# ATTACHMENT 1 PROJECT NARRATIVE



## Melvin R. Sampson Coho Hatchery

# **Project Narrative**

## 1.0 Project Description

The Bonneville Power Administration (BPA) is proposing to fund construction and operation of the Melvin R. Sampson Hatchery (MRS Hatchery) in the Yakima Basin in central Washington (Project). Operation of the MRS Hatchery would involve production of 700,000 coho salmon for release in the Yakima and Klickitat River basins. The proposed hatchery would be owned and operated by the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation) and would be constructed on land owned by the Yakama Nation Land Enterprise northwest of Ellensburg in Kittitas County, Washington

The location of the Project is at the Holmes Ranch property, situated about 5 miles northwest of Ellensburg, Washington (Attachment 2 – Figures). All Project features (excluding the septic drainfield, cone screen, and discharge pipes) are located on Tax Parcel 21218, which is owned by the Yakama Nation. The property is located approximately 0.8 miles north of the intersection of Highway 10 and Highway 97. The site is bordered by Interstate Highway 90 to the south, Klocke Road to the east, John Wayne Trail (a trans - Cascade recreation trail) to the north, and private property to the west. Portions of the site are in a conservation easement reserved to provide habitat value. The 8-acre developable portion of the site is in the southeast corner of the ranch.

This Project includes the design and construction of the MRS Coho Hatchery. Hatchery facilities will include a hatchery building of approximately 28,000 square feet (sq. ft.) for incubation, early rearing and grow-out, hatchery water re-use modules, outdoor adult holding ponds, a shop building (500 sq. ft.), three new residences (2,000 sq. ft. each), an effluent clarifier, new groundwater well pumping system, installation of a cone screen sump and pumping system, and additional work associated with achieving a functioning Coho smolt hatchery (See Attachment 3 – 90% Design Package for detailed description of all project features). The existing home and structures will be demolished and disposed of offsite.

# 2.0 Proposed Facility Design Criteria

In general, the civil design criteria will include compliance with national codes and standards as noted. The civil engineering aspects of the Project will be related to site development, utilities, grading and drainage, and fencing and security. Additional design criteria and detailed descriptions of Project features are found in Attachment 3 – 90% Design Package (see 8.5x11 hardcopy of design drawings-full plan set is available on attached CD).

February 2018 1 McMillen Jacobs Associates

# 2.1 References, Codes, and Regulations

The following references and design standards will serve as the general design criteria for the civil design of the MRS Coho Hatchery. The applicable version of each document is the latest edition in force unless noted otherwise. References to the specific codes and standards will be included in the applicable technical specifications as the design documents are advanced. The civil design, materials, equipment, and construction will conform to the codes and standards listed in Table 1.

Standard	Description
Erosion and Sediment Control	Stormwater Management Manual for Eastern Washington
Roadways	Kittitas County Code Title 12
Stormwater	State of Washington Department of Ecology
Fire and Life Safety	Kittitas County Code Title 20
Water and Sewers	Kittitas County Code Title 13

Table 1. Civil References and Standards

#### 2.2 Site Utilities

#### 2.2.1 Potable Water

The existing potable water well located near the existing residence was tested for pressure and a host of potable water quality parameters. A hose bib at the existing barn has a recorded flow rate of 20 gpm at a pressure of 38 pounds per square inch (psi). The static pressure on the hose bib was 54 psi. Assuming a required 150 gallons per day (gpd) per bedroom for single family residences, and a total of nine bedrooms at the site, the required potable water supply to the residences is 1,350 gpd. The shop building is assumed to require 300 gpd, as is the administrative area of the hatchery building. The production area of the hatchery building is assumed to use 600 gpd, resulting in a total facility demand of 2,550 gpd, or 1.8 gpm on average. By incorporating low-flow plumbing fixtures, peak demand is not expected to exceed 25 gpm. Peak potable water demand will be met by storing water pumped from the well in a potable water storage tank housed in the hatchery building. From the storage tank, water will gravity flow to each of the residences and other points of use at the facility.

The residences and hatchery building will be serviced with a 2-inch-diameter PVC potable water line that branches off and is reduced to 1-inch-diameter laterals entering each of the buildings. The hatchery building will have potable water service in the administrative area and in the incubation, egg prep, and chemical storage spaces in the northwest corner of the building. Hatchery building potable water supply is to an emergency shower (eye wash station), shower facilities, sinks, drinking fountains, toilets, and water heaters.

The potable water system will be classified as a Group B public water system under Washington State Department of Health guidelines. A wellhead protection zone variance will be required in order to utilize the existing potable well location. Kittitas County Health Department has indicated that a 4-hour well drawdown test will also be required as part of the Group B system approval.

## 2.3 Sanitary Sewer

The two residences on the west side of the Project site will each include their own 1,000-gallon septic tank, as will the new shop building. Four-inch-diameter ABS (acrylonitrile butadiene styrene) drain lines from the septic tanks will connect at a lift station located near the access road turnabout near Residences 1 and 2. A separate, 2,000-gallon septic tank will service the residence on the east side of the Project site and the hatchery building. This tank will connect with its own lift station. Effluent from the septic tanks will be pumped at the lift stations and conveyed to a single drainfield located west of the facility.

The drainfield is approximately 40 feet by 100 feet and will include a flow manifold and buried pipe laterals to distribute flow evenly across the drainfield area. All setbacks for the sanitary sewer are according to Kittitas County Code. Soils test pits were excavated at the proposed drainfield location in April of 2017 for review by the Kittitas County Health Department. The results were promising, with suitable soil types and groundwater levels several feet below ground surface. New test pits will be dug in the Spring of 2018, prior to submittal of the On Site Sewage (OSS) design.

## 2.4 Site Grading and Drainage

Site grading will include clearing, grubbing, leveling, and in some cases back-filling areas of the facility for construction of the access road, pavement, hatchery building, out-buildings, and residences. The hatchery building will be elevated to an approximate finished floor elevation of 1,590.0 feet, which is approximately 3 to 4 feet above the existing ground elevation. This will require placement and compaction of approximately 3 feet of structural fill material, along with a base layer of coarse material. Fill material will extend well beyond the footprint of the hatchery building to allow smooth transitions and vehicular access to, through, and around the building. The finished ground will generally slope away from the hatchery building at a 2 to 3% slope, providing site drainage of local runoff. The access road and turnaround will also include sloped surfaces to redirect local runoff to eliminate ponding.

#### 2.4.1 Stormwater

Storm drainage has been accommodated in the site design through the civil site layout, ensuring that the direction of sloping surfaces routes stormwater to designated infiltration areas. A formal piping system with catch basins will not be utilized; instead, stormwater will sheet-flow across graded surfaces to a broad vegetated filter strip that will treat the runoff by removing sediments and potential pollutants. Due to the flat topography and vegetated buffers surrounding the developed portion of the site, it is anticipated that stormwater will infiltrate into the ground and will not discharge from the site.

In order to accommodate a 100-foot setback from the potable water well of infiltration due to the presence of structures, drainage curbing is included in the design around the potable water well, so that stormwater is routed to vegetated filter strip 100+ feet away from the well. This will help ensure that stormwater contaminants do not enter the potable water supply.

The only concentrated stormwater flows will be from roof drains. Rock splash pads will be placed at the roof drain discharge points to help disperse flows entering the vegetated filter strips.

# 2.5 Fencing and Site Security

A new motorized, sliding gate will be installed at the entrance to the site off Klocke Road. Security fencing will also be provided along the eastern boundary of the property adjacent to Klocke Road. The fencing will extend from the new gate to terminate into a row of habitat boulders located along the full Klocke Road frontage.

Security cameras will be provided at several locations around the facility, including at the adult holding ponds, the shop, and at four locations around the perimeter of the hatchery building. A live feed to the admin area will allow operators to monitor the site from a single location. Card reader security doors will be provided at doors into hatchery production areas, adult holding and shop building doors to allow additional monitoring and to provide secure and easy access.

## 3.0 Administrative Conditional Use Criteria (Application Question 12)<sup>1</sup>

The proposed use is essential or desirable to the public convenience and not detrimental or injurious to the public health, peace, or safety or to the character of the surrounding neighborhood.

The proposed coho hatchery program was identified in the Yakima/Klickitat Fisheries Project (YKFP), which has the goal of enhancing existing stocks of anadromous fish in the Yakima and Klickitat River basins while maintaining genetic resources, reintroducing stocks formerly present in the basins, applying knowledge gained about hatchery supplementation throughout the Columbia River Basin, and providing increased harvest opportunities. The proposed hatchery would benefit the community by providing educational opportunities, employment opportunities, improving fisheries throughout the basin, and increasing harvest opportunities for recreationalists.

Fire protection at the hatchery site is served by the Kittitas County Fire District No. 2, which serves the City of Ellensburg and surrounding rural areas. The closest hospitals to the hatchery site are located approximately 2 miles south of the hatchery site in Ellensburg, Washington. They include the Kittitas Valley Healthcare Hospital and Community Health of Central-Washington.

Operation of the Project would have little impact to public health and safety because hatchery operations would largely occur within the hatchery building, which would be managed by approved personnel who would be trained on standard worker health and safety measures. Visitors would be limited to view areas and not exposed to potentially hazardous or dangerous situations. The hatchery, located on private property, would not introduce an additional risk to public health in the area.

Construction of the Project can be expected to cause moderate short-term noise impacts in areas directly adjacent to construction activity. Noise sources during construction would include employee vehicles, portable diesel generators, a temporary air conditioner used for the office trailer, construction equipment,

<sup>&</sup>lt;sup>1</sup> The following information was taken from the Melvin R. Sampson Hatchery Yakima Basin Coho Project Final Environmental Impact Statement (November 2017), unless otherwise noted.

and other small tools. Construction and other machine noise is common in a rural setting as individuals use motorized equipment to harvest hay and construct barns, and other out buildings.

Operational noise sources at the hatchery would include employee and visitor vehicles, truck deliveries, and HVAC system outdoor equipment (heat pumps, etc.) for the hatchery building, residences, and shop building. Additional pieces of equipment would operate indoors and would not lead to noticeable outdoor noise. The dominant ambient background noise sources at the hatchery site would continue to be from adjacent local roads (Klocke Road, SR-10, and I-90).

The proposed use at the proposed location will not be unreasonably detrimental to the economic welfare of the county and that it will not create excessive public cost for facilities and services by finding that:

- It will be adequately serviced by existing facilities such as highways, roads, police and fire
  protection, irrigation and drainage structures, refuse disposal, water and sewers, and schools; or
- The applicant shall provide such facilities; or
- The proposed use will be of sufficient economic benefit to offset additional public costs or economic detriment.

Construction would provide short-term employment opportunities for local and nonlocal labor, based on the location of the contractors and the need for skilled and general laborers. The construction work force would consist of approximately 30 full time workers employed for an estimated construction period of 16.5 months. The majority of workers are expected to commute from within 50 miles or less, thus there would be little additional demand on local services. In general, construction would result in a short-term, low impact on employment and demand for public services in the region.

Operation of the new hatchery facilities would result in the addition of up to five new full time hatchery workers, increasing the population of the project area by the number of resident hatchery workers hired to maintain the hatchery and their families (3 to 12 individuals). The additional workers would likely be hired from somewhere within the state, having a low impact on the regional economy and demand for public services. Spending by the added workforce in the community would result in a long-term, low impact to employment and the local tax base, thus not enough revenue would be generated to provide additional facilities.

The proposed use complies with relevant development standards and criteria for approval set forth in this title or other applicable provisions of Kittitas County Code.

The Project complies with Kittitas County Code: ORD. 2018-001 Amendment 17-06: Title 17-Interpretive Center since the project will be open to the public to learn about fish hatcheries and salmonid reintroduction in the local river systems. The Project proposes building three residences close to the hatchery. This is because fish hatcheries are 24-hour operations that require constant monitoring of instrumentation to alert operators to changes in temperature, dissolved oxygen levels, and other metrics. Failure to make needed adjustments to these metrics in a timely fashion could result in the mortality of the salmonids, worth hundreds of thousands of dollars. Three residences on-site is considered the minimum required for safe and successful operation of a hatchery of this size. Three onsite operators allow for the

absence of one operator (due to illness, vacation, etc.) with two remaining operators available to monitor and address salmonid rearing conditions at all times.

The proposed use will mitigate material impacts of the development, whether environmental or otherwise.

The Project would convert and area generally used for hay production to a facility that would:

- Would support mitigation efforts for coho in the Yakima Basin, using locally-adapted broodstock, in compliance with Hatchery Scientific Review Group principles. Over time, use of out-of-basin broodstock would be phased out entirely.
- Would reintroduce a naturally spawning population of coho in the Yakima Basin.
- Would provide educational and interpretive opportunities to adults, children, and schools in the area.
- Would provide employment opportunities, both short- and long-term.

The proposed use will ensure compatibility with existing neighboring land uses.

Most properties around the Holmes Ranch property are designated Rural Working under Kittitas County's Comprehensive Plan, which generally encourages farming, ranching, and storage of agriculture products, and some commercial and industrial uses compatible with rural environment and supporting agriculture and/or forest activities. The hatchery is an aquaculture facility, which supports fisheries in the region, and will improve recreational opportunities that are important to the character of the rural lifestyle.

The proposed use is consistent with the intent and character of the zoning district in which it is located.

The hatchery site is zoned Agriculture 20 (A-20 per the Kittitas County Zoning Ordinance (KCC Title 17; 2016b). The intent of this zoning classification is to preserve fertile farmland from encroachment by nonagricultural land uses, and protect the rights and traditions of those engaged in agriculture (KCC Section 17.29.010; 2016b). A-20 is Resource land, which allows resource-based industries, including but not limited to recreation-related tourism, agriculture, fisheries, forestry, and mining. Properties surrounding the hatchery site are zoned A-20, with the exception of an adjacent parcel, which is zoned Agriculture 5 (A-5).

The proposed development at the hatchery site is an allowed use under the Kittitas County Zoning Ordinance. Land use at the site would be a mix of resource-based and residential. Because both residential and resource-based uses are approved in areas zoned as A-20, the area would not need to be rezoned. Because the hatchery will be open and available to the public for educational purposes, the facility meets the character and intent of an Interpretive Center.

For conditional uses outside of Urban Growth Areas, the proposed use:

- Is consistent with the intent, goals, policies, and objectives of the Kittitas County Comprehensive Plan, including the policies of Chapter 8, Rural and Resource Lands;
- Preserves "rural character" as defined in the Growth Management Act (RCW 36.70A.030(15));
- Requires only rural government services; and
- Does not compromise the long-term viability of designated resource lands.

The Project, located outside of the Urban Growth Areas, would:

- Provide a variety of rural densities (GPO 8.14), roughly 4-acres would be permanently developed, this clustering needed residences around the proposed hatchery building will reduce rural sprawl. Thus, preserving the open nature of the area by maintaining a large area of pasture land to the south of the hatchery. This pasture land is directly visible from Klocke Road. New structures would be intermittently visible for a short period of time to users of the John Wayne Pioneer Trail but should not be a major distraction.
- The Project will adhere to all setbacks from streams, rivers, wetlands, and critical areas (GPO8.14C)
- Only rural government services should be required as the Project would essentially be adding two new households to the area (this excludes the existing household currently on the property which offsets the third proposed household). Visitation would be minimal and require little additional County resources.
- The Project would not preclude any adjacent agricultural or timber land use in the area.

## 4.0 Pre-application Meeting

On January 11, 2017, Kevin Jensen and Greg Allington representing McMillen Jacobs Associates, and Mark Johnston of the Yakama Nation, met with representatives from Kittitas County Community Development Services, and Public Works departments for a Pre-Application Meeting as required before permitting will commence. Attachment 4 contains the notes from that meeting.

Additional meetings held in April 2017 related to the Project fire suppression system, the proposed onsite septic system, and the potable water system where held. Notes from these meetings are presented in Attachment 4.

### 5.0 Environmental Review

An Environmental Impact Statement (EIS) was prepared for the project, pursuant to regulations implementing the National Environmental Policy Act (NEPA), to assess the potential effects of the Proposed Action on the environment (Attachment 5). Milestones and the dates that they were achieved are presented in Table 1.

Table 1. NEPA Milestones for the Melvin R. Sampson Hatchery Project

Milestone	Date/Location
Scoping Comment Period	November 16, 2015 to January 4, 2016
Scoping Public Meeting	December 9, 2015 in Ellensburg, WA
Draft EIS Available for Public Comment	March 10, 2017 to May 1, 2017
Draft EIS Public Meeting	April 12, 2017, in Ellensburg, WA
Final EIS	November 14, 2017
Record of Decision	Anticipated February 2018

Source:

https://www.bpa.gov/efw/Analysis/NEPADocuments/Pages/MelvinSampsonHatcheryYakimaBasinCohoProject.aspx

The Washington Department of Ecology (Ecology) is a cooperating agency on this EIS. For BPA to proceed with funding the project, the Yakama Nation must acquire sufficient ground and surface water rights to support operation of the MRS Hatchery. Ecology is responsible for granting these water rights. To grant the water rights, Ecology must comply with the Washington State Environmental Policy Act (SEPA). This EIS will help facilitate Ecology's SEPA process. This EIS may be adopted by Ecology as the lead state agency to fulfill the SEPA requirement. The Project Final EIS is included as Attachment 5.