the proper use, handling, storage, and disposal of chemicals and hazardous materials used at the hatchery.	Operations			X
Ensure stormwater swales and other means to divert stormwater from the river are functioning properly.	Operations			X
Fish and Aquatic Habitat				
Isolate in-water work areas and remove and relocate fish from those areas as necessary consistent with approved state and federal protocols for this practice, including: - Conduct in-water work during the July 1 to August 15 in-water work window. - Use low-impact methods to remove fish (e.g., herding of fish using seines) - Apply the most protective available protocols for electrofishing and fish handling (e.g., NMFS 2000).	Construction	X	X	X
Use construction best management practices to limit turbidity impacts on surface waters to no more than a 10% cumulative increase over the baseline turbidity level, as measured relative to a control point immediately upstream of construction.	Construction	X	X	
Use best management practices during construction consistent with USFWS recommendations for lampreys (USFWS 2010).	Construction	X	X	
Monitor instream flows against minimum instream flow requirements.	Operations			X

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Collect broodstock at Nursery Bridge in accordance with timing and other conditions as required by NMFS and USFWS. These include: --Develop an Operations Plan for broodstock collection, to be approved by USFWS, that will minimize effects on bull trout migration. - Minimize operation of the collection trap when water temperatures increase and approach 15°C, if bull trout or steelhead are present. - Remove and release species other than spring Chinook from the collection trap as quickly as practicable, unless specific permits are acquired to cover collection of other species.	Operations			X
Establish a monitoring program, in coordination with USFWS, to evaluate bull trout passage during the first 4 years of operation of the Nursery Bridge trap for broodstock collection. The monitoring should identify any sub adult or adult passage problems that could be caused by changes in ladder operations for trapping. Adaptive management procedures will be used to adjust ladder operations as needed if serious fish passage problems are identified.				
Tag Walla Walla spring Chinook and monitor out-of-basin straying through the existing Walla Walla River Basin Monitoring and Evaluation Program (BPA Project No. 2000-039-00). If straying rates exceed acceptable thresholds into the Tucannon River, reduce hatchery production to decrease the total number of hatchery-origin adults.	Operations			X
Vegetation and Noxious Weeds				
Once the final design and locations of the hatchery facilities are determined and before construction begins, in cooperation with Umatilla County, survey all areas of proposed ground disturbance for noxious weeds, including structure footprints, construction equipment access routes, and equipment/material staging areas.	Pre-construction	X		
Identify locations and densities of noxious weed species found, and identify those species that pose the highest risk of spreading to other areas on or adjacent to the site.	Pre-construction	X	X	
Consult appropriate staff from CTUIR, Umatilla County Weed Control department, or the ODA Noxious Weed Program to prioritize weed control activities on the site and to determine the most effective and practicable actions to control the spread of such weeds before, during, and after construction.	Design, construction, operations	X		X
Establish a vehicle and equipment wash station near where pavement ends and the construction access road begins- Use it to clean soil-disturbing equipment and soil- and debris-hauling vehicles prior to leaving the work area. Ensure this equipment is clean before entering the county.	Construction	X	X	
Prohibit discharge of vehicle wash water into any stream or water body.	Construction	X	X	
Limit construction activities to the area needed to work effectively in order to disturb native or desirable plant communities as little as possible.	Construction	X	X	
Obtain rock, fill, and erosion control materials such as straw bales from weed-free sources to the extent practicable.	Construction	X	X	
Educate and train workers to ensure practices are in place to minimize the spread of weeds.	Construction and operations	X	X	X
Reseed or replant all disturbed areas after construction, at the appropriate time period for germination or effective growth, with a drought-tolerant native seed mix or plants from CTUIR nursery.	Post-Construction		X	
Replant any riparian vegetation disturbed during construction with native species.	Post-Construction		X	

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Monitor seeded and planted areas with at least three field visits per year until disturbed areas are stabilized (defined as at least 70% cover by native or acceptable non-native species) and reseed or replant if necessary to ensure native vegetation is established.	Post-Construction		X	
One year after construction, in cooperation with Umatilla County, conduct a weed survey of all areas disturbed by construction to determine if there are new weed infestations; implement appropriate control measures as needed.	Operations	X		X
Socioeconomics/Environmental Justice				
Use standard practices to avoid risks to public health and safety, including preparation of a Spill Prevention and Response Plan and proper use and disposal of chemicals and hazardous substances during construction, operation, and maintenance of the proposed facility.	Construction and operations		X	X
Work with the states of Oregon and Washington to provide information about access to fishing sites.	Operations			X
Educate tribal fishers on their rights of access to fishing sites on private land, and encourage them to work with individual landowners to determine the landowner's preferences regarding access.	Operations			X
Cultural Resources				
Because there are many traditional use areas in the vicinity and artifacts have been recovered nearby, monitor the ground-disturbing portions of the project using cultural resource personnel from CTUIR.	Construction			X
If artifacts are found during construction, cease work in the area until it can be assessed by professional cultural resources staff in consultation with BPA, the State Historic Preservation Office (SHPO), and the CTUIR.	Construction	X	X	X
If human remains are inadvertently discovered, cease all work and contact law enforcement, BPA, SHPO, and the CTUIR immediately.	Construction	X	X	X
Wildlife				
Do not clear vegetation during the migratory bird nesting season (approximately March 15 to August 15).	Construction	X	X	
Air Quality				
Sequence and schedule work to reduce the amount of bare soil exposed to wind erosion, as appropriate.	Construction	X	X	
Do not apply dust-abatement additives and stabilization chemicals (typically magnesium chloride, calcium chloride salts, or ligninsulfonate) within at least 25 feet of the river channel (distances might be greater where vegetation is sparse), and apply them so as to minimize the likelihood that they would enter the river.	Construction	X	X	
Do not use petroleum-based products for dust abatement.	Construction	X	X	
Avoid application of dust abatement chemicals during or just before wet weather, and in areas that could result in unfiltered delivery of the dust abatement materials to the river.	Construction	X	X	
Ensure spill containment equipment is available during application of dust abatement chemicals.	Construction	X	X	
Maintain motorized equipment used for construction and operation to minimize emissions.	Construction and operations		X	X
Noise				
Provide the construction schedule to residents of the property to the west of the South Fork facility and other interested parties to inform them of when they might experience construction-related noise.	Construction		X	
Limit construction to daylight hours as much as possible.	Construction	X	X	
Turn off construction equipment when not in use for prolonged periods.	Construction		X	
Ensure all construction equipment is equipped with mufflers.	Construction	X	X	
Operate and maintain all equipment to minimize noise.	Construction	X	X	

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Visual Quality/ Recreation				
Conduct construction work during daylight hours as much as possible, to avoid the use of nighttime illumination of work areas.	Construction	X	X	
Require contractors to maintain clean construction sites.	Construction	X	X	
Use dust abatement measures as described above under Air Quality to avoid impacts to users of South Fork Walla Walla Road.	Construction	X	X	
Reseed or replant disturbed areas with appropriate vegetation and inspect the areas periodically as described above under Vegetation and Noxious Weeds.	Post-Construction	X	X	