Resource	Implementation plans, monitoring, mitigation	Responsibility and project phase
General	Facility design and construction will meet all applicable permit regulations (except for the Gold Creek site, all designs and permits are in development at this time). Construction will 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. Site design will incorporate measures such as retaining riparian vegetation and landscaping with native plants.	Yakama Nation Design and construction
	All work will comply with applicable regulations and permits [Joint Aquatic Resources Permit Application (JARPA)/Clean Water Act, National Pollutant Discharge Elimination System (NPDES), Floodplain Development, Shoreline Management, Hydraulic Permit Application (HPA), ground and surface water right permits, etc.]	Yakama Nation Design and construction
Water Quality	Small numbers of coho smolts will be acclimated and released from multiple sites to dilute the nutrient loads in streams.	Yakama Nation Design and operations
	Ponds with flow rates that are higher than those used in constructed regional fish facilities will be used so that there is substantial dilution of nutrients in the discharges.	Yakama Nation Design
	Smolts will be acclimated in large, natural ponds; their higher water volumes provide greater dilution of fish feed and wastes and buffer nutrient loading to the receiving stream.	Yakama Nation Design and operations
	Fish food that minimizes phosphorus concentrations in discharges will be used. Phosphorus levels in fish food will be below 1.42% (highly digestible).	Yakama Nation Operations
	Sediments will be periodically removed from some acclimation ponds to eliminate potential long-term accumulation of nutrients.	Yakama Nation Operations
	Water from the George/Natapoc hatchery site will be treated in accordance with the Natapoc Hatchery Discharge Treatment Plan to be finalized in consultation with the Washington Department of Ecology as part of the water quality permitting process.	Yakama Nation Design
Surface and Ground-water Rights	Groundwater sources will be placed where local impacts to surface water that are caused by ground-water level changes in aquifers that are in hydraulic continuity with surface water are minimized.	Yakama Nation Design
	Groundwater withdrawals will be located as close as possible to the surface water body and as far from existing senior groundwater users as feasible to reduce the size and magnitude of the drawdown cone from the site.	Yakama Nation Design
	Disturbance of the stream or side channel bottom will be minimized to the maximum extent possible to reduce the potential impacts to the hydraulic continuity between the surface water and shallow groundwater.	Yakama Nation Construction

Resource	Implementation plans, monitoring, mitigation	Responsibility and project phase
Surface and Ground-water Rights	Surface water withdrawals will be located where existing senior rights, including in-stream flow rights, will not be impacted.	Yakama Nation Design
Fish and Aquatic Habitat	Construction, operations and maintenance (O&M), and monitoring and evaluation activities (M&E) shall comply with all terms and conditions of Incidental Take Permits issued by the National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS) for this program. The Yakama Nation will notify BPA and the appropriate agency immediately of any excess take of listed fish and will follow that agency's subsequent direction. Monitoring reports will be submitted to NMFS and USFWS annually.	Yakama Nation and BPA Construction and operations
	Instream structures and screens will meet applicable NMFS and USFWS design requirements.	Yakama Nation Design
	Timing and methods of construction will be coordinated with resource agencies to minimize disturbance to Endangered Species Act (ESA)-listed species and life-stages. All in-water work window restrictions will be observed.	Yakama Nation Construction
	In-water construction areas will be isolated by the placement of cofferdams at the inlet and outlet consisting of gravel-filled bags and plastic sheeting to prevent water and fish from entering the work area. Qualified fish biologists will capture and safely move food fish, game fish, and other fish life from the impounded area as it becomes de-watered. The pond(s) will be dewatered using screened pumps, after fish have been removed and before excavation begins.	Yakama Nation Construction
	Discharge of sediment will be limited or prevented by implementing these measures: • A temporary barrier will be used to prevent backwater from entering the work area. • Before release of water flow to the project area, any sediment-laden water will be pumped out of the project area and will not be allowed to flow back into surface streams. • When flow is returned to the active channel, the sediment plume will not be visible above background turbidity 150 feet downstream of the project. • New water channels will be lined with gravel and rock. • New ponds will be filled slowly to avoid suspending and mobilizing sediments. • Banks will be restored and replanted, trees will be avoided, and any habitat structures that must be moved (large rocks or large woody debris) will be re-installed immediately up- or downstream of the disturbance as feasible.	Yakama Nation Construction
	The USFWS Best Management Practices to Minimize Adverse Effects to Pacific Lamprey will be followed.	Yakama Nation Construction
	Barrier nets will be used at acclimation sites where ESA-listed fish are not found to minimize premature escape of coho salmon.	Yakama Nation Operations

Resource	Implementation plans, monitoring, mitigation	Responsibility and project phase
Fish and Aquatic Habitat	Where ESA-listed fish are known to occupy nearby habitat, seine nets will be used at acclimation sites to partition off a portion of a water body while allowing free upstream and downstream passage of ESA-listed fish to available habitat. In areas where emergent spring Chinook or bull trout fry could be present, use of fine seine mesh to exclude fry from enclosed areas will reduce predation. Seines will be installed in a manner that excludes fry from the coho acclimation area by moving out from the bank to encapsulate the rearing area. The enclosed area would be snorkeled to verify that no ESA-listed fish are present before hatchery coho are added.	Yakama Nation Operations
	Seine or barrier nets will be removed when coho reach a size that ensures most are ready to migrate to reduce interactions with other fish.	Yakama Nation Operations
	Populations of sensitive fish species will be monitored to establish baseline levels. As the coho project moves into the natural production phases, ESA-listed and other sensitive fish populations will continue to be monitored to determine if their numbers are decreasing. If so, the Yakama Nation will initiate studies to determine if the decreasing numbers are due to predation or competition by naturally produced coho. If studies indicate that coho are adversely affecting listed fish, the program will be modified in consultation with regulatory agencies and other parties as appropriate.	Yakama Nation and BPA Operations
Wildlife, Plants, and Terrestrial Habitat	Project features such as new ponds and side channels will be designed to be as natural as possible and in most cases are in areas where forested habitat will not be cleared or removed.	Yakama Nation Design and construction
	Few if any large trees will be removed to avoid or minimize direct effects to tree-nesting bat species or birds such as diurnal raptors, owls, woodpeckers, and passerines.	Yakama Nation Design and construction
	If large trees must be removed at the Tall Timber acclimation site, a qualified biologist will confirm the presence or absence of spotted owl nest activity in the trees; if any nesting activity is found, BPA will reinitiate consultation with USFWS.	Yakama Nation and BPA Design and construction
	Large pumps and generators will be enclosed in noise-muffling structures to eliminate disturbance to wildlife.	Yakama Nation Design and construction

Resource	Implementation plans, monitoring, mitigation	Responsibility and project phase
Wetlands	Sites will be designed to avoid clearing and grading wetlands to the greatest extent possible.	Yakama Nation Design and construction
	All conditions included in construction permits will be met.	Yakama Nation Design and construction
	Disturbed wetlands and wetland buffers will be re-vegetated with native vegetation. Wetland mitigation measures developed through the WDOE permit process will be followed.	Yakama Nation Construction
	Staging areas for construction will be located outside wetland buffers and re-vegetated with native vegetation as necessary.	Yakama Nation Construction
Floodplains	Use of as many existing ponds as possible for fish acclimation and release will avoid construction in floodplains.	Yakama Nation and BPA Design
	Compensatory storage will be incorporated in the project design where above-ground facilities are located within a floodplain.	Yakama Nation Design
	Infrastructure will be buried below grade, not in elevated road prisms, preventing diversion or rerouting of floodwaters.	Yakama Nation Design and Construction
	Spoil materials will be removed and disposed in uplands or at off-site locations outside the floodplain.	Yakama Nation Construction
Visual Quality	Areas of disturbance will be minimized to the greatest extent possible. Upon completion of facility construction, all disturbed areas will be seeded with native grasses or planted with native vegetation, where appropriate.	Yakama Nation Design and construction
Recreation, Public Health and Safety, Climate Change	All construction activity will be limited to normal workday hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.	Yakama Nation Construction
	All pumps and generators will be installed in sound-enclosures and will be maintained within state-approved environmental noise regulations.	Yakama Nation Construction and operations
	Cleared vegetation or other debris will not be burned. All such material will be transported to an approved landfill.	Yakama Nation Construction
	Water supplies and dust suppression equipment will be employed at all sites requiring excavation or road improvement to ensure that dust does not create visibility problems on nearby roads and highways and does not become a nuisance to neighbors.	Yakama Nation Construction
	To reduce greenhouse gas emissions, gravity-flow water supplies and existing ponds will be used wherever possible.	Yakama Nation Design
	Project staff will be encouraged to use measures that minimize vehicle and equipment emissions, including driving techniques, prompt maintenance, and carpooling and shuttle vans.	Yakama Nation Construction and operations

Resource	Implementation plans, monitoring, mitigation	Responsibility and project phase
Recreation, Public Health and Safety, Climate Change	Propane generators at all sites will be used as soon as they are feasible to minimize greenhouse gas emissions.	Yakama Nation Operations
	A plan to recycle or salvage non-hazardous construction and demolition debris will be developed and implemented.	Yakama Nation Construction
	Locally sourced supplies will be used as much as possible.	Yakama Nation Construction and operations
Cultural Resources	At all sites, implement BPA's Inadvertent Discovery Protocol to stop work, and to protect and assess any incidental finds of cultural resources.	BPA Construction
	In consultation with the Washington Department of Archaeology and Historic Preservation, the Yakama Nation, and the Confederated Tribes of the Colville Reservation, BPA would develop a mitigation plan for any significant cultural resources identified during construction or operation in any of the project areas where impacts cannot be avoided.	BPA Construction and operations