

Study 12.1

HISTORIC PROPERTIES

November 2010

1.0 Project Nexus

Yuba County Water Agency's (YCWA or Licensee) continued operation and maintenance (O&M) of the existing Yuba River Development Project (Project) has a potential to affect historic properties.¹

Licensee will treat all information regarding the specific locations of cultural resource sites,² which include historic properties, as "Privileged and Confidential." Without prior approval from the Federal Energy Regulatory Commission (FERC), the Global Positioning System (GPS) coordinates and maps showing the locations of such resources will not be made available to any Relicensing Participant other than FERC, State Historic Preservation Officer (SHPO), United States Department of Agriculture Forest Service (Forest Service) for sites on National Forest System (NFS) land, United States Department of Interior (USDOI) Bureau of Land Management (BLM) for sites on public land administered by BLM, and participating federally-recognized Tribes.

2.0 Resource Management Goals of Agencies with Jurisdiction Over the Resource to be Studied³

Under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, federal agencies must take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings.

[Relicensing Participants - This section is a placeholder in the Pre-Application Document (PAD). Section 5.11(d)(2) of 18 CFR states that an applicant for a new license must in its proposed study "Address any known resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied." During 2010 study proposal development

¹ As defined under 36 CFR 800.16(l), historic properties are prehistoric or historic sites, buildings, structures, objects, districts, or locations of traditional use or beliefs that are included in, or eligible for inclusion in, the National Register of Historic Places (NRHP).¹ Historic properties are identified through a process of evaluation against specific criteria. For most cultural resources evaluated for listing on the NRHP, these criteria are found at 36 CFR 60.4.

² This study plan utilizes the term cultural sites to identify any prehistoric or historic district, site, building, structure, object, or Traditional Cultural Properties, regardless of its inclusion in or eligibility for inclusion in the National Register of Historic Places (NRHP).

³ Under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, federal agencies must take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. As provided in 18 CFR § 5.5(e), Licensee in its Notice of Intent to File an Application for New License requested that the FERC, the lead federal agency for the licensing, designate Licensee as FERC's non-federal representative for purposes of initiating consultation under Section 106 of the NHPA and the implementing regulations at 36 CFR § 800.2(c)(4).

meetings, agencies advised Licensee that they would provide a brief written description of their jurisdiction over the resource to be addressed in this study. If provided before Licensee files its Proposed Study Plan and Licensee agrees with the description, Licensee will insert the brief description by an agency or agencies here, stating the description was provided by that agency. If not, prior to issuing the Proposed Study Plan, Licensee will describe to the best of its knowledge and understanding the management goals of agencies that have jurisdiction over the resource addressed in this study. Licensee]

3.0 Study Goals and Objectives

The goal of the study is to assist FERC in meeting its compliance requirements under Section 106 of the NHPA, as amended, by determining if licensing of the Project will have an adverse effect on historic properties.

The objective of this study is to identify and assess Project effects on historic properties and potential historic properties that may be affected by Project O&M, and determining which of these resources requires NRHP-eligibility evaluations.

4.0 Existing Information and Need for Additional Information

Licensee's Preliminary Information Package (YCWA 2009) described existing, relevant, and reasonably available information regarding cultural resources. This information is summarized below.

To gather existing, relevant, and reasonably available information regarding cultural resources in the project vicinity, records searches were performed at State of California repositories in May and June 2009 at the North Central Information Center (NCIC) of the California Historical Resources Information System (HRIS) at California State University, Sacramento (CSU, Sacramento) and the Northeast Information Center (NEIC) at California State University, Chico (CSU, Chico).

The review of 96 previous cultural resources investigations and archival information indicates that lands in the FERC Project Boundary and within 0.25 mile of that boundary have been the subject of cultural resource investigations for over 40 years. Licensee estimates that the FERC Project Boundary contains 7,800 acres, of which approximately 4,700 acres (approximately 60%) are within the normal maximum water surface elevation of New Bullards Bar Reservoir. Based on existing and reasonably available information, all but about 2,200 acres of the area within the FERC Project Boundary were previously surveyed for cultural resources. However, most of those studies are more than 10 years old and/or do not meet current professional standards for fieldwork.

For those portions of the Project located within Yuba and Nevada counties, Licensee identified 149 previously recorded cultural resources on file at the NCIC that lie inside the FERC Project Boundary or within 0.25 mile of it. The majority of historic period site assemblages reflect

industrial mining and domestic occupations of the project vicinity; almost one-third of the historic period sites contain mining-related features. Historic infrastructure features, predominantly ditches and roads, were also identified. Native American pre-contact sites are typical of those found throughout the region, namely locations with bedrock milling features and scatters of lithic material. Other documented pre-contact cultural remains range from an isolated projectile point to evidence of long-term occupations evinced by midden deposits, possible house pits, and other domestic features.

Many previously identified cultural resources were not evaluated for eligibility for inclusion in the NRHP. Approximately 70 percent of the surveys occurred 10 or more years ago, provide insufficient information to determine the adequacy of the coverage employed, or report methods that indicate the survey coverage was broad or otherwise did not fully cover the areas included in those projects.

A review of historical 7.5-minute United States Geological Survey (USGS) topographic quadrangles and BLM General Land Office (GLO) plats indicate that at least 44 potential historic-era sites or features may still exist, some of which may be within the FERC Project Boundary. Potential historic sites are those places or features indicated in historic documentation (personal accounts, maps, regional histories, etc.) that may or may not still exist, and that will require ground-truthing to determine if materials associated with these places are present.

5.0 Study Methods and Analysis

5.1 Study Area

The study area is the Area of Potential Effects (APE), which includes all lands, Project facilities and features within the existing FERC Project Boundary, and Project-affected locations outside the FERC Project Boundary. As defined in 36 CFR § 800.16(d), an APE is:

the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

For purposes of this relicensing, the APE includes all lands within the existing FERC Project Boundary and a buffer of about 200 feet surrounding the boundary. The FERC Project Boundary and APE are shown on the maps included in Attachment A. Land ownership within the APE includes 4,306 acres of National Forest Systems (NFS) land managed by the United States Department of Agriculture, Forest Service as the Tahoe National Forest (3,113 acres) and Plumas National Forest (1,193 acres)

If YCWA proposes an addition to the Project, the APE will be expanded if necessary to include areas potentially affected by the addition.

5.2 General Concepts and Procedures

The following general concepts and practices apply to the study:

- Personal safety is the most important consideration of each fieldwork team.
- Licensee will make a good faith effort to obtain permission to access private property where needed well in advance of entering the property.
- Field crews may make minor variances to the FERC-approved study in the field to accommodate actual field conditions and unforeseen problems. When minor variances are made, Licensee's field crew will follow the protocols in the FERC-approved study.
- When Licensee becomes aware of major variances to the FERC-approved study, Licensee will issue an e-mail to the Relicensing Contact List describing the variance and reason for the variance. Licensee will contact by phone the Forest Service (if the variance is on National Forest System land), US Fish and Wildlife Service, State Water Resources Control Board and CDFG to provide an opportunity for input regarding how to address the variance. Licensee will issue an e-mail to the Relicensing Contact List advising them of the resolution of the variance. Licensee will summarize in the final study report all variances and resolutions.
- Licensee's performance of the study does not presume that Licensee is responsible in whole or in part for measures that may arise from the study.
- GPS data will be collected using either a Map Grade Trimble GPS (sub-meter data collection accuracy under ideal conditions), a Recreation Grade Garmin GPS unit (3 meter data collection accuracy under ideal conditions), or similar units. GPS data will be post-processed and exported from the GPS unit into Geographic Information System (GIS) compatible file format in an appropriate coordinate system using desktop software. The resulting GIS file will then be reviewed by both field staff and Licensee's relicensing GIS analyst. Metadata will be developed for deliverable GIS data sets.
- Licensee's field crews will record incidental observations of aquatic and wildlife species observed during the performance of this study. All incidental observations will be reported in the appropriate Licensee report (e.g., incidental observations of special-status fish recorded during fieldwork for the Special-Status Turtles – Western Pond Turtle Study will be reported in Licensee's Stream Fish Populations Study report). The purpose of this effort is not to conduct a focus study (i.e., no effort in addition the specific field tasks identified for the specific study) or to make all field crews experts in identifying all species, but only to opportunistically gather data during the performance of the study.
- Field crews will be trained on and provided with materials (e.g. Quat) for decontaminating their boots, waders, and other equipment between study sites. Major concerns are amphibian chytrid fungus, and invasive invertebrates (e.g. zebra mussel, *Dreissena polymorpha*). This is of primary importance when moving: 1) between tributaries and mainstem reaches; 2) between basins (e.g. Middle Yuba River, Yuba River, and North Yuba River); and 3) between isolated wetlands or ponds and river or stream environments.

5.3 Study Methods

The study methods will consist of the following five steps, each of which is described below.

5.3.1 Step 1 – Obtain SHPO Approval of APE

As required under Section 106 [36 CFR § 800.4(a)(1)], Licensee will submit maps depicting the APE to the SHPO for formal review, comment, and concurrence. Once approved, the maps including SHPO's concurrence letter will be filed with FERC.

Licensee may request that SHPO concur with a modified APE during the study if Licensee determines that the Project affects historic properties outside the previously SHPO-approved APE.

5.3.2 Step 2 – Archival Research

Information has been obtained from the record searches that identified previous cultural surveys and recorded archaeological and historic-era properties within or directly adjacent to the APE. Archival research will also be conducted at the repositories listed below, and others as they are identified during the study, to obtain additional information specific to the prehistory and history of the Project area, the hydroelectric system as a whole, and its individual features. The results of the archival research will serve as the basis for preparing the prehistoric and historic contexts against which archaeological and historic-era properties may be evaluated. Historical photographs located during the archival research will be cited in the text as figures and provided in a separate appendix, unless they are subject to copyright laws. Previous NRHP evaluations of Project system features, if they exist, will be used as much as possible. The places to be contacted or visited shall include:

- Oral histories, as applicable
- Forest Service, Tahoe National Forest (TNF)
- Forest Service, Plumas National Forest (PNF)
- Yuba County Library California Room, Marysville
- The Firehouse Museum, Nevada City
- Sacramento History Center and Archives
- State Library, Sacramento
- YCWA archives
- Special Collections, Meriam Library, California State University, Chico

5.3.3 Step 3 – Field Survey and Identification of Resources

FERC is required to make a reasonable and good faith effort to identify historic properties that may be affected by the Project. As described at 36 CFR § 800.4(b)(1), this may be accomplished through sample field investigations and/or field surveys that are implemented in accordance with the Secretary of the Interior's Standards and Guidelines for Identification (NPS 1983). FERC is also required to consider any other applicable professional standards and tribal, state, or local laws or procedures to complete the identification of historic properties.

5.3.3.1 Archaeological Field Survey

Following completion of Step 2, Licensee will conduct a field survey to verify locations of previously recorded cultural resources and to identify previously unknown cultural resources, if present. This will be completed by examining all accessible lands within the APE. Areas within the APE that cannot be accessed in a safe manner (e.g., certain locations containing dense vegetation, or unsafe slopes) will not be included within the survey or recording of archaeological and historic-era properties; these areas will be identified in the resulting report and an explanation for survey exclusion will be provided.

The field survey will be supervised and/or conducted by qualified, professional archaeologists (i.e., individuals who meet the Secretary of the Interior's Standards for professional archaeologists). The field survey will be used to examine all lands within the APE that can safely be accessed and will follow the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (NPS 1983) to determine whether historic properties will be affected by the relicensing.

The field survey will be scheduled to occur as close to the periods of annual low reservoir levels as possible, depending on weather conditions. Additionally, each site will be assessed for Project-related effects including, but not limited to, water fluctuation, wave action, and vegetation management.

Locations of previously recorded cultural resources will be verified and the sites re-recorded only if their existing site records or other documentation do not meet current standards for recording, or if the condition and/or integrity of the property has changed since its previous recording. Newly discovered cultural resources, including isolated finds, will be fully documented following the recordation procedures outlined in *Instructions for Recording Historical Resources* (OHP 1995), which utilizes State of California, Department of Parks and Recreation (DPR) forms DPR 523 A-L. A sketch map for each site recorded or re-documented will be drawn to-scale and the property photographed. The locations of all archaeological sites and isolates documented during the survey will be plotted by Licensee's cultural resources specialist or cultural consultant onto the appropriate USGS 1:24,000 scale topographic map at the time of discovery. Field personnel will use a GPS receiver to document the location of cultural resources (including isolates) discovered during the survey, which will be plotted onto the appropriate USGS topographic quadrangle using the UTM coordinate system. GPS data related to recordation of historic properties will adhere to DPR specifications for accuracy and

site specific procedures. Additionally, the areas examined will be plotted onto the appropriate USGS 7.5-minute topographic quadrangle for comparison with previous survey coverage maps.

Archaeological surveys that occur on Forest Service lands will require valid permits. Licensee, or, as appropriate their consultants, will obtain all required cultural permits prior to examining Forest Service lands. Licensee also will notify Forest Service personnel when field work is scheduled to begin.

As requested by TNF, artifacts encountered during the field survey on the TNF will be left in place, no artifacts on TNF will be collected during the field survey. As requested by the PNF, time-sensitive diagnostic artifacts encountered during the field work will be collected and submitted to PNF following completion of the study. All diagnostic artifacts encountered will be documented on DPR Primary Records, their positions mapped using a GPS unit, and each artifact photographed using a digital photography format.

Licensee will schedule the field survey within New Bullards Bar Reservoir (i.e., within the normal maximum water surface elevation), to the extent surveys within the reservoir can be performed, for fall or winter, weather permitting, when annual water levels are at their lowest, as shown in Figure 5.3-1. Surveys outside the New Bullards Bar Reservoir pool will be scheduled by Licensee at its convenience.

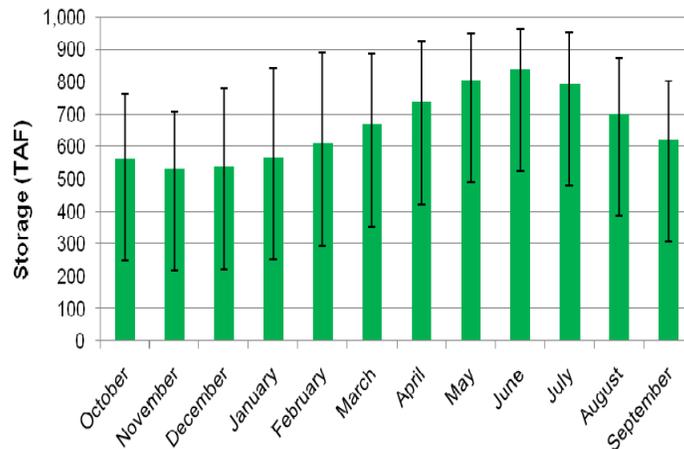


Figure 5.3-1. Historic annual reservoir levels at New Bullards Bar Reservoir.

5.3.3.2 Historic-Era Inventory of Project System Features

A field inspection, documentation, and subsequent NRHP evaluation (see below) of the entire Project system will be undertaken by qualified, professional individuals meeting the Secretary of the Interior Standards for Architectural and Engineering Documentation. Individual components will be recorded or re-recorded to meet current DPR standards. This will include digital color photography and sketch maps of individual features that show the relationship of buildings within each compound or camp that may be associated with them. Some or all features comprising the

Project (i.e., hydroelectric system) may not have reached 50 years of age at the time of the field survey. However, the entire Project system will be documented and evaluated, as appropriate, for listing on the NRHP because the system, as a whole, will soon reach 50 years of age and because it may be associated with important people that may result in an eligibility finding that supercedes the age criterion.

5.3.3.3 Discovery and Treatment of Human Remains

If human remains are discovered during the field survey, the field supervisor will immediately contact Licensee and Forest Service and/or BLM's cultural resources specialists, as appropriate. Should human remains be identified during the survey, or any phase of work under this plan, all work in the immediate area will cease and the provisions contained within federal and/or State law and ACHP policy (ACHP 2007) will be followed. In addition to compliance with federal and State law, contacts with local Native American tribes, archaeological contractors, physical anthropologists, Licensee system operators, Forest Service; and, in some cases, the SHPO may be involved. Moreover, human remains and associated funerary objects, if any, often are viewed as sacred and must be treated with respect. Sensitivity toward all interested parties also is essential whenever human remains are concerned.

5.3.4 Step 4 – National Register of Historic Places Evaluation

During documentation of archaeological sites and features in Step 3, Licensee will also document the condition of each resource to assist in identifying potential project-related affects and level of integrity to provide recommendations for NRHP eligibility or evaluations. All previously unevaluated sites that can be evaluated at this phase, based on the documented remains, background research, and site conditions, will be formally evaluated for SHPO consultation and concurrence. Any NRHP evaluations completed for sites located on NFS land will be submitted to the Forest Service for review prior to obtaining SHPO concurrence. Additionally, Licensee will consult with the participating tribes prior to submitting evaluations to the Forest Service or SHPO regarding any values that tribes may associate with archaeological sites documented in the APE to assist in identifying properties that may be eligible for the NRHP. Archaeological resources requiring further field efforts to complete NRHP evaluations will be identified and included in Licensee's PM&Es for implementation and management outside the Study Plan, likely under a FERC-approved Historic Properties Management Plan, unless more immediate action is deemed necessary to address Project-related effects.

Licensee will utilize the National Register criteria for all sites to be evaluated, which are defined in 36 CFR 60.4, and which include the following:

National Register Criteria for Evaluation. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) *that are associated with events that have made a significant contribution to the broad pattern of our history;*

- (b) *that are associated with the lives of persons significant in our past;*
- (c) *that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;*
- (d) *that have yielded, or may be likely to yield, information important to prehistory or history.*

5.3.4.1 Evaluation of Historic Project System Features

Previously evaluated historic Project systems or individual features will not be re-evaluated unless substantial changes in their conditions have been observed and documented during the study, or the evaluation is more than ten years old. If deemed appropriate by a qualified, professional cultural resources specialist, individual historic-era features may be evaluated together as a district.

All previously unevaluated historic-era Project features will be formally evaluated for eligibility to the NRHP. The evaluation will consist of three tasks: 1) development of a historic context for the APE using archival research; 2) examination of each historic feature to document and assess the level of integrity, both individually and as an element of a potential Hydroelectric Historic District; and 3) the historical information and the physical site data obtained during background and field research will be used to evaluate the eligibility of each Project feature individually and as part of a potential historic district for inclusion on the NRHP.

5.3.5 **Step 4 – Identify and Assess Potential Project Effects on National Register-Eligible Properties**

As required under 36 CFR § 800.5, Licensee will identify and assess any adverse effects on identified historic properties resulting from Project O&M. Adverse effects are defined as follows:

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative (36 CFR § 800.5(a)(1)).

5.3.6 **Step 5 – Reporting**

Licensee will prepare a report at the conclusion of the study that includes the following sections: 1) Study Goals and Objectives; 2) Methods; 3) Results; 4) Discussion, and; 5) Description of

Variations from the FERC-approved study proposal, if any. Cultural maps will be developed that clearly depict the following on USGS 1:24,000 topographic maps: the study areas examined; current inventory coverage in the areas surveyed, including intensity of coverage; and locations of cultural resources identified within the study areas.

Copies of this report will be provided to: the affected Indian Tribes; Forest Service; SHPO; CSU, Chico, NEIC; CSU, Sacramento, NCIC; and FERC. Copies of the final report and detailed locations of identified properties may be withheld from public disclosure in accordance with Section 304 (16 U.S.C. 4702-3) of the NHPA (as amended). Concurrence on report recommendations will be sought from SHPO.

6.0 Study-Specific Consultation

Licensee will engage in the following study-specific consultation:

- Licensee will obtain SHPO’s concurrence with the APE (Step 1.)
- Licensee will notify potentially affected tribes and Forest Service prior to the start of the field survey to provide the proposed field schedule (Step 3).
- Any NRHP evaluations completed for cultural resources located on NFS land) will be provided to the Forest Service for review prior to submittal to SHPO for concurrence (Step 4).

7.0 Schedule

Documented historic annual low reservoir levels indicate that New Bullards Bar Reservoir reaches its lowest water levels in November and December, when bad weather may restrict field efforts. Licensee will schedule field surveys within the New Bullards Bar Reservoir pool for fall or winter. Licensee anticipates the schedule to complete the study as follows assuming the PAD is filed on November 1, 2010, and FERC issues its Study Determination by October 4, 2011:

Archival Research (Step 1)	October 2011 - December 2011
Field Survey (Step 2)	November 2011 - April 2012
NRHP Evaluation (Step 3).....	November 2011 - April 2012
Identify/Assess Effects on NR-Eligible Properties (Step 4)	November 2011 - April 2012
Report Preparation (Step 5)	October 2011 – October 2012

8.0 Consistency of Methods with Generally Accepted Scientific Practices

The proposed study methods discussed above are consistent with the study methods followed in several recent relicensing projects. These methods have been accepted by the participating Native American Tribes, agencies, and other interested parties associated with those projects. The methods presented in this study plan also are consistent with the ACHP's guidelines for compliance with the requirements of Section 106 of the NHPA found at 36 CFR 800.

9.0 Level of Effort and Cost

[Relicensing Participants – Licensee will include a cost range estimate for this study in its Proposed Study Plan. Licensee]

10.0 References Cited

- Advisory Council on Historic Preservation (ACHP). 2007. *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Object*. Washington, D.C.
- Federal Energy Regulatory Commission and Advisory Council on Historic Preservation. 2002. *Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Projects*. Washington D.C.
- Jackson, R., M. Boynton, W. Olsen, and R. Weaver 1988. *California Archaeological Resource Identification and Data Acquisition Program: Sparse Lithic Scatters*. Office of Historic Preservation, Sacramento.
- Jackson, R., T. Jackson, C. Miksicek, K. Roper, and D. Simons. 1994. *Framework for Archaeological Research and Management on the National Forests of the North-Central Sierra Nevada*. Prepared for the USDA Forest Service, Eldorado National Forest.
- King, T. 1998. *Cultural Resource Laws and Practice: An Introductory Guide*. Lanham, MD: AltaMira Press.
- Office of Historic Preservation (OHP) 1995. *Instructions for Recording Historical Resources*. Sacramento, California.
- Parker, P. and T. King 1998. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. *National Register Bulletin 38*. Washington, DC: U.S. Department of the Interior, National Park Service
- United States Department of Interior, National Park Service (NPS) 1983. *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines in the Federal Register, September 29, 1983 (48FR44716)*. Department of the Interior, Washington, D.C.

_____ 2002. *How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15. Revised for the Internet*, <http://www.cr.nps.gov/nr/publications/bulletins/archeology/>. U.S. Department of the Interior, National Park Service, National Register, History, and Education.

Yuba County Water Agency. 2009. Preliminary Information Package, Public Information. Yuba River Development Project, FERC Project No. 2246.

ATTACHMENT 1

AREA OF POTENTIAL EFFECTS MAPS

