

Mitigation Action Plan

for the

Springfield Sockeye Hatchery Project

DOE/EA-1913

Summary

This Mitigation Action Plan (MAP) is referenced in the Finding of No Significant Impact (FONSI) for the Springfield Sockeye Hatchery Project (Proposed Action) (Department of Energy Environmental Assessment-1913). This project involves modifying the existing Idaho Department of Fish and Game (IDFG) hatchery located near the town of Springfield in Bingham County, Idaho. With funding provided by the Bonneville Power Administration (BPA), IDFG would modify this hatchery so that it would be capable of rearing up to 1 million Snake River sockeye salmon.

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 the mitigation measures were or will be implemented. It clearly identifies the components of each mitigation measure, as well as what time during the project they were or will be implemented, and who was or is responsible for implementation.

The implementation of this project will be overseen by IDFG 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, Jenna Peterson, at 503-230-3018 or jepeterson@bpa.gov. This MAP may be amended if revisions are needed due to new information or if there are any significant project changes.

Consultation Related to Mitigation Measures

BPA consulted with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act (ESA). BPA submitted a Biological Assessment to USFWS on February 27, 2012, requesting concurrence with its determinations that the Proposed Action is not likely to affect bull trout or its designated critical habitat or the Ute ladies'-tresses adversely and the action would have no effect on the Canada lynx. USFWS concurred with BPA on April 3, 2012, and determined that the Proposed Action is not likely to affect bull trout, bull trout critical habitat, or Ute ladies'-tresses adversely. No ESA-listed anadromous species are present within the hatchery site. Impacts on these species during the incidental capture and subsequent handling activities associated with outmigration sampling are covered under a separate ESA consultation with the National Oceanic and Atmospheric Administration (NOAA) Fisheries.

As part of the Section 106 consultation process under the National Historic Preservation Act, a cultural resources assessment of the potential for the study area to support historic, archaeological, and Native American resources was completed in July 2011. The cultural resources assessment was based on a review of known archaeological resources within a 1-mile radius of the study area, as inventoried at the Idaho State Historic Preservation Office (SHPO), Boise, Idaho. BPA also provided information and requested input on the Proposed Action from the following tribes during development of the EA: the Shoshone Bannock Tribes of the Fort Hall Reservation, the Shoshone Paiute Tribes of the Duck Valley Reservation, the Fort McDermitt Paiute-Shoshone Tribe, the Burns Paiute Tribe, and the Nez Perce Tribe of Idaho. Consultation with these tribal organizations was initiated on July 12, 2011.

BPA received concurrence on the area of potential effect (APE) from the SHPO on August 5, 2011. No responses were received as a result of tribal consultation. A pedestrian survey and shovel testing of the study area was completed in August 2011. A report detailing the results of this work and a determination of no historic properties affected was submitted to the consulting parties in early November 2011. In early December, the SHPO requested that BPA submit additional information, including updated historic properties site forms, which BPA did in mid-February 2012. In late February 2012, the SHPO provided its response, containing a determination that the Proposed Action would have an adverse effect on historic properties. Because of this discrepancy in effects determination, BPA hired an architectural historian to conduct further analysis of the age of the hatchery buildings and the role the buildings played in the development of fish rearing in southern Idaho.

This research revealed that the hatchery building and concrete raceways were constructed sometime between 1969 and 1971, with further modifications taking place between 1971 and 1985. Minimal maintenance activities and upgrades had taken place since its original construction. As a result, the facility is run-down. These structures do not meet the 50-year age threshold for listing in the National Register of Historic Places (NRHP), nor do they appear to rise to the level of exceptional significance to qualify for inclusion under any of the NRHP

criteria considerations for properties younger than 50 years of age. Therefore, these structures are not considered historic properties under the National Historic Preservation Act, and the Proposed Action would have no adverse effect on historic properties.

Mitigation Measures

The following minimization and mitigation measures have been identified to reduce potential impacts associated with the Proposed Action.

Environmental Resource	Mitigation
Land Use and Recreation	<ul style="list-style-type: none"> • Obtain appropriate permits from Bingham County to allow for new residences to be constructed in a heavy manufacturing zone. • Develop and distribute a schedule of construction activities to potentially affected landowners near the construction site to inform residents when they may be affected by construction activities; advertise the construction schedule in local newspapers and post it in public places, those customarily used for public notices, such as libraries, post offices, and local government buildings, and also at Crystal Springs Pond to inform recreationists of construction activities. • Conduct a preconstruction public meeting and invite landowners to meet with contractors and IDFG staff responsible for project implementation to receive information and discuss concerns. • Provide appropriate contact information for contractor liaisons and IDFG staff to local residents for any concerns or complaints during construction.
Visual Resources	<ul style="list-style-type: none"> • Restore disturbed vegetation as soon as possible after construction is completed. • To the extent possible, design of the wellhead structures will include the use of non-reflective materials and downward-facing lighting.
Vegetation	<ul style="list-style-type: none"> • 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. • Identify clearing limits on all construction drawings. Use high-visibility construction fencing to demarcate the limits of construction and vehicle operation to prevent disturbance from occurring outside allowable areas. • Revegetate temporarily disturbed areas with appropriate native species. Use seed mixes that meet the requirements of federal, state, and county noxious <u>weed</u> control regulations and guidelines. • If any previously undiscovered rare, threatened, or endangered plant species is observed before or during project implementation, fence off and avoid these individuals. • If individuals of Ute ladies'-tresses are observed before or during project implementation and impacts cannot be avoided, implement compensatory mitigation as determined by USFWS. • Implement a noxious weed control program prior to and during construction. This control program will include the following elements: <ul style="list-style-type: none"> ○ Treat known infestations before ground disturbance begins by scheduling appropriate weed treatments, such as mowing, hand pulling, and use of approved herbicides. ○ Map and flag areas of noxious weed populations for construction crews so these populations can be avoided when possible. ○ Ensure equipment brought into the construction area is free of weeds and weed seeds. ○ Work from relatively weed-free areas into the infested areas rather than vice-versa. ○ Clean equipment and vehicles of mud, dirt, and plant parts after working in infested areas. ○ Maintain weed-free staging areas. ○ Apply herbicides according to labeled rates and recommendations to ensure protection of surface water, ecological integrity, and public health and safety. ○ Implement and periodically schedule post-construction control of noxious weeds on an as-needed basis.

Environmental Resource	Mitigation
Water Quality and Water Quantity	<ul style="list-style-type: none"> • Design and construct access roads to minimize drainage from the road surface directly into surface waters and direct sediment-laden waters into vegetated areas. • Review water quality mitigation measures, required best management practices (BMPs), and permit requirements with construction contractors and inspectors during a preconstruction meeting covering environmental requirements. • 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. • Delineate construction limits within 200 feet of streams, other waterbodies, and wetlands; manage sediment as specified in a Stormwater Pollution Prevention Plan with a sediment fence, straw wattles, or a similarly approved method that meets the U.S. Environmental Protection Agency's (EPA's) erosion and stormwater control BMPs or any other applicable permit requirements to eliminate sediment discharge into waterways and wetlands, <u>minimize the size of the construction disturbance areas, and minimize removal of vegetation to the greatest extent possible.</u> • Minimize the size of construction disturbance areas, and minimize removal of vegetation to the greatest extent possible. • Inspect erosion and sediment controls weekly, maintain them as needed to ensure their continued effectiveness, and remove them from the proposed hatchery site when vegetation is re-established and the area has been stabilized. • Implement a Spill Prevention, Control, and Countermeasures Plan that requires fuel and other potential pollutants to be stored in a secure location at least 150 <u>200</u> feet away from streams, waterbodies, and wetlands; ensures that spill containment and cleanup materials will be readily available on site and, if used, restocked within 24 hours; and, in the event of a spill, ensures that contractors will be trained to contain the spill immediately, eliminate the source, and deploy appropriate measures to clean and dispose of spilled materials in accordance with federal, state, and local regulations. • Restrict refueling and servicing operations to locations where any spilled material cannot enter natural or human-made drainage conveyances (e.g., ditches, catch basins, ponds, wetlands, streams, pipes), at least 150 <u>200</u> feet from streams, waterbodies, and wetlands; use pumps, funnels, absorbent pads, and drip pans when fueling or servicing vehicles. • Store, fuel, and maintain vehicles and equipment in designated vehicle staging areas located a minimum of 150 <u>200</u> feet away from any stream, waterbodies, and wetlands. • Prohibit the discharge of vehicle wash water into any stream, waterbody, or wetland without pretreatment to meet state water quality standards. • Reseed disturbed areas <u>at the first practical opportunity</u> after construction and regrading are complete, at the appropriate time period for germination. • Monitor germination of seeded areas <u>with at least three field visits per year until the proposed hatchery site has achieved stabilization (defined as at least 70% cover by native or acceptable non-native species); if vegetative cover is inadequate, implement contingency measures and reseed to ensure adequate revegetation of disturbed soils. And if vegetation cover is inadequate, implement contingency measures and reseed to ensure adequate revegetation of disturbed soils.</u>

Environmental Resource	Mitigation
	<ul style="list-style-type: none"> • Inspect and maintain access roads and other facilities after construction to ensure proper function and nominal erosion levels. • Monitor water quality at Crystal Springs Pond and change hatchery water use to provide more flow through to the pond, if needed, thereby ensuring maintenance of water quality parameters, including temperature, dissolved oxygen, and chlorophyll a concentrations.
Wetlands	<ul style="list-style-type: none"> • Locate roads and other design features to avoid or minimize impacts on wetlands and streams whenever possible. • When working next to wetlands (including their buffer areas) and waterbodies, limit disturbance to the minimum necessary to achieve construction objectives; minimize habitat alteration and the effects of erosion and sedimentation. • Flag or stake wetland boundaries in the vicinity of construction areas so that wetlands and streams can be avoided during construction. • Do not place machinery, construction vehicles, or equipment within 400 <u>200</u> feet of any stream or wetland unless placement is authorized by a permit or is on an existing road. • Refuel machinery and store it a minimum of 150 <u>200</u> feet from wetlands and waterways and inspect it regularly for leaks. • If temporary roads are built in wetlands, underlay temporary fill with geotextile fabric or portable pads, remove all fill, and revegetate with appropriate native wetland plant species in compliance with required permits. • Design and implement any construction activities to minimize unavoidable impacts, coordinate with the U.S. Army Corps of Engineers to obtain a Section 404 permit for any fill placed in wetlands, and work with the Idaho Department of Environmental Quality to obtain Section 401 water quality certification for this permit (see Section 4.3). • <u>Delineate construction limits within 200 feet of streams, other waterbodies, and wetlands; manage sediment as specified in a Stormwater Pollution Prevention Plan with a sediment fence, straw wattles, or a similarly approved method that meets EPA’s erosion and stormwater control BMPs or any other applicable permit requirements to eliminate sediment discharge into waterways and wetlands; minimize the size of construction disturbance areas; and minimize removal of vegetation to the greatest extent possible.</u> • Implement an erosion control and sedimentation plan, which will include sedimentation and erosion control measures, such as silt fences, straw bales, and jute matting to prevent sediment from entering waterways and wetland habitats. • Revegetate temporarily disturbed areas with appropriate native species. <u>Use seed mixes that meet the requirements of federal, state, and county noxious weed control regulations and guidelines.</u> • Monitor water quality at Crystal Springs Pond and change hatchery water use to provide more flow through to the pond, if needed, thereby ensuring maintenance of water quality parameters, including temperature, dissolved oxygen, and chlorophyll a concentrations.

Environmental Resource	Mitigation
Geology and Soils	<ul style="list-style-type: none"> • Use appropriate shoring for all excavation conducted during facility construction as required by local and federal safety regulations. • Design the proposed expansion of the existing septic system to accommodate the tight, loamy soils at the proposed hatchery. • 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. • Locate staging areas in previously disturbed or graveled areas to minimize soil and vegetation disturbance where practicable. • Delineate construction limits <u>within 200 feet of streams, other waterbodies, and wetlands; manage sediment as specified in a Stormwater Pollution Prevention Plan</u> with a sediment fence, straw wattles, or a similar method that meets NPDES EPA's erosion and stormwater control BMPs or any other applicable permit requirements to eliminate sediment discharge into waterways and wetlands; minimize the size of construction disturbance areas; and minimize removal of vegetation to the greatest extent possible. • Inspect erosion and sediment controls weekly, maintain them as needed to ensure their continued effectiveness, and remove them from the proposed hatchery area when vegetation is reestablished and the area has been stabilized. • Design and construct access roads to minimize drainage from the road surface directly into surface waters, and direct sediment-laden waters into vegetated areas. • Reseed disturbed areas at the first practical opportunity after construction and regrading are complete. • Monitor seed germination of seeded areas with at least three field visits per year until the proposed hatchery site has achieved stabilization (defined as at least 70% cover by native or acceptable non-native species); if vegetative cover is inadequate, implement contingency measures and reseed to ensure adequate revegetation of disturbed soils. • Inspect and maintain access roads and other facilities after construction to ensure proper function and nominal erosion levels. • Implement dust abatement during construction.
Fish and Aquatic Species	<ul style="list-style-type: none"> • <u>Delineate construction limits within 200 feet of streams, other waterbodies, and wetlands; manage sediment as specified in a Stormwater Pollution Prevention Plan with a sediment fence, straw wattles, or a similarly approved method that meets EPA's erosion and stormwater control BMPs to eliminate sediment discharge into waterways and wetlands; minimize the size of construction disturbance areas; and minimize removal of vegetation to the greatest extent possible.</u> • Implement required BMPs associated with the NPDES permit. • Use settling ponds to remove organic waste (i.e., uneaten food and feces) from the proposed hatchery water to minimize the discharge of these substances to the receiving waters. • Use therapeutic chemicals only when necessary, typically for short durations, to be in conformance with accepted standard practices and treatment applications. • Ensure that the 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.

Environmental Resource	Mitigation
Wildlife	<ul style="list-style-type: none"> • Explain wildlife-related mitigation measures to construction contractors and inspectors during a preconstruction meeting covering environmental requirements. • 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 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.
Cultural Resources	<ul style="list-style-type: none"> • 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.
Transportation	<ul style="list-style-type: none"> • Provide appropriate contact information for contractor liaisons and IDFG staff to local residents for any concerns or complaints during construction. • Keep construction activities and equipment clear of residential driveways to the greatest extent possible. • Employ traffic control flaggers and post signs along roads warning of construction activity and merging traffic for temporary interruptions of traffic where needed.
Noise and Public Health and Safety	<ul style="list-style-type: none"> • Limit noise emissions from the wellhead water supply pumps to no more than 69 A-weighted decibels (dBA) at a 50-foot reference distance. • Limit outdoor noise emissions from the proposed hatchery's water recirculation pumps and mechanical water chillers to no more than 73 dBA at a 50-foot reference distance. • Limit outdoor noise emissions from the backup diesel generator to no more than 73 dBA at a 50-foot reference distance. • Employ a liaison who would be available to provide information, answer questions, and address concerns during project construction. • Schedule all construction work during daylight hours. • Locate stationary construction equipment as far away from noise-sensitive receptors as possible. • 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. • Operate and maintain all construction equipment to minimize noise generation.
Public Facilities and Services	<ul style="list-style-type: none"> • Coordinate with local law enforcement, fire protection, and other emergency responders to ensure they are prepared to address any emergencies that may arise during construction and operation. • Coordinate the routing and scheduling of construction traffic with the relevant county and state road staff to minimize interruptions to local traffic.
Energy	<ul style="list-style-type: none"> • Where possible, use high-efficiency light fixtures (e.g., LED, compact fluorescent, high-efficiency fluorescent bulbs). • Where possible, install automatic lighting controls, including occupancy sensors and lighting control panels. • Use skylights, windows, and/or opaque wall panels for natural lighting of the large early rearing room and occupied spaces. • Use chilled water energy recovery via water-to-water heat exchangers. • Use premium efficiency pump motors on process water systems and heating, ventilation, and air-conditioning (HVAC) units.

Environmental Resource	Mitigation
	<ul style="list-style-type: none"> • Use artesian well water flow for the proposed hatchery water supply to the greatest degree practical. • Install low-flow plumbing fixtures for domestic uses to reduce well pumping. • Install a central flow monitoring and control system.
Air Quality	<ul style="list-style-type: none"> • Transport all vegetation or other debris associated with construction clearing to an approved landfill. (Burning of all such material will not be done; some small-scale vegetation burning may be done for weed control on access roads.) • Use water trucks to control dust during construction as needed. • Ensure that all vehicle engines are maintained in good operating condition to minimize exhaust emissions. • Handle and dispose of all potentially odorous waste during operation in a manner that does not generate odorous emissions. • Implement vehicle idling restrictions. • Encourage carpooling and the use of shuttle vans among construction workers to minimize construction-related traffic and associated emissions. • Locate staging areas in previously disturbed or graveled areas where practicable to minimize soil and vegetation disturbance. • Encourage the use of the proper size of equipment for each job because larger equipment requires the use of additional fuel that would not be necessary. • Use alternative fuels, such as propane, for stationary equipment at the construction sites or use electrical power where practicable. • Reduce electricity use in the construction office by using compact fluorescent bulbs and turning off computers and other electronic equipment every night. • Recycle or salvage nonhazardous construction and demolition debris where practicable.