

EXHIBIT E – ENVIRONMENTAL REPORT

SUBPART E.4 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

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E.4.1 INTRODUCTION

The District proposes to construct a new power generating facility on the east side of the Similkameen River (Project) and abandon the existing decommissioned Enloe Powerhouse on the west bank. The powerhouse is listed in the National Register of Historic Places (NRHP). This Section of the Exhibit E – Environmental Report describes the historical and archaeological resources in the Area of Potential Effect (APE) and the impact of the Project on those resources.

The District recognizes the need to identify, protect, and preserve cultural resources associated with the Project. The purpose of this section is to describe the cultural resources present in the Project area, evaluate how the construction and operation of the proposed Project would impact those resources, and summarize the protection, mitigation, and enhancement measures proposed by the District.

This section describes the methods used to locate, identify, and evaluate and cultural resources within the APE; summarizes existing data on sites and features of cultural significance in the area; describes the resources that were found; describes the direct and indirect impacts on cultural resources; and proposes a management plan for resources within the Project's APE.

Some of this information was synthesized from reports and information available for this area. Additional information was gathered from surveys and studies conducted in consultation with applicable state and federal agencies in accordance with Title 18, Part 4, Section 41 of the Code of Federal Regulations (18 CFR 4.41): Application for Major Modified Project-Existing Dam.

REGULATORY COMPLIANCE

A Cultural Resources Section 106 Technical Report has been prepared and submitted to the Washington State Department of Archaeology and Historic Preservation (WDAHP) and consulting parties, in compliance with federal and state regulations governing cultural resources. The report follows the requirements of Section 106 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), as well as the Washington State Environmental Policy Act (SEPA). The District also prepared a separate Traditional Cultural Properties (TCP) report to address potential impacts to TCPs within the Project area, included as Appendix A of the Cultural Resources Report Section 106 Technical Report. The findings of the Cultural report are not attached due to the confidential nature of the information.

CONSULTING PARTIES (CULTURAL RESOURCES WORK GROUP)

Consultation conducted for cultural resources is summarized in Section E.4.4 below. FERC delegated authority to initiate Section 106 consultation on behalf of the agency to the District in September 2005. The District subsequently convened a Cultural Resources Work Group (CRWG) consisting of the District and its licensing team, FERC, WDAHP, the BLM, and the Colville Confederated Tribes (CCT). Over the course of the development of the license application, the CRWG met or conducted conference calls on a monthly basis and provided comments on the establishment of an APE, and on the cultural resources survey design, maps, and report.

HISTORICAL RESOURCES OPTIONS

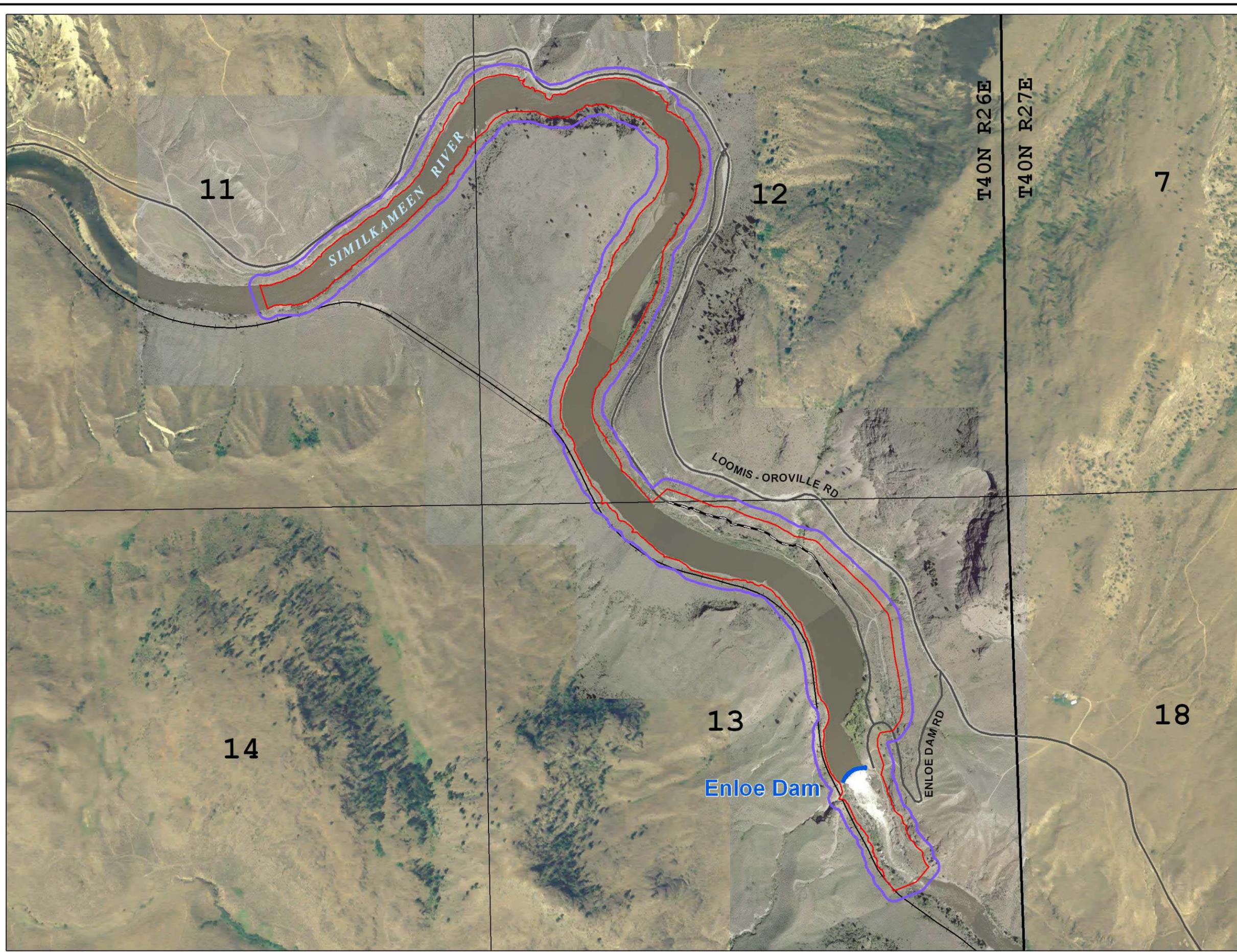
The CRWG is continuing to consider options with respect to the Project's historical resources, including demolition of the historical Enloe Powerhouse, as well as means to protect sites containing possible prehistoric resources, other historic resources, and TCPs. These considerations will result in a Programmatic Agreement that will be negotiated in the course of the Section 106 compliance process. Impact evaluation in this cultural resources report for the license application assumes demolition of the powerhouse and compliance with all requirements for cultural resources protection.

APE, RESEARCH, AND FIELD INVESTIGATIONS

The District, in consultation with the CRWG, determined the APE for this Project (Figure E.4-1). The archaeological APE for the Project includes lands within the FERC boundary, which is defined by the contour of 1055 feet above mean sea level. The APE includes the dam, penstocks, powerhouse, recreational sites, access roads, and other ancillary facilities. The APE also includes all areas directly or indirectly affected by the Project if and when determined. The APE for historical resources (buildings and structures) extends beyond the FERC boundary to include an additional 100 feet (horizontally) where Project operations may affect the character or use of historical resources and/or TCPs. If the boundary of an archaeological site extended beyond the FERC boundary, the entire site would be defined and recorded. Two archaeological sites, a historical railroad camp (45OK1240) and a historical homestead (45OK1238), were located completely outside the APE, however they were so close to the boundary that they were observed and assessed from within the Project boundary during field work. These resources are referenced in the License Application but no determinations of eligibility were made.

Once the APE was defined, archaeological and architectural research was conducted at local, state, and national repositories. Construction staging areas will occur within the APE. Avoidance of known sites is required in planning for the location of these staging areas.

[Figure E.4-1]



- Legend**
- Archaeological APE and FERC Boundary
 - Historical Resources APE (extends 100 feet horizontally beyond the FERC boundary)
 - ⤵ Enloe Dam
 - Railroad Tunnel
 - Railroad
 - Existing Road
 - Planned Road
 - Section Boundary

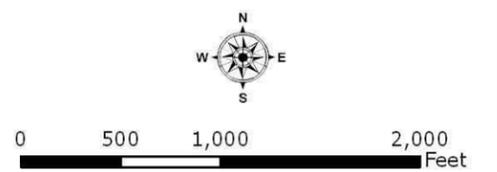


Image sources: USDA National Agriculture Imagery Program, 2005 and PUD No. 1 of Okanogan County, 2006.

Enloe Dam Licensing Project

**Figure E.4-1
Project APE Map**



The initial archaeological field survey consisted of a pedestrian survey, conducted in March and April of 2006, along the banks and terraces within the APE on the Similkameen River. The survey was limited to landforms that are potentially impacted by Project operations including, but not limited to, water fluctuations that are or may cause soil erosion and soil-disturbing recreational uses related to the waters within the FERC Boundary. A second field survey, conducted on March 27, 2007, was conducted to survey the land within the revised APE, created by including the existing access road to the east of the Similkameen River near the dam, in the Project APE. All field investigations were undertaken within the revised APE in accordance with state and federal methodological standards and requirements, and in consultation with the CRWG. Site integrity and potential eligibility for inclusion in the NRHP was assessed for all newly and previously recorded properties.

Four previously identified archaeological sites (45OK367, 45OK532, 45OK533, and 45OK566) were reevaluated and updated inventory forms were prepared. Archaeological inventory forms were also prepared for newly identified resources: 45OK1265 AR-2 and 45OK1239 (AR-4). The field designation "AR" was used for each newly identified archaeological resource. Site 45OK1238 (AR-1) lies outside the APE, therefore this resource is not discussed although, background information is provided in the Section 106 Report. Site 45OK1238 (AR-1) and Site 45OK1240 (AR-5) also lie outside the APE, but are so close to the southern APE boundary that they were observed during fieldwork. Background information is provided in the Section 106 Report; however, no impact would occur to these sites. Field site number AR-3 consisted of the foundation of the old Enloe Powerplant operator's house employee housing. The field designation AR-3 was dropped because it was determined that the foundation was part of site 45OK367. In April 2007, the District obtained permanent site numbers for the newly identified sites. Copies of the archaeological inventory forms, as well as more specific information on the archaeological resources inventory have been submitted to the Washington State Historical Preservation Officer (SHPO) and consulting parties in the Section 106 Cultural Resources Technical Report.

In March of 2006, ENTRIX architectural historians conducted a historical resource inventory of the APE to record buildings and structures that are 50 years of age or older. The focus of the fieldwork was to identify previously unrecorded buildings and structures within the APE and to document the current condition of the NRHP-listed Enloe Dam, Enloe Powerhouse, and associated structures. Prior to conducting the fieldwork the District arranged for access to the powerhouse and other portions of the APE not open to the general public. In the field, architectural historians photographed and recorded the physical features of historical resources on inventory forms, later entering the information into the DAHP historic property inventory form database.

The Enloe Powerhouse and Dam are listed on the National Register and recorded as site 45OK368. For the purposes of this study, one inventory form was prepared for the dam and a separate form was prepared to document the current condition of the

powerhouse and penstock. In the field, architectural historian's assigned field "HR" or historic resource numbers to newly recorded historic resources. Inventory forms were also prepared for a segment of Great Northern Railway Grade (HR-1), an access road to the operator's house (HR-2), a historical pump house (HR-3), and the Oroville-Tonasket Irrigation District Canal (HR-4). Copies of the inventory forms and more specific information on the historical resources inventory have been submitted to SHPO and consulting parties in the Section 106 Cultural Resources Technical Report.

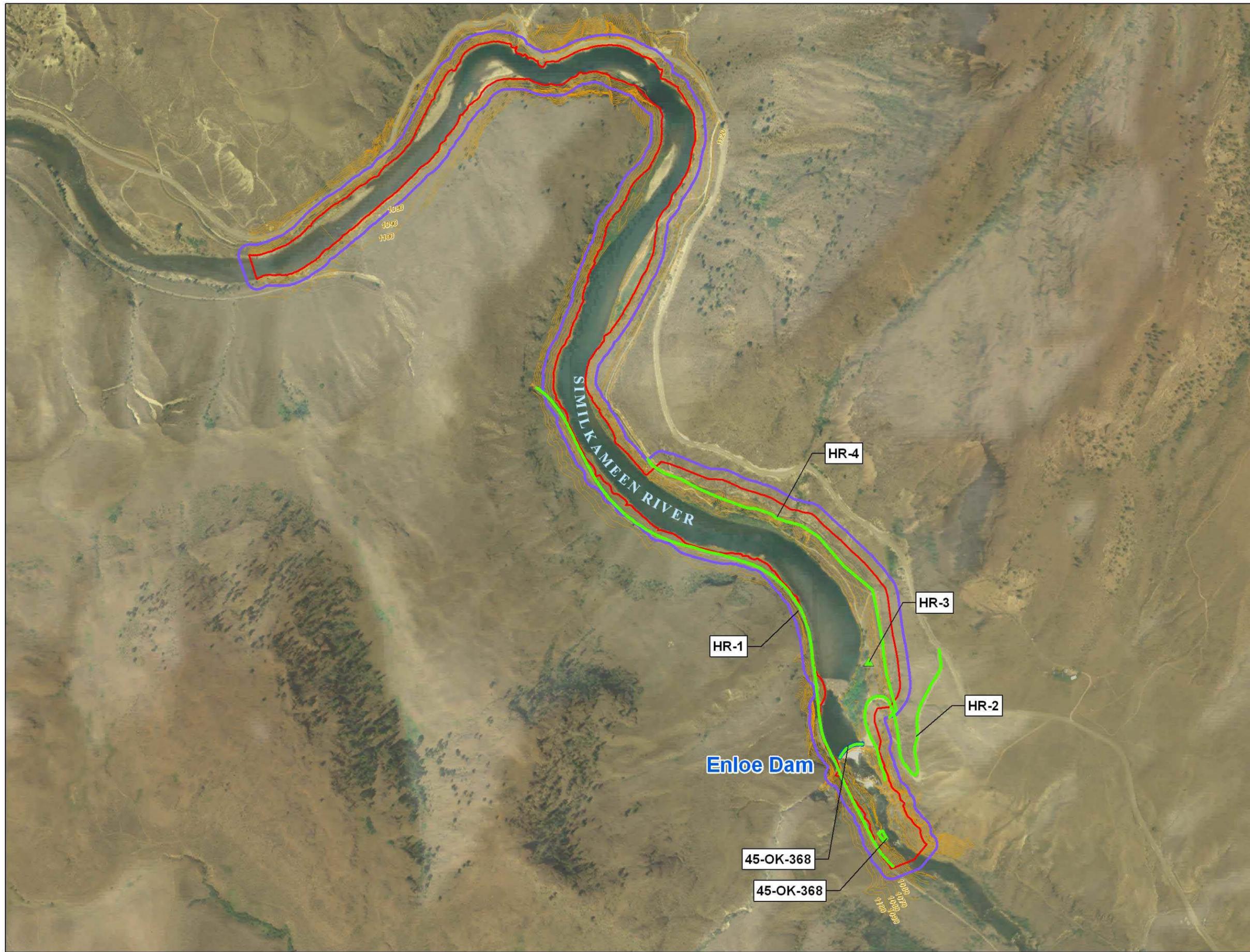
E.4.2 DESCRIPTION OF HISTORICAL RESOURCES

Six resources were identified during the architectural field survey (Table E.4-1, Figure E.4-2). This included the Enloe Dam (45OK368), Enloe Powerplant and Penstock (45OK368), Great Northern Railway Grade (HR-1), Access Road to Operator's House (HR-2), Pump House (HR-3), and the Oroville-Tonasket Irrigation District Canal (HR-4). The Great Northern Railway, which embodies integrity of location, setting, and feeling, is under criterion A has been determined eligible for the NRHP. The Access Road and the Pump House lack sufficient integrity to be considered eligible for the NRHP. The Enloe Dam, Powerplant and Penstock (45OK368) were previously determined eligible for the NRHP.

**Table E.4-1
Inventoried Historical Resources**

Site/Field Number	Resource Name (Previously identified site number)	Historical Significance	Relevant NRHP Criteria or Reason for Omission
45OK368	Enloe Dam	NRHP Listed	NRHP Criterion A
45OK368	Enloe Powerplant and Penstock	NRHP Listed	NRHP Criterion A
HR-1	Great Northern Railway Grade	Eligible	NRHP Criterion A
HR-2	Access Road to Operator's House	Not Eligible	Does not meet NRHP criteria
HR-3	Pump House	Not Eligible	Integrity Compromised
HR-4	Oroville-Tonasket Irrigation Canal	Not Eligible	Integrity Compromised

[Figure E.4-2]



- Legend**
- Archaeological APE and FERC Boundary
 - Historical Resources APE (extends 100 feet horizontally beyond the FERC boundary)
 - Enloe Dam
 - ▲ Inventoried Historical Resource
 - ~ Inventoried Historical Resource
 - ~ Contour (Contour Interval = 10 Ft)

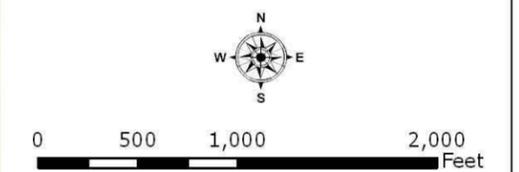


Image sources: 2005 USDA National Agriculture Imagery Program

Enloe Dam Licensing Project

Figure E.4-2
Historical Sites located within the Enloe Dam Licensing Project APE



E.4.2.1 NATIONAL REGISTER SITES

Two resources within the Project APE are currently listed on the NRHP. The 1920 Enloe Dam (45OK368) was listed in the NRHP in 1978. Constructed in 1920, the dam is a concrete arch-gravity structure with a spillway standing 54-feet above the streambed of the Similkameen River. The neighboring Enloe Powerplant and Penstock (45OK368) was also listed on the NRHP in 1978. This brick and concrete building, although currently in ruinous condition, remains eligible for the National Register. Constructed between 1919 and 1923, the concrete and brick powerhouse features a distinctive half-hipped, half-gabled roof and houses two Pelton 1600 kv turbine-generator units. The building is situated on the west side of the Similkameen River. Both the dam and powerplant remain significant under National Register Criterion A. As an early hydroelectric power generation facility in the Okanogan Valley that provided power to mining and irrigation facilities, the dam and powerhouse proved critical to the development of the local economy in the early twentieth century.

E.4.2.2 IMPACTS

The following discussion of impacts under the Build with Demolition of the Enloe Powerhouse and No Build alternatives provides a summary of known or anticipated impacts from short-term construction impacts and long-term operation impacts. In addition to the known or anticipated impacts, undetermined impacts could occur to historic properties by routine maintenance, operation, and improvement actions during the license period. Since all possible actions that might occur during the license period cannot be known at this date, general categories, or types, of actions have been developed to provide a basis for determining the necessary management steps. These possible maintenance activities are listed below by category:

- Routine Maintenance and Repairs;
- Alterations to Buildings, Structures, and Sites;
- Isolation from, or Alteration of, the Property's Surrounding Environment;
- Introduction of Elements Out of Character with the Property or its Setting; and
- Transfer or Sale of the Property without Preservation Conditions.

In addition to the direct and indirect impacts caused by the disturbance of a site during construction or maintenance operations and recreational activities, this section considers the effect that fluctuating water levels in the reservoir would have on cultural resources. To assist in understanding where the Project will cause water levels to change, Figure E.4-3 shows the estimated reservoir inundation zone with the location of the inventoried historical resources plotted. The location of archaeological resources is

considered confidential, and those resources are not included on the figure. There is one prehistoric site, 45OK532, which could be affected by fluctuating water levels in the reservoir.

Construction Impacts

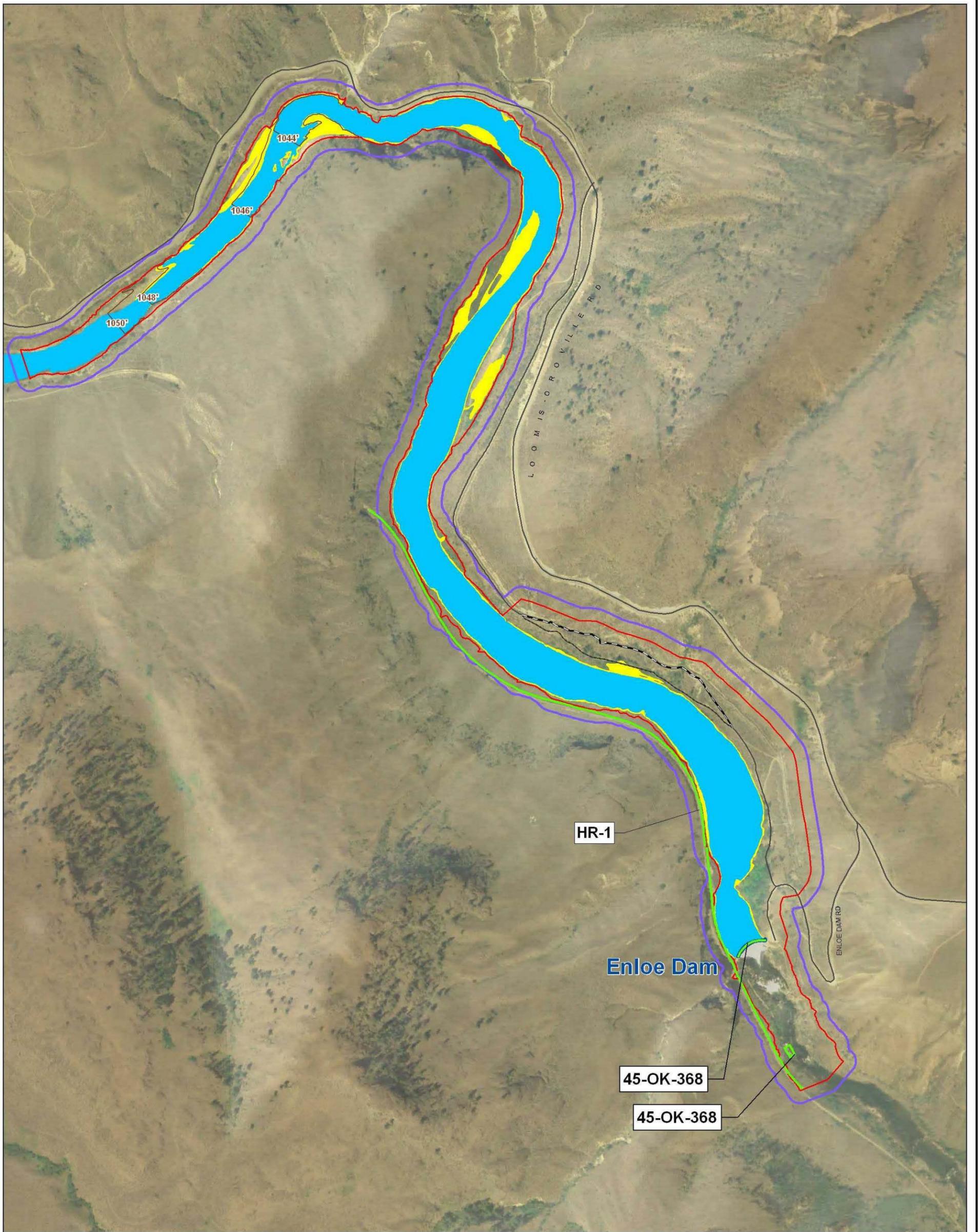
Within the APE, the NRHP-eligible Great Northern Railway Grade (HR-1) and the NRHP-listed Enloe Dam (45OK368) and Enloe Powerhouse (45OK368) are significant resources. The Enloe Powerhouse and Great Northern Railroad Grade are abandoned and are located across the river from the proposed construction site. Construction noise, dust or vibrations caused by construction of the new generating facility on the east side of the river would not affect the Enloe Powerhouse or Great Northern Railway Grade.

The dam may require minor stability improvements to meet current dam safety requirements and extend its service life. Modifications would depend on a seismic and structural evaluation. Options include installing vertical anchors through the trapezoidal thrust block structure forming the right abutment of the dam and into the foundation, or buttressing the structure on the downstream side by pouring a concrete block against it. Crest gates would be placed on the top of the dam. Once the Project has been constructed, the concrete on the downstream face of the dam would be checked and any scouring would be repaired. The existing low level outlet gates may be permanently closed. These operations would not alter the design or construction of the dam and would contribute to the extended life of the structure. These would not be considered adverse impacts.

**Table E.4-2
Impacts to Eligible/NRHP-Listed Historic Resources**

Site / Field No.	Resource Name	Historical Significance (Criterion)	Project Impacts
Alternative: Build			
45OK368	Enloe Dam	NRHP Listed (A)	No Impact
45OK368	Enloe Powerhouse and Penstock	NRHP Listed (A)	Impact
HR-1	Great Northern Railway Grade	Eligible (A)	No Impact
No Build Alternative			
45OK368	Enloe Dam	NRHP Listed (A)	No Impact
45OK368	Enloe Powerhouse and Penstock	NRHP Listed (A)	Impact
HR-1	Great Northern Railway Grade	Eligible (A)	No Impact

[Figure E.4-3]



- Legend**
- Archaeological APE and FERC Boundary
 - Historical Resources APE
 - Inventoried Historical Resource
 - Reservoir Without Crest Gates (Current Low-Flow Waterline)
Surface Elevation at Dam: 1045.3'
 - Zone Inundated by Crest Gates (Proposed Low-Flow Waterline)
Surface Elevation: 1048.3'
Approximate Surface Area: 12.2 acres

- Enloe Dam
- Planned Road
- Existing Road
- Elevation Contour

0 250 500 1,000 Feet

Image source: 2005 USDA National Agriculture Imagery Program

Enloe Dam Licensing Project

**Figure E.4-3
Estimated Reservoir
Inundation Zone and Location
of Historical Resources**

ENTRIX

Operation Impacts

Table E.4-2 provides a summary of long-term operation impacts for the historically significant Great Northern Railroad Grade, Enloe Dam and Enloe Powerhouse and Penstock. The proposed construction of the new generating facility on the east side of the river would have no adverse effect on the Enloe Powerhouse and Penstock. The District would demolish the existing Enloe Powerhouse and Penstock, which would be an adverse effect to this historic resource.

Demolishing the powerhouse would require the transportation of equipment and supplies along the existing NRHP-eligible Great Northern Railroad Grade, which serves as the existing access road to the Enloe Powerhouse. The use of heavy equipment and hauling of refuse along the railroad grade would avoid damaging the grade including elements to its existing railroad grade surface or tunnel, which is outside the APE. There would be no adverse effect to the Great Northern Railway Grade.

E.4.2.3 PROTECTION, MITIGATION & ENHANCEMENT MEASURES

A summary of Project PM&Es is provided in Appendix D.1.

ISSUE: ENLOE DAM AND POWERHOUSE AND ASSOCIATED OBJECTS AND STRUCTURES

Potential Impact

Character-defining features of the dam, powerhouse, and associated objects and structures could be demolished or lost.

Proposed PM&E HIST-01: Solicitation for Powerhouse Ownership

Upon receiving a license, the District will solicit interested parties to assume ownership and management of the powerhouse. This solicitation would provide the opportunity for community groups, qualified non-profit groups, or state, federal, and local government agencies to find an alternative use for the building. The Programmatic Agreement (PA) will specify the period of time during which the District would solicit and review offers, selection criteria, and procedures for signing an agreement. Should a qualified owner not be identified within the specified period of time outlined in the PA, the powerhouse would be demolished as described in HIST-02. The cost of HIST-01 is estimated to be \$5,000.

Proposed PM&E HIST-02: Demolition and Site Closure

This PM&E would be implemented if a qualified owner is not identified under HIST-01. The costs of the careful demolition of the powerhouse to create an interpretive site are \$85,000. The cost of site closure of the historic powerhouse is anticipated to be \$35,000. Implementation off the interpretive site is described below in HIST-03.

Proposed PM&E HIST-03: Install Interpretive Panels

To preserve information on the current powerhouse, the District will develop and install interpretive panels with information about the history of the powerhouse adjacent to its current site. The District will work with historical societies and community groups to incorporate information on the powerhouse into other resources such as interactive cd-roms or websites on the role the dam played in community development. The District will retain copies of the HAER documentation for the powerhouse and dam which includes photographs of the dam and powerhouse. Because the condition of the powerhouse has deteriorated since this report was completed, additional photography documenting its current state will be taken. Interpretive materials would be developed and installed regardless of whether a new owner is identified. Development of the interpretive information and installation of the panels are estimated to cost \$25,000.

Expected Outcome

The outcome of this process includes the completion of the Section 106 process and development of the HPMP, and a PA. The documentation of the powerhouse and the interpretive panels will provide access to the information on this early example of a hydroelectric development.

ISSUE: DEVELOPMENT OF HISTORIC PROPERTIES MANAGEMENT PLAN (HPMP)**Potential Impact**

In order to mitigate for impacts of Project operations to historic resources in the APE, a HPMP is required to be developed in coordination with all consulting parties including the District, WDAHP, BLM, FERC, and the CCT.

Proposed PM&E HIST-04: Review and Agreement on the Draft HPMP

A draft HPMP has been prepared which stipulates specific mitigation measures for known adverse effects to historic resources. Some potential mitigation measures could include working with local historical societies, recreation, and preservation groups to develop and install interpretative panels about the penstock and powerplant; drafting of annotated measured drawings of the powerplant, or creating an interactive cd-roms or website with historical information on Enloe Dam and Powerhouse. The HPMP also includes information about the ongoing treatment of historic resources within the APE and mitigation measures for archaeological resources. Discussions about the HPMP are continuing with the CRWG to agree upon specific mitigation measures. Review and agreement on the HPMP is not yet advanced sufficiently to have an accurate estimate the costs of these PM&Es.

Expected Outcome

The desired outcome would be concurrence by the CRWG on the HPMP and incorporation of this information within the PA.

E.4.3 DESCRIPTION OF ARCHAEOLOGICAL RESOURCES

A description of the archaeological resources identified within the APE is provided in Table E.4-3. A TCP report is included as an appendix to the Section 106 Cultural Resources Technical Report submitted to SHPO and consulting parties. The location of the archaeological sites is confidential. A map of these resources has not been included in this document.

**Table E.4-3
Inventoried Archaeological Resources**

Site/Field Number	Resource Name	Historical Significance	Relevant NRHP Criteria or Reason for Omission
45OK367	Prehistoric	Not Eligible	Lack of integrity
45OK532	Prehistoric	Eligible	NRHP Criterion D
45OK533H	Historic Homestead	Not Eligible	Does not meet NRHP Criteria
45OK566	Prehistoric	Eligible	NRHP Criterion D
(AR-2)	Historic Roads	Not Eligible	Does not meet NRHP Criteria
45OK1239 (AR-4)	Similkameen Falls Power House	Not Eligible	Lack of integrity
45OK1241 (AR-6)	Historic Can Dump	Not Eligible	Does not meet NRHP Criteria

Table Notes: In the field archaeologists assigned the historical Enloe Powerplant employee housing foundations field site number AR-3. Because the foundations are actually part of site 45OK367, AR-3 is not listed above or evaluated separately. All NRHP eligibility recommendations were confirmed by the WDAHP. Efforts to relocate site 45OK565 in the 2006/2007 testing were unsuccessful.

In 1985, sites 45OK367, 45OK532, 45OK533H, 45OK565 and 45OK566 were recorded by the Seattle District of the US Army Corps of Engineer's cultural resources reconnaissance for the Similkameen River Multipurpose Project Feasibility Study (Salo 1987). In 1991, an archaeological consultant, Archaeological and Historical Services (AHS), conducted additional investigations of sites 45OK367, 45OK532, and 45OK566 for the Section 106 work associated with the Enloe Dam FERC Licensing effort (Boreson 1992). AHS prepared Determinations of Eligibility (DOE) (National Register of Historic Places Form) based on the results of the testing at sites 45OK367, 45OK532, and 45OK566. The District has prepared DOEs for the archaeological sites within the APE.

E.4.3.1 NATIONAL REGISTER SITES

Of the four previously identified archaeological sites, two appear to be eligible for the NRHP under Criterion D (to be confirmed by SHPO). Site 45OK532 is a prehistoric camp and lithic scatter situated beside the Similkameen River, upstream from the Enloe Dam. While ethnographically identified as a salmon fishing locale, this area also retains

associations with the Coyote myth. The site features above- and below-ground cultural remains including cutting, scraping, perforating, and drilling implements. The presence of a stemmed projectile point suggests an occupation period between 3000 and 5000 years ago. Ruins of historic structures within the site do not contribute to the overall significance of the site. Site 45OK566 is another prehistoric site that measures approximately 100 m long and 30 m wide and is located on a terrace overlooking the east side of the Similkameen River, south of the Enloe Dam. Testing at the site has revealed intact subsurface deposits, such as a microblade; a possible microblade; and cutting, scraping, and drilling tools related to prehistoric activities. Due to the intact nature of the deposits and the area's ethnographic association with the Coyote myth, the site has research potential and is therefore eligible for the NRHP under Criterion D.

In addition to confirming the eligibility status of previously documented sites, archaeological field investigations were conducted to determine the presence of additional resources. The sites were evaluated for NRHP eligibility, but only two appear to be eligible for the NRHP.

AR-5, a historic laborer's camp site that is associated with either the construction of the Great Northern Railway's Marcus Division Molson-Chopaka Section of railroad or the Enloe Dam and Powerhouse. Historic features consist of a partially collapsed stone over (2m in diameter) located in front of the foundation of a stone structure that is 8m in length and 3m wide. A concentration of metal approximately 20m in diameter is located in the center of the site. The metal is deteriorated, but several hole-in-top cans are still visible. The site may be eligible for the NRHP under Criterion D due to its potential of yielding additional information about the daily lives of railroad laborers, a group of people often from varying ethnic groups and for whom there is limited documentation regarding their daily lives. This site lies outside of the APE, therefore, the resource is not discussed under project impacts.

E.4.3.2 IMPACTS

The Project impacts to archaeological resources for both alternatives would be the same and have been summarized in Table E.4-4.

**Table E.4-4
Project Impacts upon Eligible/NRHP Listed Archaeological Sites**

Site/Field No.	Resource Name	Historical Significance/ Criterion	Project Impacts
Both the Build and No Build Alternatives			
45OK532	Prehistoric	NRHP Eligible (D)	Construction/Operation
45OK566	Prehistoric	NRHP Eligible (D)	No Impact

Construction Impacts

Within the APE, sites 45OK532 and 45OK566 are eligible for listing in the NRHP. Archaeological site 45OK566 is not located directly in the area of any proposed ground disturbance or construction, and therefore will not be adversely affected by Project construction. The proposed site construction will occur in the vicinity of site 45OK367, a multi-component site that has been determined ineligible for the NRHP due to disturbance of the prehistoric archaeological deposits during the historic period. The proposed access to the site is in the vicinity of archeological site 45OK532. Modification to the road during construction or construction staging could cause ground disturbance that would impact the prehistoric deposits at this site.

The demolition of the Enloe Powerhouse is unlikely to affect historically significant archaeological resources. The demolition of the powerhouse may result in ground disturbing activities; however, such ground disturbance would primarily occur in areas of disturbed soils where the powerhouse was constructed. Minimal ground disturbing activities may occur during the removal of the penstock, which connects the dam to the powerhouse. Because the penstock is located near the ethnographic location of Coyote's Dam, any ground disturbing activity in this area should be monitored.

Operation Impacts

The operation of the powerhouse would have no known adverse effect on the NRHP eligible archaeological sites 45OK532 and 45OK566 that are within the APE. Prehistoric site 45OK532 is buried in the alluvial terrace adjacent to the reservoir. Fluctuating water levels in the reservoir could disturb archaeological deposits at this site, which is adjacent to the water's edge. Prehistoric site 45OK566 is on a terrace outcrop above the river which limits the potential of Project-related erosion impacts at this historically significant site. Recreation activities within the APE could also disturb sites through artifact collection or ground disturbance (i.e. vehicular use) in the site areas. Vehicular access is planned in the vicinity of archaeological site 45OK532. If unmitigated, traffic on the gravel road could cause ground disturbance or erosion that would impact the site.

E.4.3.3 PROTECTION, MITIGATION & ENHANCEMENT MEASURES

A summary of Project PM&Es is provided in Appendix D.1.

ISSUE: ARCHAEOLOGICAL RESOURCES ALONG THE RESERVOIR SHORELINE

Potential Impact

Loss of or impact to archaeological resources due to shoreline erosion and fluctuating water levels in the reservoir could occur.

Proposed PM&E ARCH-01: Conduct Monitoring of Shoreline Areas

The District will conduct monitoring of shoreline areas to prevent damage to previously unrecorded archaeological sites and the NRHP-eligible archaeological site due to water fluctuations. The HPMP will describe the proposed monitoring plan and the treatment plan for archaeological resources identified as at risk of exposure to avoid loss of important archaeological artifacts and sites. The HPMP will be developed for the filing of the License Application. The total cost of implementation of the plan has not been estimated, however, the costs of monitoring are anticipated to be \$65,000.

Expected Outcome

The outcome includes the completion of the Section 106 process and the development of the HPMP. The implementation of the HPMP will minimize or avoid adverse impacts to archaeological resources, both documented minimize or avoid adverse impacts to archaeological resources, both documents and unrecorded sites and unrecorded sites potentially at risk of exposure and loss due to shoreline erosion.

ISSUE: GROUND DISTURBING ACTIVITIES DUE TO CONSTRUCTION NEAR NRHP-ELIGIBLE ARCHAEOLOGICAL SITES**Potential Impact**

Loss of or impact to NRHP-eligible archaeological resources could occur due to ground disturbance.

Proposed PM&E ARCH-02: Avoid Known Eligible Sites

Construction activities that have the potential to affect known eligible sites will be planned, and traffic patterns established, to avoid damage to these sites. The cost of avoiding these sites is estimated at \$15,000.

Expected Outcome

The outcome of this process should be the avoidance of adverse impacts to any NRHP-eligible sites.

ISSUE: ARCHAEOLOGICAL RESOURCES ALONG THE ACCESS ROAD**Potential Impact**

NRHP-eligible archaeological resources could be lost or impacted due to ground disturbance and/or erosion.

Proposed PM&E ARCH-03: Monitor Eligible Sites During Construction

The District will conduct monitoring of construction areas to prevent damage to NRHP-eligible archaeological site(s). The HPMP will recommend strategies to minimize ground disturbance during construction. The HPMP will also describe the proposed monitoring plan and the treatment plan for archaeological resources identified as at risk of

exposure to avoid loss of important archaeological artifacts and sites. The expected cost for developing the HPMP and monitoring are discussed above for archaeological resources along the reservoir shoreline.

Expected Outcome

The outcome includes the completion of the Section 106 process and the development of the HPMP. The implementation of the HPMP will minimize or avoid adverse impacts to archaeological resources, both documented and unrecorded sites, potentially at risk of exposure and loss due to ground disturbance and erosion.

ISSUE: UNIDENTIFIED ARCHAEOLOGICAL SITES AND TCPS

Potential Impact

Potential loss of or impact to unidentified archaeological resources and TCPs could occur.

Proposed PM&E ARCH-04: Development of an Inadvertent Discovery Plan

The District has completed the identification and evaluation of the TCPs within the APE. Complete avoidance of all of these areas is not feasible due to their proximity to project facilities. Care will be taken in areas near TCPs. The development of an Inadvertent Discovery Plan that specifies required actions and procedure should a site be accidentally disturbed during construction activities. The District will provide information to its staff and construction workers about the potential for archaeological deposits to be found. The expected costs development of the Inadvertent Discovery Plan is \$15,000. The costs of implementation of the plan have not been estimated.

Expected Outcome

The outcome of the mitigation is the protection of unidentified archaeological sites and TCPs and the minimization of adverse effect to sites inadvertently disturbed by construction activities.

ISSUE: IMPACTS TO ARCHAEOLOGICAL SITES DUE TO INCREASED RECREATION

Potential Impact

Potential damage to archaeological site(s) could occur due to increased recreation activity in the Project area.

Proposed PM&E ARCH-05: Determine Potential Recreational Impacts to Archaeological Sites

The District is discussing the proposed recreation plans with the CRWG to determine if there will be impacts to archaeological sites in the vicinity of the recreation facilities. The

HPMP will specify necessary mitigation and treatment measures to protect these prehistoric sites. The District will provide information to its staff and maintenance workers about the potential for archaeological deposits to be found. The costs of implementation of the plan have not been estimated.

Expected Outcome

The outcome of the mitigation is the protection of the archaeological site through the minimization of adverse effects and the implementation of the HPMP.

E.4.4 CONSULTATION SUMMARY

Section 106 Consultation began with the establishment of the CRWG in late 2005 as described in Section E.4.1 above. Consultation with the CRWG continued through 2008, generally through monthly conference calls. These calls were held on February 6 2006; March 6 2006; June 5, 2006; July 10, 2006; August 14, 2006; October 16, 2006; November 13, 2006; December 18, 2006; February 5, 2007; March 6 2007; May 21, 2007; April 9, 2007; June 5 2007; July 9, 2007; August 6, 2007; January 15, 2008; February 26 2008; March 17, 2008; April 21, 2008; May 1 2006; June 2, 2008; and July 7, 2008.

The CRWG has been or is continuing to be involved in the following work:

- Determination of the APE
- Review of several drafts of Section 106 Report
- Review of the Traditional Cultural Properties Report
- Discussion of comments that relate to Cultural Resource issues on the Draft License Application
- Development of a Historic Properties Management Plan (HPMP)
- Development of mitigation measures for adverse effects.

All CRWG meetings are documented and minutes are distributed to the group members. Focused communications have been held with individual CRWG members to resolve issues without involving the entire CRWG. These included a conference call between Greg Griffith of the WDAHP and ENTRIX staff representing the PUD, regarding initial comments on the historic site inventory forms in November 2006; a conference call between Rob Whitlam of the WDAHP and Kimberly Demuth and Megan Herkelrath of ENTRIX, regarding whether to create DOEs for the TCPs, in April of 2007; and correspondence (through email) between Rob Whitlam of the WDAHP; Guy Moura of the CCT; and ENTRIX regarding whether additional testing is needed within the

boundaries of site 45OK367 before the planned construction of the intake channel, in June 2007. In March of 2008 additional correspondence occurred by phone and by email between the District, Lucy Zuccotti, Craig Smith, and Kimberly Demuth of ENTRIX and Rich Bailey of the BLM and Guy Moura of the CCT regarding additional testing to determine the boundaries of site 45OK367. The CRWG meetings have continued to take place in 2008 and will be ongoing until the Section 106 process is completed. The group is expected to continue in an advisory role to the District for its ongoing management of the historic properties in the Project area.

As part of the Section 106 consultation process, a TCP Report has been prepared as an Appendix to the Section 106 Report. The District has coordinated with the Colville Confederated Tribes on the completion of this report, including communications regarding monitoring that would be conducted as geotechnical test pits were excavated within the site boundaries of 45OK367, in November 2006 and additional testing conducted in March 2008 on that site. The results of the testing are included within the Section 106 Report.

In addition to the Section 106 Consultation process, the District held several meetings with the Upper and Lower Similkameen Bands in Canada in late 2005. The Bands participated in the District's outreach meeting in January 2006. The District met with the Lower Simalkameen Band again in November 2007 and officially invited the Band to participate in consultation in January of 2007. This Band has not joined the consultation process.

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