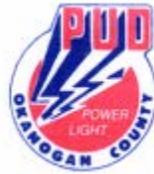


# FIRE SUPPRESSION PLAN



## ENLOE HYDROELECTRIC PROJECT (FERC PROJECT NO. 12569)

JUNE 2014



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## 1.0 INTRODUCTION

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### 1.1 PURPOSE AND INTENT

The Enloe Hydroelectric Project (Project) is located on the Similkameen River at river mile 8.8 measured upstream of its confluence with the Okanogan River. Enloe dam was originally constructed for hydroelectric generation, for which it was operated from 1923 until the powerhouse was decommissioned in 1958.

On July 9, 2013, the Public Utility District No. 1 of Okanogan County (District) received a license from the Federal Energy Regulatory Commission (FERC) to restore hydropower generation at Enloe Dam. The FERC license authorizes the District to construct a new 9-MW hydroelectric power plant downstream of the existing dam.

This Fire Suppression Plan (FSP) was prepared in consultation with the Bureau of Land Management (BLM) and the Washington State Department of Natural Resources (DNR) pursuant to Article 412 of the FERC license. The FSP is one of a number of management plans that provide specific direction to the District on how to manage the project area and project operations.

The purpose of the FSP is to protect wildlife habitat and reduce fuel loads at the Project. The FSP describes fire prevention measures, detection and reporting procedures, fire suppression responsibilities and coordination, signage and emergency public notification, and rehabilitation of project lands in the event of a wildfire. The FSP provides specific guidance for managing, preventing and protecting the project area and project facilities from wildfire impacts.

### 1.2 PROJECT AREA

The Project is situated in a narrow portion of the Similkameen River valley, about 3.5 miles northwest of the City of Oroville, Washington. The project boundary encompasses approximately 152 acres of land and water and is generally defined by the 1,057.7 foot elevation contour (NAVD 88) and encompasses an approximately 2.4 mile reach of the Similkameen River (Figure 1). The project boundary extends one quarter mile downstream from Enloe Dam to include Similkameen Falls and the site of the proposed powerhouse, tailrace, and associated facilities. Most of the land within the project boundary is publicly owned. The term “project area” used in the FSP refers to the land and water areas encompassed by the project boundary

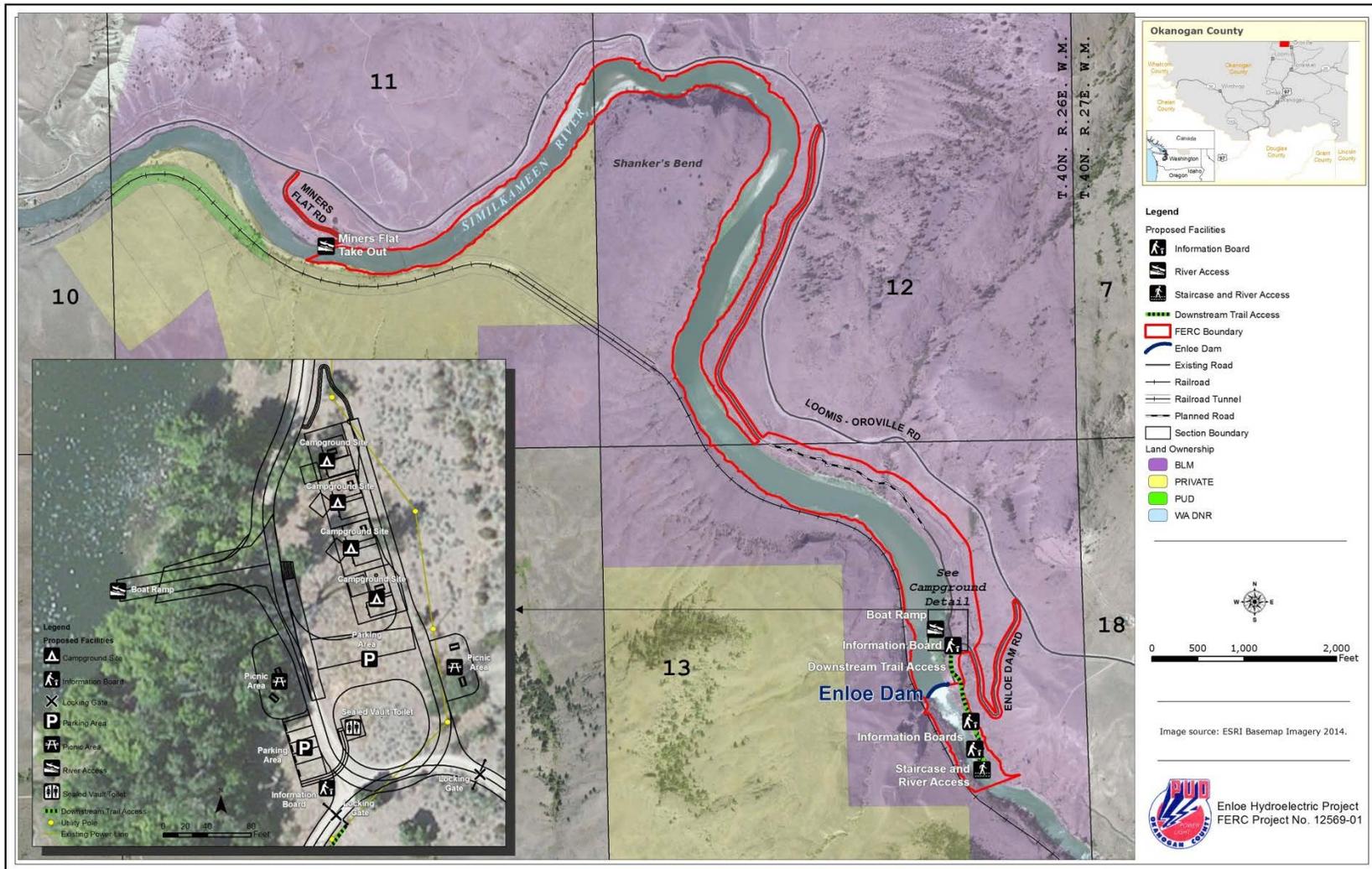


Figure 1 Project Area and Land Ownership

## 2.0 PREVENTION AND DETECTION

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The following section provides a description of fire prevention and detection on project lands and BLM-administered lands located within the project boundary during construction, operation, and maintenance activities. The District is responsible for funding all fire prevention measures described in the FSP.

Wildfire, due to lightning strikes or human ignition, could spread from outside the project boundary. While the prevention of fires from outside the project boundary is not discussed in this plan, reporting and suppression would follow protocols outlined herein. The risks of fire from project activities occurring inside the project boundary are minimal; the most likely causes are as follows:

- Unauthorized burning by recreators
- Smoking
- Use of vehicles and heavy equipment, including welding and grinding
- Use of flammable liquids

Consistent with Article 22 of the FERC License, the District will do everything reasonably within its power to prevent and suppress fire within the project area and will require its employees, agents, contractors, subcontractors and employees of contractors and subcontractors to do likewise. The following prevention, detection, and suppression measures will be adhered to during project construction operation, and routine maintenance activities. Vegetation within the Project Area is shown in Figure 2.

### 2.1 FUEL LOAD REDUCTION

The District's fuel load reduction methods will be implemented across all facilities within the project area including the powerhouse, transmission line, recreation areas and access roads. These procedures will be adapted to site conditions and modified as appropriate by District personnel qualified to make fire risk assessments.

The following fuel load reduction measures will be applied as appropriate in areas within the project area:

1. Buildings will have roofs and siding comprised of non-combustible materials.
2. Maintain a three-to-five-foot area around buildings clear of combustible materials, such as lumber, tires, and vegetation. Ground cover in these areas will be substantially non-flammable. Examples include asphalt, concrete, bare soil, green grass, mulches, or rock.
3. Electric utility poles will be coated up to a minimum of four feet above the ground with a fire resistant coating. Shrubs and trees adjacent to structures will be trimmed below a height of 4 feet.

4. There will be no overhanging vegetation within 15 feet vertically of any structure's roofline.
5. Noxious weeds will be controlled consistent with Article 407 of the Project's license and the District's BLM right-of-way agreement.
6. Access road surfaces will be maintained free of vegetation and consist of non-flammable materials such as gravel, asphalt or concrete.
7. Power-line vegetation will be maintained to clearance requirements listed in the National Electric Safety Code.
8. Construction-related debris will be managed and removed in a responsible manner, consistent with the Project's Aesthetics Management Plan.

## **2.2 MANAGING IGNITIONS**

The following guidelines will be implemented to reduce the risk of unwanted ignitions.

### **Burning**

District personnel, contractors and subcontractors will adhere to seasonal burning restrictions as implemented by the County, BLM and DNR. Recreational campfires are discussed below (Section 2.5).

### **Spark Arresters and Mufflers**

All District and contractor equipment operating with an internal combustion engine will be equipped with federally approved spark arresters. Spark arresters are not required on trucks, buses, and passenger vehicles (excluding motorcycles) that are equipped with an unaltered muffler or on diesel engines equipped with a turbocharger. Heavy trucks or other vehicles used for hauling will be equipped with a factory designed muffler or equivalent.

### **Welding and Heavy Equipment**

When grinding metal or welding within the project boundary, work will be located in a safe location free of combustible materials if possible. If the work cannot be moved, combustible materials will be cleared or covered with fire resistant materials to protect them from combustion where possible.

## **2.3 FIRE EXTINGUISHERS**

All District and contractor vehicles and heavy machinery will be equipped with an approved fire extinguisher. Each fire extinguisher will be inspected annually for serviceability by a qualified service and testing company. The inspection or certification tag will not be removed or the seal broken. Missing certification tags or broken seals will be cause to treat the extinguisher as an expended vessel. Expended fire extinguishers will be replaced by a full charged, like vessel prior to operation of the equipment that it was removed from. Extinguishers will be stored so that immediate location and unobstructed access is possible.

## **2.4 DISTRICT EMPLOYEE TRAINING**

Prior to each summer recreation season, District project personnel will receive annual training. Training will incorporate general wildland fire safety awareness, project specific fire safety precautions, fire prevention measures, and emergency notification protocol.

## **2.5 FIRE PREVENTION AT THE RECREATION AREA**

The District will adhere to the following procedures in order to prevent fires in and around the Enloe Dam recreation area:

1. Activities within the project area must comply with Okanogan County (County), DNR or BLM fire restrictions encompassing project lands. District personnel will post fire restrictions at the project entrance and on the information board located near the Enloe Dam parking area.
2. Fireworks are prohibited, including the 4th of July.
3. Dry grass in the camping area and picnic areas will be maintained to a height of four inches or less.
4. Ground cover, within 20 feet of all fire rings, will consist of non-flammable materials such as asphalt, bare soil, concrete, or rock.
5. Campfires will be permitted only when contained within permanent fire rings provided in each of the four campsites within the recreation area. Fires outside permanent fire rings are prohibited.
6. Visitor created fire rings will be removed upon discovery.

## **2.6 FIRE DETECTION AND REPORTING**

Due to the remoteness of the project area, cell phone service is not available. Therefore, District employees and contractors will carry a District radio and Emergency Contact Notification List when onsite (Appendix A). Upon contacting District Headquarters, the appropriate District officer will immediately contact 911, appropriate District employees, BLM, and DNR.

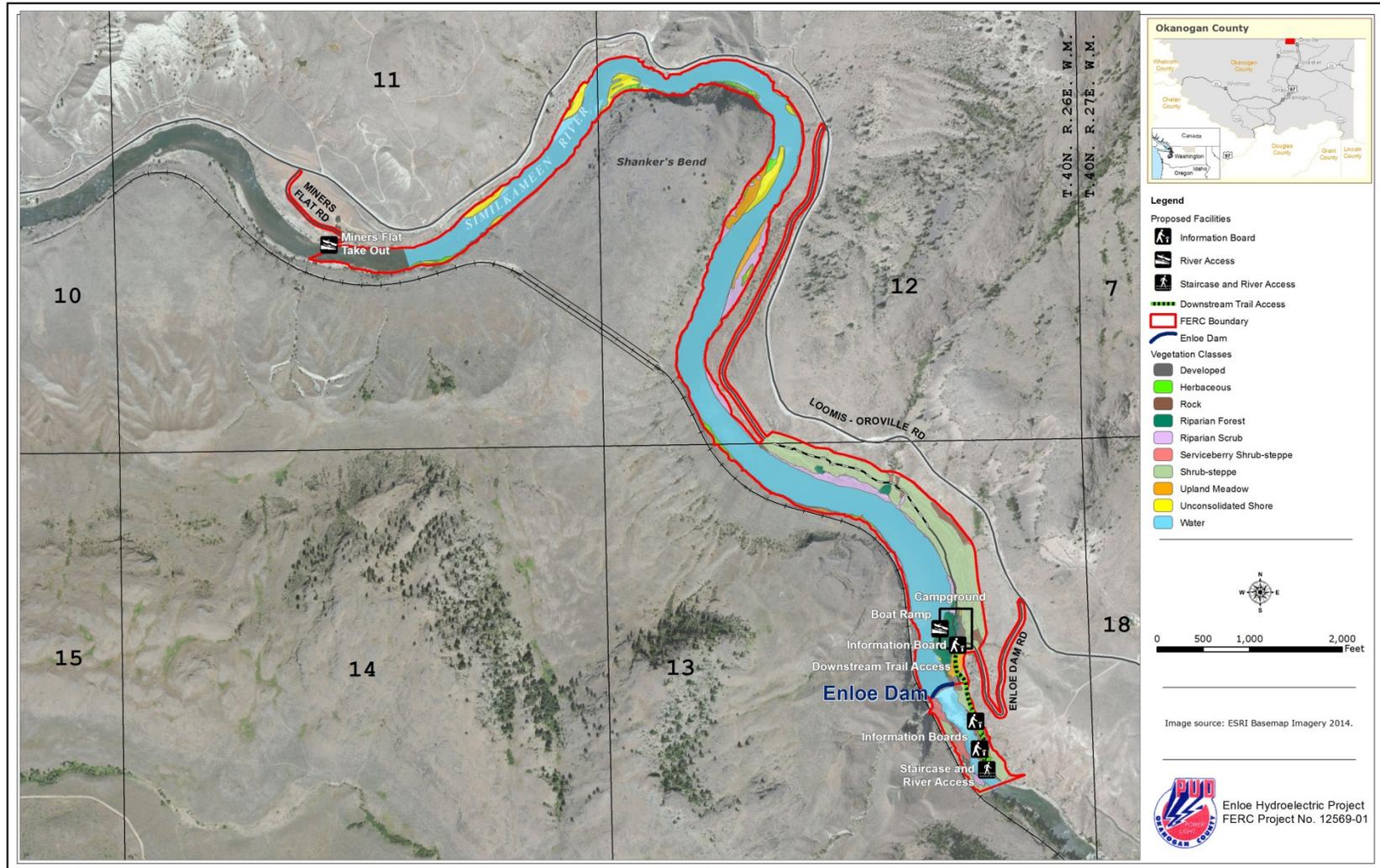


Figure 2 Vegetation in the Project Area

### **3.0 FIRE SUPPRESSION**

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#### **3.1 WASHINGTON DEPARTMENT OF NATURAL RESOURCES**

DNR is responsible for suppression of wildfires on non-federal forested and range lands. DNR does not have authority or training to suppress structure fires. The DNR is responsible for fire suppression on a small portion (< 1 acre) of the project area. To aid DNR's response ability, the District will allow DNR to install their own lock on the Enloe Dam Road gates.

DNR is responsible for notifying the District of wildfires on or near the project area in a timely manner.

#### **3.2 UNITED STATES BUREAU OF LAND MANAGEMENT**

BLM is responsible for suppression of all wildfires occurring on BLM forested and range land. BLM does not have authority or training to suppress structure fires. The portion of the project area for which BLM is responsible for fire suppression includes approximately 56.62 acres. To aid BLM's response ability, the District will allow BLM to install their own lock on the Enloe Dam Road gates.

The BLM is responsible for notifying the District of wildfires on or near the project area in a timely manner.

#### **3.3 OKANOGAN COUNTY FIRE DISTRICT NO. 1**

Fire District No. 1 is the initial attack responder for wildland fires and structure fires within the project boundary. Once an Incident Commander is assigned, Fire District No. 1 will provide the responding agency(s) mutual aid. To aid Okanogan County Fire District No. 1's response ability, the District will allow them to install their own lock on the Enloe Dam Road gates.

#### **3.4 PUBLIC UTILITY DISTRICT NO. 1 OF OKANOGAN COUNTY**

The District will equip project maintenance personnel with basic firefighting equipment including fire extinguishers and shovels. Maintenance personnel will also carry the Emergency Contact Notification List (Appendix A). In the event of a fire within the project area, District employees and contractors will take immediate action to the extent it is safe to do so and in a manner consistent with District operations and safety program. Upon notification of a wildfire within or nearby the project area, the District will evaluate, and if necessary, turn off any power and/or equipment that could create a greater fire hazard or jeopardize the safety to those conducting fire suppression activities.

The District is responsible for contacting 911, BLM and DNR in the event of a fire within the Enloe Dam project area. Okanogan County 911 dispatch will contact the appropriate fire response agencies to respond.

Once the fire department(s) arrive, fire suppression activities will be directed by the fire department. The District will provide assistance to the fire department as requested.

#### **4.0 SIGNAGE AND EMERGENCY PUBLIC NOTIFICATION**

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The District will post signs at the project entrance and on the recreation information board informing visitors of local fire restrictions, campfire safety, and emergency contact information.

In the event the County, DNR or BLM imposes fire restrictions encompassing project lands, the District will post fire restriction notifications on the information board and at the project entrance. District personnel will remove fire restriction signage upon notification from the appropriate agency that restrictions have been lifted.

For safety purposes, if a wildfire is reported within the project area, or on adjacent lands, emergency response agencies or District personnel will vacate the recreation area of all recreators. Once all recreators have safely exited, the District will barricade all access roads until the area is determined safe for re-entry.

## 5.0 POST-FIRE STABILIZATION AND TREATMENT

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In collaboration with BLM, the District will implement two post-fire treatment measures: emergency soil stabilization and vegetation rehabilitation. These measures are intended to minimize runoff, erosion, sedimentation, and other adverse effects that may threaten valued resources downslope and downstream from the burned area.

Once the project area has been cleared for re-entry, the District will consult with BLM and evaluate burned areas to determine proper methods for soil stabilization and reestablishment of vegetation on a case-by-case scenario.

Emergency post-fire stabilization and rehabilitation efforts will be tailored to protect cultural and natural resources. Measures to be implemented will be determined by the time of year, expected near-term weather, soil characteristics and supplies available.

Generally, soil stabilization will take place within 30-days of the area being cleared for reentry.

Vegetation rehabilitation will adhere to the seeding specifications and application rates found in Section 9.3 of the Right-of-Way Plan of Development (POD). Post fire vegetation rehabilitation will occur when site conditions are conducive to the establishment of seedlings, typically fall or early spring. The National Fire Plan Emergency Stabilization program processes may be implemented in coordination with BLM.

Seeding, and any other necessary site restoration, will occur after consultation with BLM.

## 6.0 CULTURAL RESOURCES

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In the event of a fire, the District will follow the emergency response protocols listed in Section 5.11 of the Historic Properties Management Plan (HPMP). The District will provide training and information to employees and contractors regarding the HPMP, including the contact information for the District's Historic Property Management Plan Coordinator (HPMPC). As described in the HPMP, the HPMPC is responsible for assessing potential impacts from fire to historic properties (cultural resources listed on or eligible for listing on the National Register of Historic Places), contacting cultural resources personnel at the appropriate land managing agency, and preparing documentation of any impacts to historic properties from the fire to members of the the Cultural Resource Work Group (CRWG). The CRWG includes BLM, Washington Department of Archaeology and Historic Preservation (DAHP) and the Colville Confederated Tribe.

To the extent practical, and based upon the nature of the fire, the District's personnel in charge of the fire response will work with the HPMPC to avoid using areas with known historic properties as the location for temporary staging and response areas.

The District will consult with the CRWG on plans for revegetation and debris clean-up in the event of a fire. An archaeologist will monitor all ground-disturbing activities and if necessary, employ procedures in the Unanticipated Discovery Plan in the HPMP. If the fire occurred in an area near Enloe Dam or the Northern Pacific Railroad Grade, the District will follow the resource specific guidelines as well as general guidelines for maintenance and rehabilitation of historic properties as described in Appendix G of the HPMP.

To avoid impacts to historic properties from activities relating to preventing fires, the District will provide the members of the CRWG the opportunity to review plans relating to the installation of fire suppression equipment or fire resistant materials on or on the grounds adjacent to the Enloe Dam and the existing Powerhouse. The choice of materials and the location of equipment should be selected in accordance with the guidelines relating to materials and color palette in the Aesthetics Management Plan and the HPMP.

## Appendix A - EMERGENCY NOTIFICATION LIST

