TECHNICAL MEMORANDUM 13-1

Native American
Traditional Cultural Properties

Yuba River Development Project
FERC Project No. 2246

December 2012

TECHNICAL MEMORANDUM 13-1

EXECUTIVE SUMMARY

Yuba County Water Agency (YCWA) conducted a Native American Traditional Cultural Properties (TCP) Study for the Yuba River Development Project (Project), Federal Energy Regulatory Commission (FERC) Project Number 2246, from March 2009 through July 2012. The Area of Potential Effects (APE) encompassed 4,306 acres, including the FERC Project Boundary and a 200-foot radius surrounding New Bullards Bar Reservoir. YCWA requested the State Historic Preservation Officer's (SHPO) concurrence on the APE in a letter dated March 21, 2012, and received SHPO's concurrence in a letter dated April 19, 2012, in accordance with 36 Code of Federal Regulations (CFR) Section (§) 800.

For relicensing of the Project, FERC designated YCWA as FERC's non-federal representative for purposes of consultation under Section 106 of the National Historic Preservation Act, as amended, and the implementing regulations found in 36 CFR § 800.2(c)(4).

YCWA conducted several consultation meetings with tribes and agencies beginning in 2009 and continuing into 2012. YCWA, tribes, and agencies collaboratively developed study proposals and selection of the TCP Study ethnographer, Albion Environmental, Inc. Invitations to participate in each meeting were sent to tribal representatives, FERC, SHPO, Plumas National Forest, and Tahoe National Forest. Most of these individuals and organizations participated in the meetings. On October 19, 2011, YCWA convened a meeting of tribal groups and agencies to introduce members of YCWA's team, discuss the FERC-approved study, and to initiate field consultation with the tribes. YCWA followed this meeting with a round of letters to each of the tribes and individuals on the NAHC list.

The four tribal groups that expressed an interest in participating in the study were Enterprise Rancheria, Nevada City Rancheria, the United Auburn Indian Community, and the Strawberry Valley Rancheria. After additional discussions with the tribes, only the United Auburn Indian Community and Nevada City Rancheria became formal tribal participants in the study, although individuals with ties to the Strawberry Valley Rancheria also participated.

Field and off-site interviews began in November 2011 and continued into September 2012. YCWA ethnographers also completed archival research, focusing on the notes and manuscripts of pioneering ethnographers, who worked with the Native American communities early in the twentieth century.

The study did not identify any TCPs within or near the APE.[1]

[1] While no TCPs were identified during the study, tribes and the Forest Service will have the opportunity to continue consultation with YCWA, including any potential site visits that may be warranted, throughout development and implementation of an Historic Properties Management Plan (HPMP) that will serve to protect and manage significant archaeological, tribal, and historic built resources within the APE through the term of the new license. Development of the HPMP is not part of the FERC-approved study.

Interviews both on- and off-site revealed a general concern about the treatment and preservation of archaeological sites, but did not reveal present day use of these areas for traditional activities such as resource gathering, ceremonial, or spiritual activities, nor were they identified as landmarks of importance to the communities. In addition, the extensive archival record, while providing excellent ethnographic and ethnohistoric information on the general vicinity, does not contain any data specific to the APE.

On October 31, 2012, YCWA provided an interim technical memorandum to the tribes, Forest Service, and other interested parties and requested written comments within 30 days. No comments were received.

The study was conducted in conformance to the FERC-approved Native American TCP Study (Study 13.1), with two variances. First, two archival research sources identified in the study were not reviewed. One is the Theodoratus collection of the 1974 investigation of the Parks Bar Project on the lower Yuba River, housed at the Bancroft Library at University of California at Berkeley, and sealed for the foreseeable future. The other included collections at the regional branch of the National Archives, which were determined to not contain information significant to the present study. The second variance is that the study is slightly behind the scheduled completion date of September 30, 2012. This is due to a longer period than anticipated needed for a quality control review of the data and technical memorandum. The delay does not affect the overall relicensing schedule.

The study is complete.

Table of Contents

List of Figures

List of Tables

List of Attachments

TECHNICAL MEMORANDUM 13-1

NATIVE AMERICAN TRADITIONAL CULTURAL PROPERTIES[2]

The Yuba County Water Agency's (YCWA) continued operation and maintenance (O&M) of the Yuba River Development Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 2246, may potentially have an adverse effect on historic properties, including traditional cultural properties (TCP) and ethnographic resources that qualify for listing on the National Register of Historic Places (NRHP).

TCPs are locations associated with cultural practices or beliefs of a living community that are: 1) rooted in that community's history; or 2) important in maintaining the continuing cultural identity of a community. National Register Bulletin 38 (Parker and King 1998:1) defines a TCP as:

- Locations associated with the traditional beliefs of an aboriginal/indigenous group about its origins, its cultural history, or the nature of the world and cultural landscapes.
- A rural community whose organization, buildings and structures, or patterns of land use reflects the cultural traditions valued by its long-term residents.
- An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices.
- Locations where Native American religious practitioners have historically gone and are known or thought to go to today, to perform ceremonial cultural rules of practice.
- Locations where a community has traditionally carried out economic, artistic or other cultural practices important in maintaining its historic identity.

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 a reasonable opportunity to comment on such undertakings. As defined under 36 Code of Federal Regulations (CFR) Section (§) 800.16(l), historic properties are prehistoric or historic sites, buildings, structures, objects, districts, or locations of traditional use or beliefs (i.e., TCPs) that are included in, or eligible for inclusion in, the NRHP.

[2] This technical memorandum presents the results for Study 13.1, *Native American Traditional Cultural Properties*, included in YCWA's Revised Study Plan filed with FERC on August 17, 2009, and approved by FERC in its Study Determination on September 14, 2009. There were no modifications to Study 13.1 subsequent to FERC's September 30, 2011 Study Determination.

1.0 Goals and Objectives

The goal of the study was to assist FERC in meeting its compliance requirements under § 106 of the NHPA, as amended, by determining if licensing of the Project will have an adverse effect on NRHP-eligible TCPs, ethnographic resources, or other cultural resources of tribal significance.

The objective of the study was to identify TCPs and other cultural resources of tribal importance that may potentially be affected by Project O&M, evaluate their eligibility to the NRHP, and identify Project-related activities that may affect TCPs, other tribal interests, or traditional interests of other groups within the Project's Area of Potential Effect (APE). The specific objectives of this study include:

- Identification of potential TCPs or ethnographic locations within the APE
- Evaluation of any identified TCP or ethnographic areas for listing on the NRHP
- Identification of Project-related effects on NRHP-eligible or unevaluated TCPs and ethnographic locations

2.0 Methods

Methods used during the study are consistent with the FERC-approved study. The methods included four steps, each of which is described below.

2.1 SHPO Approval of APE

As required under § 106, YCWA identified the APE as all lands, Project facilities, and features within the existing FERC Project Boundary,[3] and Project-affected locations outside the FERC Project Boundary. Under 36 CFR § 800.16(d), the APE is defined as "*the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historical properties, if any such properties exist.*" For purposes of this Relicensing, the APE includes all lands within the FERC Project Boundary and a buffer of about 200 feet (ft) surrounding the boundary of New Bullards Bar Reservoir.

The Project APE encompasses 4,306 acres (ac) of National Forest Systems (NFS) land managed by the United States Department of Agriculture, Forest Service (Forest Service), divided into 3,140 ac managed by Tahoe National Forest (TNF) and 1,165 ac managed by Plumas National Forest (PNF). Maps depicting the APE on United States Geological Survey (USGS) 1:24,000 scale (7.5-minute) topographic maps are included in Attachment 13-1A.

On March 21, 2012, YCWA initiated consultation with the State Historic Preservation Officer (SHPO) to request concurrence on the Project APE, in accordance with 36 CFR § 800.4(a)(1).

[3] The existing FERC Boundary for the Project is shown on existing Exhibit J and K maps.

2.2 Archival Research

Archival research began in 2009, with an investigation of records repositories that were thought to contain information on the Project region and APE. These included files at the Northeast Information Center at California State University, Chico, and at the North Central Information Center at California State University, Sacramento, within the California Historical Resources Information System. The record searches included: 1) a review of cultural resources records and site location maps; 2) historic General Land Office maps; 3) an up-to-date list of NRHP-listed properties; 4) the California Register of Historic Resources; 5) the Office of Historic Preservation Historic Property Directories for Yuba, Nevada, and Sierra counties; 6) 1992 California Points of Historical Interest; 7) 1996 California State Historic landmarks; 8) 1976 California Inventory of Historic Resources; and 9) a search of the Northeast Information Center and North Central Information Center files for ethnographies or other cultural reports relevant to the study. The records searches were employed in part to identify Indian Trust Assets (ITA)[4] and TCPs within the FERC Project boundary and adjoining area.

Documents on file with the TNF and PNF were also reviewed.

In 2012, additional sources of information pertaining to the history and ethnography of Native Americans of the region, especially the Nisenan, were consulted. This included the Dorothy Morehead Hill Collection, housed in the Special Collections Department at the Meriam Library, California State University, Chico. This collection contains the personal notes, photographs, videos, audio tape interviews, transcripts and other information (e.g., manuscripts and newspaper clippings) amassed during the career of anthropologist Dorothy Jean Morehead Hill (1922-1998). The Bleyhl Collection, also housed at the University, but available online (http://www.csuchico.edu/lbib/spc/bleyhl/index.htm), was additionally consulted. The Bleyhl Collection is a compendium of newspaper articles and other sources chronicling interactions between Native Californians and white Americans from 1840 until 1920. Finally, archives of the Yuba County Library in Marysville, California, were consulted.

2.3 Tribal Consultation and Identification of Resources

YCWA sought to identify potential TCPs through tribal consultation. To accomplish this, consultation and fieldwork were undertaken in accordance with § 106 of the NHPA, as amended, and consistent with National Register Bulletin No. 38, *Guidelines for Evaluating and Documenting Identification of Traditional Cultural Properties* (Parker and King 1998).

Following the ethnographic literature review, the FERC-approved study required identifying potential TCPs through extensive tribal consultation in Step 3. YCWA initially contacted the Native American Heritage Commission (NAHC) on March 9, 2009, to obtain a listing of tribal groups or individuals who should be notified regarding the Project. NAHC replied to this

[4] Indian Trust Assets (ITA) are legal interests in assets held in trust by the federal government for Indian tribes or individual Indians. These can be real property, physical assets, or intangible property rights. ITAs do not include things in which a tribe or individuals have no legal interest.

request on March 16, 2009. All individuals and organizations included on NAHC's list were contacted by telephone in April 2009.

Additional tribal representatives with interests in the Project were also identified through other Relicensing projects. These individuals and those previously notified were contacted by YCWA in June 2009 to provide updates regarding the Relicensing.

Interested tribal representatives were mailed copies of the Relicensing Pre-Application Document in July 2009 that included an information questionnaire designed to solicit concerns or additional information regarding the Project.

Consultation with participating tribes and agencies included collaborative development of study proposals and selection of the TCP Study ethnographer. YCWA retained a qualified, professional ethnographer, who meets the standards for ethnography as defined in Appendix II of National Register Bulletin No. 38 (Parker and King 1998). The ethnographer, in consultation with tribal representatives, determined the scope and breadth of interviews, and then contacted the appropriate tribe(s) and interested tribal/cultural stakeholders to arrange for interviews at a time and location acceptable to those tribal interviewees. As provided for in the FERC-approved study, tribal interviewees and the ethnographer visited appropriate portions of the APE together to define potential TCPs. Interviews with the ethnographer were both conducted on a "one-on-one" basis and in groups. Oral traditions and information were collected during the interviews to help define potential TCPs in the APE, to assist in making sound judgments and management decisions in Project planning, and to satisfy the study goal of assisting FERC in meeting its compliance requirements under § 106 of the NHPA, as amended.

2.4 National Register of Historic Places Evaluation

In accordance with Step 5 of the FERC-approved TCP study, YCWA was to use the results of the study to prepare a plan to evaluate the eligibility of potential TCPs for listing on the NRHP. The FERC-approved study requires assessment of past, present, and reasonably foreseeable future Project effects on potential TCP historic properties, as well as details of evaluation methods to be implemented. The evaluation plan was to be provided to the tribes for review 30 days prior to submitting to the SHPO. No TCPs have been identified in the Project APE, negating the need to implement Step 5 of the study.

If at any time during the term of the new license additional archival or field research identifies potential TCPs in the APE, YCWA, in accordance with 36 CFR § 800.5 and Step 6 of the FERC-approved study, will assess any adverse effects on historic properties resulting from Project O&M, in consultation with potentially affected tribes. 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)).

3.0 Results

3.1 Study Area (APE)

As previously mentioned in Section 2.1, YCWA initiated consultation with SHPO to request concurrence on the Project APE on March 21, 2012, in accordance with 36 CFR § 800.4(a)(1). The SHPO concurred with the Project APE in a letter dated April 19, 2012.

3.2 Archival Research

YCWA conducted an initial series of records searches in order to determine if TCPs, or other ethnographic resources, had been entered into the readily available cultural resource data bases for the region and APE. No such locations were identified for the APE as a result of these efforts. Additional research, therefore, was completed to augment the findings, which further identified no documented TCPs or ethnographic resources in the APE. Additionally, no ITAs, Indian Reservations, lands designated under tribal ownership, or any other ITAs were encountered during this research. The research did, however, provide background relevant to the overall cultural context of the APE and region, as provided below in Section 3.3.

The FERC-approved study provided for an aggressive archival review, under Step 2, that identified a number of primary and secondary ethnographic sources, as well as archival repositories that were thought to contain information pertinent to the Native American presence in the Project APE. Initial archival research, with what were deemed the most detailed and pertinent documents and publications, quickly revealed that information on the project APE was likely to be limited or almost non-existent. For this reason, the archival research effort was modified and redirected toward what are thought to be the most productive sources. These are predominantly the fieldnotes, manuscripts, and publications of the early anthropologists who worked with Nisenan descendants during the early twentieth century. These sources are invaluable because they record not only the traditional lifeways of the Nisenan, but also what was remembered of the locations of pre-contact villages, camps, and resource procurement. Even at that time, knowledge of settlement and use location was much diminished, due in large part to the catastrophic social, subsistence, and settlement disruption that began with the Gold Rush and continued through the second half of the nineteenth century.

3.3 Cultural Context

Archival research conducted as part of the Relicensing effort provided background information relevant to understanding past Native American lifeways and cultural sequences and historic

period developments within and adjacent to the Project. The cultural context developed from this research is provided below.

3.3.1 Prehistory and Archaeology

Archaeologists have struggled to understand the chronology of human occupation in the Sierra Nevada for many years. Without such an understanding, discerning and ordering changes in cultural patterns are impossible. This issue was critically reviewed in 2002 (Rosenthal et al. 2002) and more recently in 2008 (Rosenthal 2008) where it was observed that, "*after more than 100 years of archaeological research in the western Sierra Nevada, no independent chronological framework exists for this region. Although a number of culture-historical schemes have been advanced for various western-slope drainages, none is based on local chronological evidence*" (Rosenthal 2008:27). Rosenthal (2008) found that, to a great extent, the existing cultural chronologies for the Sierra continue to be tied to typological chronologies established for the Great Basin and the Central Valley of California, despite growing criticism of the results, which are often less than fully satisfactory. This is also, to a degree, true even of "indigenous" chronologies in the vicinity of the APE, such as those developed by Elsasser (1960) for Martis Valley, Eric Ritter's report of the Spring Garden Ravine site (CA-PLA-101) near Auburn (Ritter 1970), and Clewlow's work at CA-NEV-407 (Clewlow et al. 1984). More recent attempts have also been made by Jackson and Ballard (1999) and Rosenthal et al. (2002).

3.3.1.1 Late Pleistocene/Younger Dryas/Recess Peak Advance – Paleoindian (15,000 to 10,000 B.P.)

The Clovis culture currently is identified in North America as occurring between approximately 13,500 to 13,000 years ago. The acquisition of date ranges for the Clovis culture from current literature is fraught with confusion, due to a plethora of alternative dating schemes and dating methods. The cultural pattern is distinguished by "fluted" projectile points, percussion blades, and other distinctive artifacts. Very few Clovis sites have been identified in North America. The Clovis culture, which is the earliest well-documented cultural expression in the Americas, is linked to the medial part of this time period, ca. 13,500 to 13,000 B.P. No diagnostic Clovis artifacts, which are distinguished by "fluting" of the proximal portion of both faces of projectile points and possibly other tools, have been found in the Project Vicinity.[5] However, a fluted point was found at Lake Almanor, located approximately 100 miles north in Plumas County (Kowta 1988:57). Fluted point fragments and complete specimens, typically isolated, are, however, known from scattered locations throughout much of the Sierra Nevada (c.f., Rondeau and Dougherty 2009). Unfortunately, few are from dated contexts.

3.3.1.2 Terminal Pleistocene/Initial Holocene (ca. 10,000 B.P.)

The Pleistocene ended 10,000 ago in the sense that the great continental ice sheets were in serious retreat. However, modern studies using data from Antarctic and Greenland ice cores have shown that the great glacial advances of the Pleistocene were at least quasi-periodic, with a

[5] For the purposes of the relicensing, the Project Vicinity is defined as the area surrounding the Project in the order of a county or United States Geological Survey (USGS) 1:24,000 topographic quadrangle.

cycle length ranging from approximately 110 to over 150,000 years. There is no certainty at present whether the Pleistocene has really ended or if the Holocene is merely the latest interstadial event with more ice to come in the future. Cultural evidence from this era in the Sierra Nevada is scant, but comparatively well-established. Lindstrom et al. (2007:6) note the "Pre-Archaic/Tahoe Reach phase," marked by large stemmed points, resembling weapons, from the Great Basin from this era, occurred in the Project Vicinity.

3.3.1.3 Early Holocene-Late Paleoindian (ca. 10,000 to 8,000 B.P.)

By the Early Holocene, evidence from numerous archaeological sites throughout the state show that California was fully explored by this time and supported a significant population. The regional climate was distinguished by a steady warming and drying trend, or a period of "relative warming…" (c.f. Lindstrom et al. 2007). In the Truckee area, the Alder Hill basalt quarry was active. McGuire et al. (2006) recovered Great Basin stemmed points, datable carbon and obsidian that indicate the area was being visited by the Early Holocene for the procurement of toolstone. Lindstrom et al. (2007:5) also note that at site CA-ELD-180, Great Basin stemmed points, some of which likely had their origins in the western Sierra foothills, were recovered, manufactured from a broad range of materials, and indicate considerable mobility of at least portions of the human population. In yet other areas, such as the western Sierra foothills in Calaveras County, there is evidence of extremely stable land use. For example, evidence shows continued use of the Skyrocket site over a span of approximately 2,500 years during the Early Holocene (Fagan 2003:88). It is quite possible that similar remains may be present near the Project Vicinity at lower elevations.

3.3.1.4 Middle Holocene – Early Archaic (ca. 8,000 to 5,000 B.P.)

The Middle Holocene is poorly represented archaeologically throughout California. Lindstrom et al. (2007:8) remark on this issue, speculating that several factors may obscure middle Holocene contexts. Warming conditions, arising during the early Holocene, evidently continued into the mid-Holocene. In the Tahoe region, Lindstrom et al. (2007:7) cite an extensive list of studies, all of which have concluded that the mid-Holocene was the warmest period in recent geological history and, at least in North America, one of the driest periods. Levels in Lake Tahoe may at times have fallen sufficiently low to isolate the lake from the Truckee River. Lindstrom et al. (2007) note evidence of a drought period estimated to have lasted approximately 350 years, between about 6,300 and 4,850 B.P. Effects of these changes farther west are not well documented. Again, at the Sky Rocket site in Calaveras County, evidence of occupation diminishes, but is never fully interrupted (Fagan 2003:99).

3.3.1.5 Late Holocene – Middle Archaic (5,000 to 2,000 B.P.)

The beginning of the Late Holocene is marked by climatic shifts toward a more temperate regime and the first well documented archaeological cultures in central and northern California. In the Sacramento-San Joaquin Delta region, the Windmiller culture emerged with unique traits, including an unusual mortuary pattern, marked by prone interments with crania oriented in a westerly direction (Moratto 1984:201-207). In the Truckee vicinity and portions of the neighboring western High Sierra, the Martis Complex, marked by typological affiliations with

the Great Basin and a preference for locally abundant basalt, was identified by Heizer and Elsasser (1953), Elsasser (1960), and Moratto (1984). The Martis complex is well-represented near the Project Vicinity at sites, such as CA-NEV-15, CA-NEV-67, CA-PLA-6, and CA-SIE-20 (Elsasser 1960). To the west and north, the Messilla Complex was defined at three sites in Butte County (Moratto 1984:297-299). Moratto (1984:303), following arguments of earlier investigators, including studies for the proposed Auburn Dam and Bullards Bar reservoirs, suggests that Martis may reflect ancestral Maiduan prehistory. A three-stage Bullard's Bar cultural complex was identified by Humphreys (1969), that appears to follow the same typological progression as the Martis to Kings Beach and Mesilla to Sweetwater cultural phases from Lake Tahoe and Lake Oroville respectively. The Bullards Bar I-III phases are characterized by a shift from large to small projectile points (Moratto 1984:300-301). The earliest period, Bullards Bar I, dates from approximately 2450 B.P. to 1949 B.P. This phase likely represents seasonal occupation sites with a diverse subsistence base, characterized by large basalt and chert projectiles as well as milling stones and mortars (The Keith Companies et al. 1993:4-76). What is evident from the available archaeological information is that by the Middle Archaic, people of the Sierra Nevada show clear influences from both the Great Basin and Central California. However, the archaeological remains cannot as yet be reliably attributed to modern ethnographic groups.

3.3.1.6 Late Holocene – Late Archaic and Emergent (2,000-200 B.P.)

With the Late Archaic, the lack of discernible relations between archaeological complexes and the known material cultures of ethnographic Californian populations end. In the High Sierra, the Martis Complex gives way to the Kings Beach Complex, and in the west analogous changes occur as the Middle Horizon is replaced by early Augustine Pattern settlements. In the west, important subsistence changes take place as the acorn emerges as a clearly important staple; a process marked by a proliferation of the use of bedrock mortars. The bow appears as the preeminent weapon, marked archaeologically by an abrupt reduction in projectile point size and a significant increase in numbers of points in use. In the high Sierra, the bow also appears in the Kings Beach Complex and preferred materials for weapon tips change from basalt to microcrystalline silicate materials (Moratto 1984).

Typologically, the projectile points of the western slope differentiate themselves from the east. To the west, the arrow tip is characteristically dominated by a small contracting-stemmed or corner-notched point, manufactured of local materials and harking typologically back in time to Martis contracting-stemmed points and perhaps west and north to the Gunther Series points of northwest California (Dougherty 1990; Jackson and Ballard 1999; Ritter 1970). In contrast, the functionally equivalent chipped stone artifacts of the Kings Beach Complex associate typologically with Great Basin forms, including Eastgate and Rose Springs (Moratto 1984:295-299).

Both cultural patterns shared the bedrock mortar. The Bullards Bar II phase, dating from approximately 1450 to 500 B.P., shares the characteristics of surrounding complexes and is represented by Eastgate, Rose Springs, and Gunther Barbed projectile point types (The Keith Companies et al 1993:4-76).

The Emergent Period marks the clear appearance of the modern ethnographic cultures. In the Sierra, the Late Kings Beach and Phase II Augustine pattern societies continue their development, now readily associated with Washoe and Nisenan respectively. The ancestral Nisenan are likely represented by the Bullards Bar III phase, which dates from approximately 500 B.P. to the historic period. Residential villages appear archaeologically in this period, as well as the continued use of bedrock acorn processing and arrow points for hunting (The Keith Companies et al. 1993:4-76).

3.3.2 Ethnography and Ethnohistory

3.3.2.1 Language, Geography, and Demography

The Project lies within the territory of the Nisenan, otherwise known as the Southern Maidu or Valley Maidu. Together with the northeastern Maidu and Konkow, they formed one of the three principal branches of the Maiduan linguistic group, which is part of the larger Penutian language family. The Nisenan spoke the southernmost branch of the Maiduan language. According to Kroeber (1925:393), these three languages (Nisenan, Maidu, and Konkow) were of sufficient divergence as to constitute three separate languages, though languages sharing many word similarities. Nisenan was further subdivided into a number of dialects. Wilson and Towne (1978:387), apparently quoting Kroeber (1925:393), put the number at three: Northern Hill Nisenan, Southern Hill Nisenan, and Valley Nisenan. However, a careful reading of Kroeber puts Wilson and Towne's interpretation in doubt. Contrary to Wilson and Towne, Kroeber (1925:393) is not specific on the number of Nisenan dialects, noting:

> In this vast tract there are almost certain to have been divergences of idiom between the north and south, as well as between those divisions living actually on the Sacramento and those at the upper limit of habitation in the mountains. The available vocabularies indicate that these presumptive differences must have been actual; but again the data on which it is possible to build are too unsystematic to allow of either classification or mapping.

It is not entirely clear where in Kroeber (1925) Wilson and Town received their information for three distinct Nisenan dialects. The above passage seems to imply at least four dialects in Nisenan territory, though Kroeber makes it clear that even this conclusion is based on too few data, and at the very least should be looked upon with caution. Nor in Kroeber's later work, *The Valley Nisenan* (1929), does he specify any dialects, though he does distinguish between what he calls a hill Nisenan and valley Nisenan (1929:253).

Beals (1933:337), by contrast, who produced the most comprehensive ethnography on the Nisenan, mentions at least four dialectic divisions, writing:

> Viewed from the standpoint of linguistic differences there were probably four main groupings although apparently every political unit showed slight dialectic differences. The valley people again should be set apart, while the hill and mountain people were separated into three groups by two east-west lines indicating sharper breaks than existed between political groupings. One of these

> was somewhere in the neighborhood of the Bear River [sic]. Another must have been approximately along the middle fork of the American River [sic]. It is impossible to locate them exactly as the people in many of the intervening regions have vanished. This division is based largely on the statements of surviving Indians at such places as Nevada City, Auburn, Colfax, and Placerville.

In still another interpretation of the Nisenan language and its various dialects, linguist Andrew Eatough (1999:1) argues for a total of at least five different dialects, though he is uncertain about the exact number during pre-contact times. He writes:

> There were clearly a number of quite distinct Nisenan dialects. Precisely how many once existed is not known, but at the very least we can distinguish Northern Hill…North Central Hill or Nevada City Nisenan…Central Hill or Auburn Nisenan…Southern Hill…and Valley Nisenan.

These contradictory interpretations regarding dialects underscore the near total disintegration of the Nisenan as a result of contact with Euro-Americans beginning in the early- and mid-1800s.

At the time of the earliest historic contact, the Nisenan occupied a portion of northeastern California that since Euro-American times has traditionally been known as the "Gold Country," an area bordering the Sacramento River to the west and the Sierra Nevada to the east. The region includes parts of the modern counties of Yuba, Nevada, Placer, Sacramento, and El Dorado. From north to south, their territory encompassed an area from either the North Yuba River or the southern fork of the Feather River down to the Cosumnes River (Wilson and Towne 1978:388; Littlejohn 1928:23). The northern boundary has traditionally been difficult to define as it appears to have been a zone where the Nisenan's northern neighbors, the Konkow, mingled linguistically and culturally with the Nisenan. On the southern bank of the Cosumnes River lived the eastern branch of the Miwok, while just to the west were the Patwin.

Ecologically, Nisenan territory encompassed a region characterized by flat river bottomland, along the Sacramento River, to the 10,000 and 12,000 foot elevation Sierra Nevada divide. Between these two extremes were the gradually ascending Sierra foothills, an environment consisting of, among others, scattered oaks (especially interior live oak (*Quercus wislizenii*) and blue oak (*Quercus douglasii*)) and California buckeye (*Aesculus californica*). These species are eventually superseded by gray pine (*Pinus sabiniana*) and ceanothus shrubs (*Ceanothus* sp.) in the higher elevations. At even higher elevations, sugar pines (*Pinus lambertiana*) and Western yellow pine (*Pinus ponderosa*) are the dominant hardwood species. This region experienced dramatic fluctuations in climate and temperature. Summer months along the Sacramento River, for example, routinely reach into the high 90s and even 100s (degrees Fahrenheit), while the winter months in the high elevations experience snow, frost, and below-freezing temperatures.

Estimates of pre-contact Nisenan population size have been notoriously difficult to define (Beals 1933; Kroeber 1925), as much of their population had been decimated prior to the Twentieth Century. Kroeber (1925) argues for a total pre-contact Maidu population of 9,000, but admitted the figure was decidedly liberal. However, by the time Kroeber and other ethnographers began to study the Nisenan in the early Twentieth Century, there were only a reported 1,100 Nisenan

and those of mixed-Nisenan heritage. This dramatic decline in population was largely the result of events unleashed primarily by the California Gold Rush. The discovery of gold in the lands of the Nisenan and the subsequent contact between whites and Indians, much of which was of a violent nature, played a significant role not only in reducing overall Nisenan population numbers, but also destroying the Nisenan as a viable culture. By the latter half of the Nineteenth Century, Nisenan population numbers were in dramatic decline, so much so that Powers (1877:317) observed:

> They [the Nisenan] had the misfortune to occupy the heart of the Sierra mining region, in consequence of which they have been miserably corrupted and destroyed. Indians in the mining districts, for reasons not necessary to specify, are always worse debauched than those in the agricultural regions.

3.3.2.2 Subsistence

The primary ethnographic sources on the Nisenan include Powers (1877), Faye (1923), Kroeber (1925, 1929), Littlejohn (1928), Gifford (1927), Beals (1933), Voegelin (1942), Uldall and Shipley (1966), Merriam (1967), and Wilson (1972). Collectively, these writers describe a hunter-gatherer society organized into the characteristic Californian "tribelet" (*sensu* Kroeber 1925) and living in small, semi-permanent villages within a more or less specified geographic territory. Like many native Californian groups, the Nisenan engaged in a seasonal round of food gathering, which included the exploitation of a wide range of natural occurring plants and animals. Edible resources were abundant in Nisenan territory year-round, though some (such as acorns and certain other plants) were acquired primarily during specific seasons. Beals (1933:346) noted that the Nisenan were exceedingly catholic in their choice of food, avoiding very few edible resources.

> Nearly all available foods were eaten. No insect or invertebrate is mentioned as having been avoided; nor any edible plant. The Nisenan did specifically avoid eating the dog and the grizzly bear, possibly also the wolf, coyote, and reptiles. Birds known not to have been eaten were the buzzard, eagle, and northern pileated woodpecker.

In general, the division of labor in Nisenan society followed a pattern whereby men hunted and fished and women gathered, though both sexes were apparently involved in acorn and pine nut gathering. Terrestrial game such as deer, elk, bear, rabbit, and a wide variety of small and medium animals were consumed. Deer was a major staple for the Nisenan, usually stalked individually or in communal hunts (Beals 1933:346), the latter frequently involving the participation of several villages. Individual hunters stalked deer with bows and arrows, sometimes using deer-head decoys. They were frequently assisted in this endeavor by dogs, which were greatly prized for their assistance in hunting. Bows were typically between 2 and 3 ft long, sinew-backed, and made of yew, while arrows were tipped with obsidian, basalt, or chalcedony points. A communal hunt, by contrast, was the primary way to acquire deer (Beals 1933:347). This activity usually involved several hunters driving the deer into enclosed areas, where the animals were dispatched by the most skilled marksmen. Other times, especially during the fall, deer drives involved the use of fire. Brush was set alight, and deer were driven

into the center, where they were killed. Occasionally deer were also caught in snares. Once a deer was killed, it was butchered, and the meat was stripped from the carcass. Usually long thin strips of meat were taken, though sometimes thin, flat pieces were cut from the strips. Individual pieces of meat were laid on willow stick racks to dry. In warm weather, it took about 24 hours for meat to dry (Wilson 1972:34). Deer hides were used for blankets, clothing or sometimes, as mats on the floors of houses.

Bears were also hunted, an activity that usually occurred in the mountains. Several important prohibitions preceded a bear hunt. It was forbidden, for example, to utter the Nisenan word for bear (*ko'pa*) prior to a hunt; instead, the hunters simply used the word animal (*k'uton*) in conjunction with a hand gesture involving fingers bent forward at the second joint (Beals 1933:348). Bears were often taken while hibernating. Some bears were shot in their lairs while others were flushed out using burning oak logs and shot or speared to death. Grizzly bears were greatly feared and strictly avoided

Rabbits were typically hunted in large drives that took place in the spring. A 100-yard long net made of milkweed (*Asclepias* sp.) fiber or hemp was stretched across a specified area (Beals 1933:348). Sometimes several nets were joined together to form a barrier a mile long. The headman, who owned the net, organized the drive, specifying where and when it would take place and gathering together families and individuals. The headman sometimes also appointed a "rabbit captain" who was responsible for organizing the hunt and dolling out the meat and skins after a successful hunt. During the drive, rabbits and other small game were driven into the net, entangled, and clubbed to death. A successful drive netted hundreds of rabbits, and was often the occasion for a "big time," or native fandango. Rabbits were also hunted individually; they were driven out of burrows, where they were shot with arrows or beaten to death with sticks.

A variety of birds were hunted including quail, grouse, ducks, geese, and even blue jays, among others. Quail were especially prized; some men specialized in the hunting of quail almost to the exclusion of other activities. The birds were hunted using "quail fences," which were low barriers between 8 and 9 inches in height and stretched diagonally up open hill slopes. The birds were flushed into the barrier, usually at night with torches, and dispatched. Women's hair was also used for quail snares (Beals 1933:349; Faye 1923:39). Quail meat was either roasted or dried.

Fish formed a substantial part of the Nisenan diet, especially for those populations living along rivers and streams. They were acquired in a variety of ways – from hook and line to the use of natural poisons. Fishhooks were bi-pointed and typically made from the bones of rodents (Wilson 1972:35). Caught fish were gutted, the entrails discarded, and then split down the back and laid open so the meat would not get spoiled. Trout were either eaten as soon as they were caught or dried. Women pounded the dried fish into a meal that was stored in baskets. Perhaps one of the most common ways of obtaining large catches of fish however, was through the use of poison. Soaproot (*Chlorogalum pomeridianum*) was pounded into a gelatinous mass and tossed into streams or pools. The men then waded into the water and stirred the soaproot so that it permeated the entire pool. Once the stunned fish floated to the surface, the men gathered them with their hands and tossed them to the women who stood on the bank (Wilson 1972:34). Fish were also taken with bone-pointed spears, dip nets, and weirs.

Insects such as grasshoppers, larvae, pupae, and ants were also eaten. Grasshoppers were considered a particular delicacy among the Nisenan (Wilson 1972), and, like rabbits, were obtained in large communal drives. These were gathered primarily in the summer when they were particularly abundant in meadows or similar areas with flat ground. To collect grasshoppers, a number of conically-shaped pits were excavated to a depth of about three feet. Several men and women formed a line or semi-circle and beat the grass with sticks, herding the insects before them and into the pits. Immediately, the pits were covered with hide, and a smoke bundle tossed under the hide to kill the creatures. After a time, the grasshoppers were gathered, soaked, and cooked in earth ovens specially built for the occasion. The cooking process usually took several hours and grasshoppers were considered done when they were dry and crisp. The cooked grasshoppers were then crushed with manos and metates, winnowed in trays to remove the wings, and stored in baskets.

Vegetal foods provided the most important sources of calories and carbohydrates for the Nisenan. Various nuts, seeds, roots, tubers, bulbs, corms, berries, wild grapes, and other greens were gathered. However, the most important vegetal foods were acorns (Beals 1933:351; Wilson 1972:36-37). According to Beals (1933:351), between six or seven varieties of acorns were recognized by the Nisenan as suitable for consumption. The most prized acorn, however, belonged to the black oak (*Quercus kelloggii*). Acorn harvesting typically occurred during the fall, when the acorns were ripe and the trees heavily laden. Trees that were known to provide lots of acorns were frequented over and over again and may have been owned by particular families (Wilson 1972:37, Beals 1933:363). Men climbed the trees and shook the branches, thereby dropping the acorns to the ground. The women gathered them up and put them in baskets. The acorns were shelled and then ground into a flour, the latter process facilitated by the use of either bedrock or portable mortars and pestles. The flour was winnowed in trays with the finer flour segregated from the coarser. After being ground and winnowed, the flour was leached with warm water to remove the toxic tannic acid. The meal was then stored in baskets, and eventually made into soup or bread. When a crop was particularly abundant, the acorns were stockpiled in a granary and occasionally traded with other groups.

3.3.2.3 Social and Political Organization

Like many native groups in California, the Nisenan were organized into what has been termed the "tribelet." The term and concept were derived from the writings of A.L. Kroeber, who in 1932, observed that the dizzying array of different social and political groupings in native California was far different from other parts of North America. The concept of the tribe, used with ubiquity elsewhere in North America, was simply not an adequate description of the many and varied social groupings in California. As a result, Kroeber coined the term "tribelet" to explain the basic social and political organization of a majority of California's native peoples, including the Nisenan. The tribelet was defined as a social aggregation, consisting of one or more household groups, that included immediate family members (parents and children) and any associated relatives (either collateral, lineal, or affinal), living together in a village or community. Sometimes, however, the tribelet included two or more villages. These households were gathered together on the basis of a shared language, culture, and identity. Typically, tribelets defined communal territorial boundaries and engaged in regularized intergroup

relations, such as hunting and gathering and ritual observances. The tribelet, moreover, was autonomous, self-governing, and independent.

The Nisenan conformed to this pattern quite well. Littlejohn (1928:17) describes Nisenan thusly:

> The Nisenan were not a tribe in the strict sense of the term. The unit was the local group which occupied a single village site or two or more adjacent sites. Political unity was, however, only nominal. The chief unifying factor was the language which, aside from slight dialectic differences, was the same throughout the entire area. There was a general cultural pattern but there were decided distinctions between the cultural traits of the Indians living in the valley and those who occupied the hills and mountains. These distinctions were particularly evident in traits which were related to sustenance and to habitation; traits, in other words, which were determined by the physiography of the territory.

In the mountains and foothills, villages were generally located on a knoll or on a bench on high ground between rivers. In the valleys, villages were built on low, natural rises along streams or rivers. Small villages contained between 15 to 25 people, while large villages could contain over 500 people (Kroeber 1925:831). Dwellings were dome-shaped and made of brush or bark lashed over an oak pole frame. They were between 10 and 15 ft in diameter, and any village might contain between 7 or 50 houses. The floors of the dwelling were sunk a few feet into the ground and covered over with pine needles or leaves. Hearths were situated in the center of the room. In larger villages, dance houses (*k'um*) and acorn granaries were constructed. The former were relatively elaborate, semi-subterranean structures built with heavy beams and between two or four main posts depending on size of the house. These houses were used for ceremonies, gatherings, feasts, and various assemblies (Beals 1933:344).

Relations between villages were usually friendly, though sometimes disputes would erupt over such things as trespass, hunting rights, ceremonial obligations, or accusations of sorcery. If these disputes were not resolved, feuds could easily erupt between villages. Surprise attacks and organized raids were the most common types of warfare (Beals 1933:366), though occasionally pitched battles took place. Weapons included bows and arrows, spears, clubs, and slings. Usually, however, these battles did not result in many casualties.

Beals (1933:359) characterizes chiefs, or headmen, in Nisenan society (called a *huk*) as possessing "*little direct authority, but often possessing much influence, depending on their support by public opinion*." Chieftainship was hereditary in certain lineages but always subject to the approbation of villagers. If an heir proved incapable of fulfilling the duties of a *huk*, a new headman was elected by the older men and woman of the community (Littlejohn 1928:22). Traits most important for chiefs to possess included the ability to persuade and settle disputes. A "good" chief, according to one of Beals' informants, had to possess a number of characteristics (Beals 1933:360):

> [A] good chief advises his people, restrains them from trespass, takes initiative in holding "big times," tells people when to begin gathering acorns, make fire

> drives, other large community activities, arbitrates disputes, [and] sees generally to their welfare [sic].

One of the chief duties of the headman was organizing people for the dances that played such an important role in Nisenan society. Among the Nisenan inhabiting the valley, dances were held seasonally, and usually coincided with the ripening of a particular economically important plant food or the arrival in the area of abundant game. The most important dances, however, were called "big times" (*lu'mai*), and were usually held in the large dance houses. These dances were occasions for multi-group gatherings and much merrymaking. Often different villages, some located many miles away, came together to participate in these "big times." The headman was responsible for summoning the dancers, a task which was usually accomplished by a runner sent out to different villages. He carried a string with several knots; the knots signified how many days until the dance was to be held. Dancers were almost always men (Kroeber 1929:269), though women were allowed to dance during certain ceremonies. Dance regalia were elaborate and varied, and included headdresses, feathers, stick rattles, and other paraphernalia. The Kuksu religion and its associated dances also made a late entry into Nisenan territory.

The chief was nearly always a wealthy man, who possessed a large personal cache of items, such as bows and arrows, shells, baskets, and animal hides. He also frequently possessed more than one wife (Beals 1933:360). Most of his food was supplied to him by others and, as chief, he was required to act generously and distribute supplies during lean times. In fact, much of his reputation as a "good" chief was based on how well he treated visitors and the members of his own community. A chief could be deposed for a number of reasons, not least of which was his inability act and deal with people benevolently. A chief was also responsible for organizing people during war and planning raiding forays.

3.3.2.4 Religious Beliefs

Although Beals (1933:379) stressed a certain lack of uniformity in the religious beliefs of his Nisenan informants, they were nonetheless united in their belief that there existed a supernatural realm peopled by spiritual beings, some of whom possessed great powers. They also believed that all natural objects were endowed with supernatural powers. Beals (1933:379) writes:

> To the Nisenan the world is a place where every object is endowed with potential supernatural powers. These powers may sometimes be taken advantage of or propitiated to bring "luck," or the possession of "medicines" may enable an individual to have "luck," which amounts to giving him more than natural powers in certain pursuits.

Like other native Californian groups, the Nisenan placed great importance on shamans. There were two main types of shamans in Nisenan society, those that were specialists in native medicine and curing and those who had direct contact with the supernatural realm. The first of these were called *yo'muse* and called upon to relieve illness and disease. They worked with a number of different shamanistic items to bring about cures, such as charm stones, roots, seeds, leaves, and various herbs. Many shamans were skilled in sucking foreign objects out of a patient's body; such obstructions were believed to be the primary cause of illnesses. Some

shamans, however, were greatly feared because of their poisoning skills. In fact, poisoning was a major concern in Nisenan society, and one that was painstakingly guarded against. A *yo'muse* could be either a man or woman. The second type of shaman, always a man, was called an *oshpe* and acted as an intermediary between the natural and spiritual worlds. He had the ability to conjure spirits and was the repository of ancient lore.

Like a number of tribelets in central and northern California, the Kuksu cult played an important role in Nisenan society. According to Kroeber (1929:312), however, only the valley Nisenan were involved in the cult; the hill Nisenan apparently did not practice Kuksu. The cult was expressed among the valley Nisenan by the existence of two separate organizations. The first of these, called *Akit*, allowed only men, while the second, called *Teme'ya*, allowed a limited number of men and women. The first organization was a general dancing society where initiates, mostly boys or young men, were taught specific dances over a period of time. The second organization involved dances where the performers impersonated spirits and wore elaborate costumes, especially the very large headdress characteristic of Kuksu performers.

3.3.2.5 Ethnohistory

Although Spain claimed Alta California as part of its New World possessions, the area north of what today is the Bay Area witnessed little overt Spanish influence. The 21 missions, which were intended to demonstrate the claim of the Spanish empire to what is now modern-day California, only extended as far north as modern Sonoma County. In fact, Spain only had a tenuous hold on northern California, though at least a few researchers have surmised that some native inhabitants of the region, including some Nisenan, were likely forced into the Spanish mission system (Angel 1882; Forbes 1969:32; Wilson and Towne 1978:396). The three colonialist nations, Russia, Great Britain, and the United States, vied with Spain, and each other, over possession of the region. Fort Ross, in modern-day Mendocino County, for example, was established by the Russians in 1812, and was considered its farthest-flung New World outpost.

One of the few Spanish expeditions into the region was led by Gabriel Moraga, who in 1808 marched north from Mission San Jose in order to scout locations for possible mission sites. He reportedly located 12 Indian villages along the Cosumnes River, 11 Nisenan villages along the American River, and seven Nisenan villages along the Feather River (Peterson 1977:3). Fray Narcisco Duran led a later Spanish expedition into Nisenan territory in 1817. The expedition traveled up the Sacramento River and encountered numerous Native Californians, several groups of which were hostile (Peterson 1977:3-4).

When Alta California was ceded to Mexico in 1822, the far northern half of California remained in dispute. Although technically a possession of Mexico, it soon bore witness to the intrusions of many different foreign expeditions, including British and American fur trappers. These forays were done often without the knowledge or certainly, the approval of the Mexican authorities. American fur trapper Jedediah Smith led an expedition into the northern Sacramento Valley, and Nisenan territory, in 1828. He kept a diary during the expedition, in which he recorded numerous encounters with the region's native inhabitants. John Work, a trapper working for the Hudson Bay Company, also visited the area a few years later, in 1833.

As a consequence of these, and other, expeditions, virulent epidemics were unleashed among the native populations of the region. Perhaps the most devastating of these occurred in 1833, and was apparently a result of either smallpox or malaria (Peterson 1977:6; Cook 1955:308). By one estimate, this epidemic may have wiped out perhaps as much as 75 percent of the valley Nisenan population (Cook 1976). Several explorers of the time recorded the devastation these diseases wrought on the natives and their villages (quoted in Peterson 1977:5-6). Work (cited in Maloney 1945:24) recorded one such event.

> The villages which were so populous and swarming with inhabitants when we passed that way in January now seem almost deserted and have a desolate appearance. The few Indians who remain…are lying apparently scarcely able to move. It is not starvation as they have considerable quantities of their winter stock of acorns still remaining.

The first Euro-American immigrant to settle in Nisenan territory was John Sutter, who had been granted permission to settle there by the Mexican governor Juan Bautista Alvarado. Sutter established a fort, ranch, and mill near present-day Sacramento. He recruited numerous Nisenan in his enterprises, and used them as laborers on many of his various projects. His relations with the Nisenan, as well as other native groups, were complex; while he could at times be generous and benevolent, he could also be harsh and brutal (Peterson 1977:9-11).

The annexation of California by the United States in 1849-1850 resulted in continued woes for the Nisenan and neighboring groups in the area. In fact, the ensuing years were tumultuous for the Indians of the region. Not only did disease take a massive toll on their population but the violence unleashed by miners and settlers who entered their territory in the 1840s and 1850s also had a significant and devastating effect on their population. After the discovery of gold at Sutter's Mill in 1848, miners and settlers flooded into northern California, gradually expropriating native lands. Many of the streams and creeks the various Indian groups had used and relied upon for generations became polluted and befouled as the prospectors overran the area in their mad search to find the elusive mineral. This prompted angry responses from the region's native inhabitants, and hostilities between the two groups became commonplace. Many of the miners, for their part, viewed the Indians as little better than wild beasts (calling them "Diggers"), and thus, dealt with them harshly. There were numerous violent incidents – raids, retaliatory killings, rapes, and outright massacres – between the two opposing groups during this time.

Despite resistance on the part of the Nisenan, the eventual outcome of this clash between white and native culture was inevitable. The Nisenan were simply no match for the superior numbers, technology, and organization of the American invaders. During the latter half of the nineteenth century, the native groups that had occupied the area were gradually and inexorably displaced, killed off by disease or violence, or forced into hiding and seclusion. As whites settled on their lands, the few surviving Nisenan were gradually pushed to the margins of society, where many of them were eventually absorbed into the dominant economic system. Many Nisenan found work in agriculture, logging, ranching, and domestic pursuits (Wilson and Towne 1978:396).

The issue of landless Indians (i.e., those not living on reservations) in California became a problem that aroused the interest of the Federal government at the turn-of-the-century. In order to ascertain the number of Native Americans living outside the reservation system, a San Jose attorney named Charles E. Kelsey was appointed by the Bureau of Indian Affairs to conduct a comprehensive survey. He was tasked with enumerating the numbers of landless Indians in California and investigating their need for land. Between 1905 and 1906, Kelsey traveled throughout California, gathering a long list of names, ages, and locations or residences of living Native Californians (Kelsey 1971). Kelsey's work in Yuba County yielded a depressingly small number of Native Californians living in the region. Altogether, he counted a total of 50 landless Indians and three mixed-blood Indians (Kelsey 1971:2).

3.3.2.6 Ethnographic Place Names along the Yuba River and Vicinity

Along with Paul-Louis Faye (1923), Hugh Littlejohn (1928) was one of the first to conduct ethnographic work among the surviving Nisenan. A graduate student in anthropology at Berkeley during the 1920s, he was apparently a student of Edward Gifford and A.L. Kroeber's. According to notes associated with his Berkeley archived work, Littlejohn conducted his field work in July and August 1928, when he worked with a number of Nisenan informants. His monograph *Nisenan Geography* was published in 1928 as part of the ethnological documents for the Museum of Anthropology at the University of California, Berkeley. Littlejohn compiled a list of Nisenan village and place names for several different areas, including Pleasant Valley and Placerville in El Dorado County, the Auburn-Colfax area in Placer County, Nevada City in Nevada County, and in Yuba and Sierra counties.

Littlejohn's Nisenan informant for the Yuba County area was a man named Henry Thompson, who lived at Stanfield Hill (Littlejohn 1928:55). According to Littlejohn, Thompson was a "full-blooded Indian," who claimed affiliation, at least linguistically, with Indians living around Nevada City, Colfax, and Auburn. According to Thompson, there were four large village sites with ceremonial round houses (*kum*) in the vicinity of Stanfield Hill (Littlejohn 1928:57-58). One of these was located on the informant's property and was called *Kalo'ma*, a village with a round house situated on a knoll. At the time Littlejohn recorded this locale, traces of the kum were still visible (Littlejohn 1928:58). To the east of Stanfield Hill, was the village site of *Mom'inku*. Southwest of Dry Creek was the village site of *Pol'omyan*. The headman of *Pol'omyan* and *Mom'inku*, according to Thompson, was a man named *Wu'pus* or "Ned." The village of *T!uhu'*, near Dry Creek, at a site that at the time was part of Virginia Ranch (this area is now underwater). The headman of this village was a man named Captain Sam (Littlejohn 1928:90).

West of Stanfield Hill were three named sites: *O'nehu'yan*, *Chichim'bupu*, and *Men'oma*. The first site, *O'nehu'yan*, was located on the fork of an unnamed creek in Butte County. It was located north of Bangor, and according to Littlejohn's informant, it was a village where the inhabitants spoke a mixed language. The headman was called Captain Edgar by the Nisenan and *Salai'yu* by the Maidu. *Chichim'bupu* was also located on Honcut Creek and like *O'nehu'yan*, a mixed language was spoken there. *Men'oma* was located southeast of *Chichim'bupu* along Honcut Creek.

Southeast of Stanfield Hill were several named Indian settlements. Northeast of the town of Bridgeport, for instance, was the village of *Sel'ewa*, situated on a creek between the South and Middle Forks of the Yuba River. The village of *Kai'empa'kan*, which had a large and important round house, was near Squirrel Creek and reportedly had a good spring. West of Rough and Ready, and south of the Yuba River, were five Indian settlements: *On'opoma*, *Pu'dadom*, *Pam'pakan*, *Ko'kokchar*, and *Cham'paka*. The first of these *On'opoma* had a large round house reputed to be 200 ft in diameter (Littlejohn 1928:57). There was very little information regarding the remaining sites. North of Smartsville, across the Yuba River was the Indian camp of *Wi'lili*.

In the vicinity of Grass Valley there were three sites: *Yol'losyan*, *Si'pony*, and *Dap'imluk*. At *Si'pony* was reputed to be a large round house and a graveyard (Littlejohn 1928:56). North of Grass Valley in the vicinity of Nevada City, were four sites: *Yu'lichar*, *Wau'kaulo*, *Wau'kaudok*, and *Te'tema*. According to Littlejohn's informant (1928:56), the headman at *Wau'kaulo* was a man named Captain John; when he died, he was replaced by a man named Ben Wilson. *Wau'kaudok* was located near Deer Creek. The headman of this village was a man named Old Sam. When Old Sam died, he was replaced by his cousin Long Charlie (Littlejohn 1928:56). The village of *Te'tema* was located up Deer Creek from *Wau'kaudok*. Relations between *Te'tema* and *Wau'kaudok* were good, according to Littlejohn's informant, though the two villages had different headmen. To the east of Nevada City, in the vicinity of Banner Hill was the village of *Pa'puk*, which was reputed to be a large Indian settlement. It was abandoned, however, soon after the arrival of the Whites. The fifth native locale in the vicinity of Nevada City was *Ok'paimpa'kan*, though its exact location was not known.

West of Grass Valley, in the Penn Valley area, there were several native locales, including *Hum'huminkum*, *Uku'koyu*, and *Ka'paui*. Little information was gathered about the first two, though the latter village had a headman named Captain Tom (Littlejohn 1928:57).

Southeast of Grass Valley, in the vicinity of the modern Rollins Reservoir, were a cluster of native villages. About a mile west of the Greenhorn River, was the large settlement of *Tu'yi*, which reportedly had a large round house. Three other villages were located near *Tu'yi*, including *Hoy'dok*, *Yol'sian*, and *Torn'imkum*, the largest of which was *Yol'sian*.

In northeastern Yuba County, near the Challenge-Brownsville area, was the village of *Pan'koyo*, which was reputed to be a large settlement. East of that, in eastern Yuba County, was the village of *Nak'nak*, which was located in the vicinity of Camptonville along Willow Creek.

Littlejohn (1928:58) mentions that there were several temporary Indian camps in the vicinity of Oregon House, Kentucky Ranch, Dobbins, Indian Ranch, Frenchtown, Maple Grove Ranch, Brownsville, Sicard Flat, and Sucker Flat in Yuba County, but his informant was not able to remember the names for these.

3.3.2.7 Present Day Native American Communities

The late nineteenth and early twentieth centuries proved to be an extremely difficult period for California's Native American communities. The unratified treaties of the early 1850s left

virtually the entire Native population without a land base, forcing surviving tribes into refuge enclaves, often living as laborers on ranches or in other rural settings. The Dawes, or General Allotment, Act of 1887 began the long process of forced self-sufficiency and acculturation that was to become the overriding federal government policy well into the 1950s. The Dawes Act provided homestead-like land allotments to Native Americans, without the trust relationship with the federal government common to treaty-based reservations. The Dawes Act was seen generally as a failure, and by the early twentieth century, the "plight of the landless Indian" had become a moral crisis. As noted in Section 3.2.2.5, the federal government and charitable organizations began to examine the situation with an eye to providing some form of land base through which the surviving tribes could sustain themselves. This effort led to the establishment of some 50 rancherias in California, usually small tracks of land, often lacking resources and employment or agricultural opportunities. Some rancheria communities maintained their populations, although many saw a decline as residents were forced to move away to earn livings in urban environments.

The federal government maintained an active legislative program of acculturation during the first half of the Twentieth Century. Indian schools, such as those at Carson City, Nevada, and Riverside, California, trained Indian children in domestic service and the trades, usually separating them from their tribes and natal families for the majority of their childhood years. The drive to acculturate Native Americans and end their trust relationship with the federal government came to a head in California with the California Rancheria Termination Act of 1958. Rancheria lands were offered to residents in what were to be privately owned parcels, while at the same time the government terminated any trust responsibilities to the rancherias, including assistance with health care, education, or subsistence. The Act was seen as a failure largely because the rancheria communities were unprepared for the change. Privately owned parcels were quickly lost due to unpaid taxes and sales to non-Indians. Many rancherias fought the Act and many were able to "unterminate" their rancherias, and reestablish trust status with the federal government. Of particular importance was the judgment rendered in the Tillie Hardwick class action suit begun in 1978, which held that 17 rancherias had been wrongfully terminated. Many of the rancherias in the case remained in terminated status, often because there were no longer tribal members living on private parcels on the former rancheria lands.

The result of this tangled and often unsavory history is that many tribal communities have maintained or reclaimed their lands under trust status with the federal government and many have not. Those tribes that are "federally recognized" have access to the benefits of that trust status, including opportunities for economic improvement, in some cases casino gaming. So-called "unrecognized tribes" have taken many paths to reclaim or establish their status with the federal government, although the various processes may take years, with questionable chances of success. The economic disparity between recognized and unrecognized tribes has become stark, as recognized tribes realize the rewards of casino gaming and its attendant opportunities for education and health care, and economic and political influence.

Of the many tribes contacted to participate in this study, two, the United Auburn Indian Community, a recognized tribe, and the Nevada City Rancheria, an unrecognized tribe by the federal government, participated actively. The following provides a summary of their current status.

United Auburn Indian Community

The United Auburn Indian Community of the Auburn Rancheria is a federally recognized tribe. The United Auburn Indian Tribe was reestablished after late Nineteenth Century displacement when the Department of the Interior documented the presence of a separate, cohesive band of Maidu and Miwok indians living in a village on the outskirts of Auburn, California (United Auburn Indian Community 2011). In 1917, the federal government provided land in trust for the Auburn Band near Auburn, California, and the tribe formally established a reservation at that location. Under the California Rancheria Act of 1958, the federal government terminated federal recognition of the Auburn Band in 1967. In 1991, the tribe reorganized as the United Auburn Indian Community and requested that the United States formally restore their federal recognition. In response to the groups' petition, Congress passed the 1994 Auburn Indian Restoration Act, which provided that the tribe could acquire land in Placer County to establish a new reservation. The tribe opened the very successful Thunder Valley Casino on tribal lands in 2003. The revenues from the casino business have provided economic self-sufficiency to the United Auburn Indian Community and the tribe has subsequently provided a great deal of funds to the surrounding non-tribal community as well. The Auburn Rancheria is located approximately 27 miles southeast of the Project.

Nevada City Rancheria

The Nevada City Rancheria is made up of foothill Nisenan whose ancestors lived in pre-contact villages, such as *Waukaudok*, *Woloyu*, *Ustomah* and *Kiwimdo* (Nevada City Rancheria 2011). In 1887, the Tribal Chief of the group, Charley Cully, obtained a land allotment for the tribe. After the chief's death in 1911, the allotment was converted by presidential executive order to Federal Trust Land, and the tribe became a federally recognized tribe – the Nevada City Rancheria. The rancheria was terminated in 1964 as a result of the 1958 Rancheria Act. Though the federal status of the tribe was terminated, the group still continues to protect their heritage, culture, and future. The Nevada City Rancheria is located approximately 8.9 miles southeast of the Project.

3.3.3 Historic Overview

Principal historical themes applicable to the Project Vicinity include: early European settlement of California, migration and transportation, mining development, development of agriculture, cattle ranching, recreation, tourism, hydroelectric systems, water control and distribution, and formation of the water districts. Each of these themes is discussed below.

3.3.3.1 Early Regional History

European-American exploration of the area began in the early nineteenth century. As mentioned above, Gabriel Moraga led an exploration expedition through the region in 1808. Additionally, trappers from the Hudson Bay Company crossed the region during the 1830s. As part of a Mexican land grant, John Sutter owned a large part of what is known today as Yuba County. In 1842, Sutter leased the portion of his rancho, which eventually became the town of Marysville, to German Theodore Cordua. Cordua established a stock ranch and built an adobe home and trading post at the southern end of present day D Street in Marysville. In 1844, Cordua obtained

a grant from the Mexican government for seven leagues of land not included in his lease from Sutter, situated north of Yuba River within current Yuba County boundaries.

With the 1848 discovery of gold, the resulting population boom brought thousands of miners and settlers to California. Development of the area burgeoned, due to the proximity of gold fields to rivers in Yuba County that were capable of transportation to and from Sacramento and San Francisco. Frenchman Charles Covillaud purchased a half share of Cordua's property in 1848, and Michael C. Nye and William Foster purchased the other half in January of 1849.

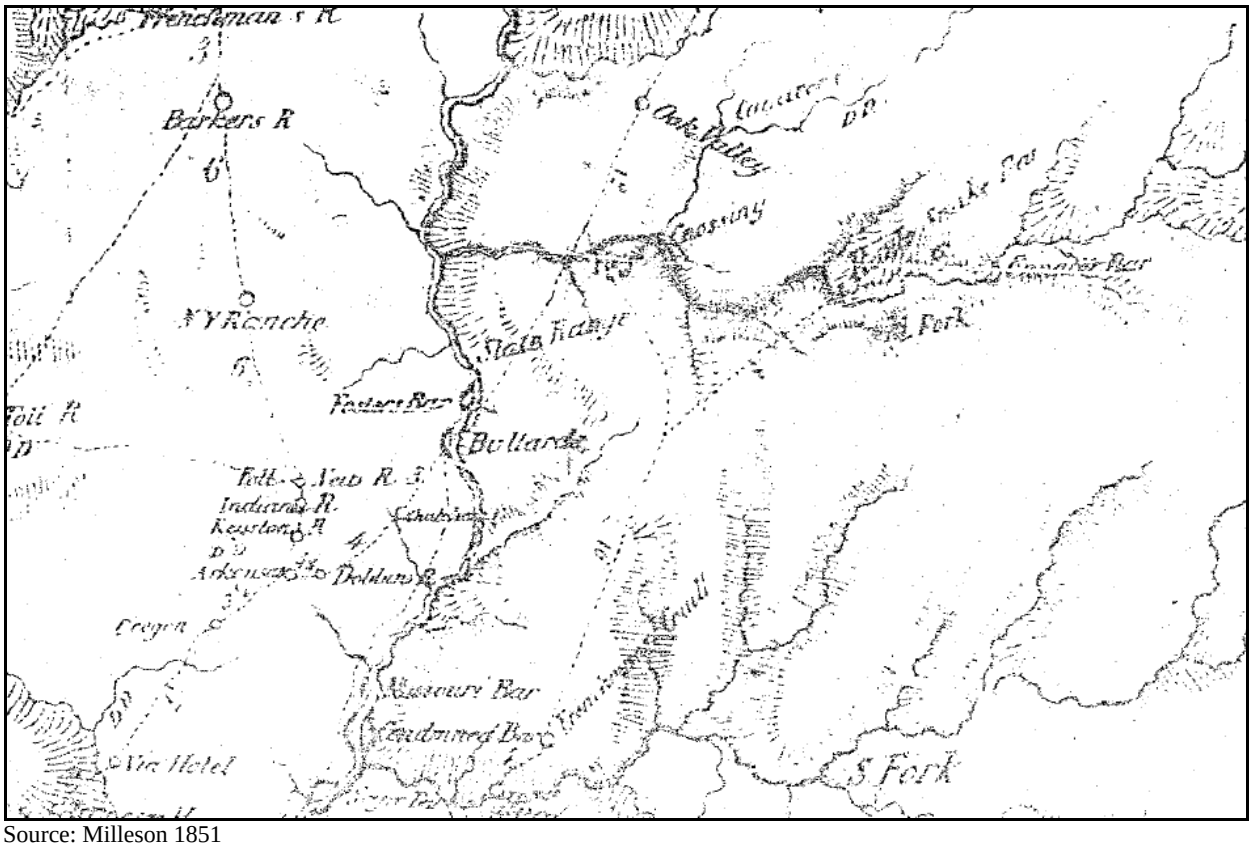
The following January, a town was laid out on Covillaud's property and was named Marysville for his wife Mary Murphy Covillaud, a Donner party survivor (Hoover 2002). Due to its location on the Feather River, Marysville became a transportation hub and a center of trade for northern mines. The city benefited from close proximity to the high-producing mines and thus experienced extensive growth. Marysville prospered during the Gold Rush era and became one of the largest cities in California. In addition to the major transportation and distribution center at Marysville, small towns and communities were established to serve miners' needs.

3.3.3.2 Fosters Bar Township and Bullard's Bar

Miners identified numerous gold-bearing bars and developed mining communities along North Yuba River. Foster Bar Township was established in August 1850, and by 1860, the township population grew to 898. The township initially "*embraced all of Yuba County east of the mouth of Middle Yuba River, and a part of the west end of Sierra County*" (Chamberlain and Wells 1879). During the 1850s, the township underwent several subsequent divisions but eventually, boundaries extended south and east along Yuba River and to the west, abutted Parks Bar and New York Bar Townships. Descriptions of the township in the *Official History of Yuba County* (Chamberlain and Wells 1879) state that:

> The township lies among the foothills of the Sierra, which were formerly well covered with sturdy oaks and pines. The numerous saw-mills have converted all of this timber into lumber, and in its place a young growth of oak, pine, fir, and manzanita have sprung up, which in a few years will again be ready for the saw. The township is bordered on the south and east by Yuba River. Through its fertile valleys, many creeks and streams find their way to the river. The larger of these are Dobbins, Oregon, Indiana, Keystone, California, and Clear Creeks. The many little valleys among the hills are well cultivated, and large quantities of grapes, apples, pears, peaches, and plums are annually raised. Large bands of stock graze on the hillsides.

In 1849, miners established Bullards Bar (part of Foster Bar Township) along the Yuba River just south of Foster Bar. The community was named for pioneer miner Dr. Bullard of New York, who had been shipwrecked off the California coast on route to the Sandwich Islands (Hoover 2002). Figure 3.3-1 shows the extent of development within the area by 1851, and the many communities given the "Bar" designation that reflect the importance of mining to the region.

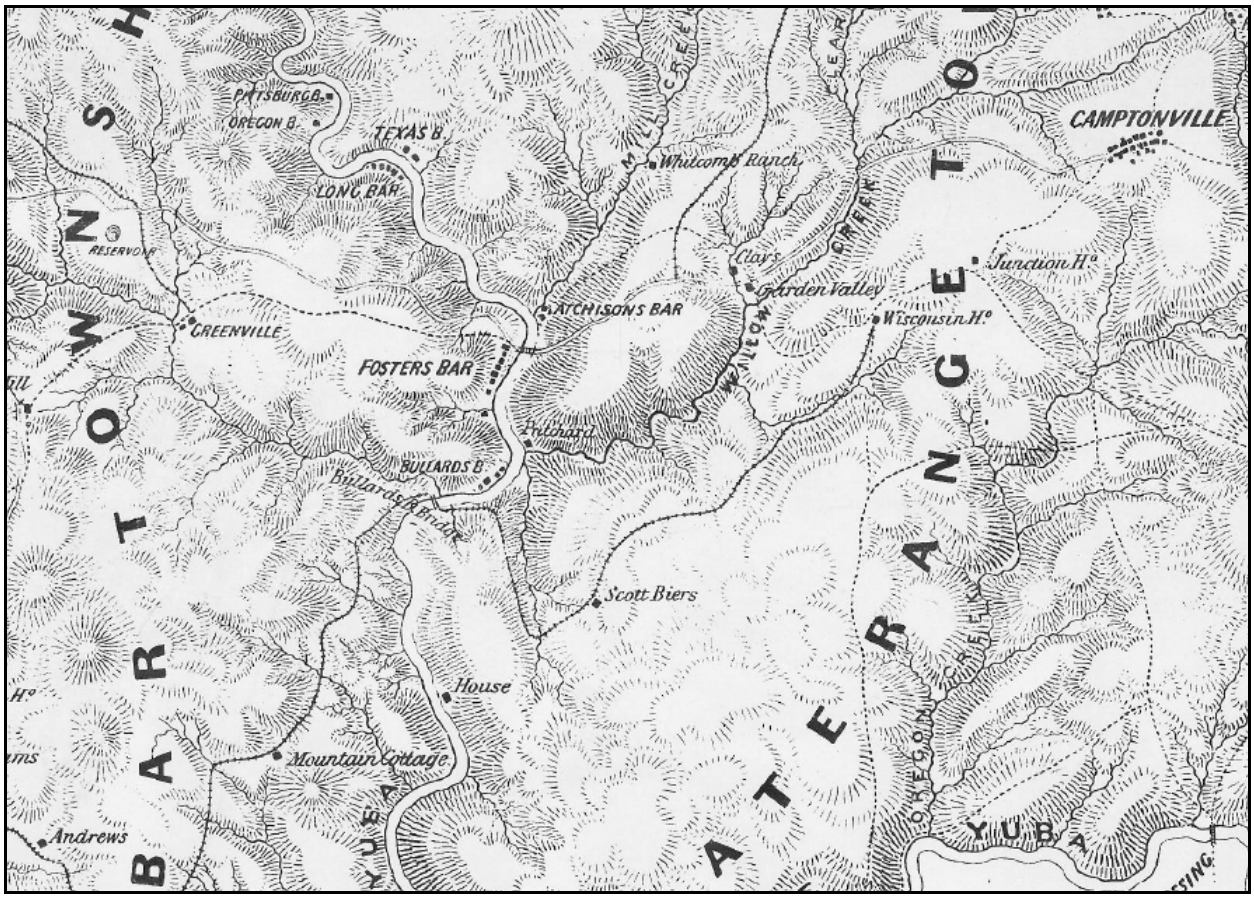


Source: Milleson 1851

Figure 3.3-1. Map of Feather and Yuba Rivers 1851; Bullard's Bar Vicinity.

As early as 1850, locals had constructed a bridge at Bullards Bar, but due to the local custom of expedient construction, it was built as "*a light structure in the summer, so that if the high water of the winter season should carry it away, the loss would be comparatively light*" (Chamberlain and Wells 1879). The bridge was washed away by the following winter's storms. The original Bullards Bar Bridge appears on the 1861 Official Map of Yuba County (Figure 3.3-2). Each succeeding bridge suffered a similar fate, until 1858 when George Mix built a substantial structure at a cost of $7000, which stood until carried away by the 1862 flood.

Subsequently, a bridge was erected a short distance up the river, which was later purchased by John Ramm. In 1875, storms also washed this bridge away. Ramm soon built another at a cost of $5,600, which he continued to operate as a toll bridge, until the county purchased it shortly before the turn of the 20th century (Daily Appeal 11/28/1880; Hoover et al. 1966). This bridge served the community until construction of the original Bullards Bar Dam and associated bridge. By 1879, the population of Bullards Bar had dwindled to 30, consisting of approximately 15 white and 15 Chinese settlers (Chamberlain and Wells 1879).



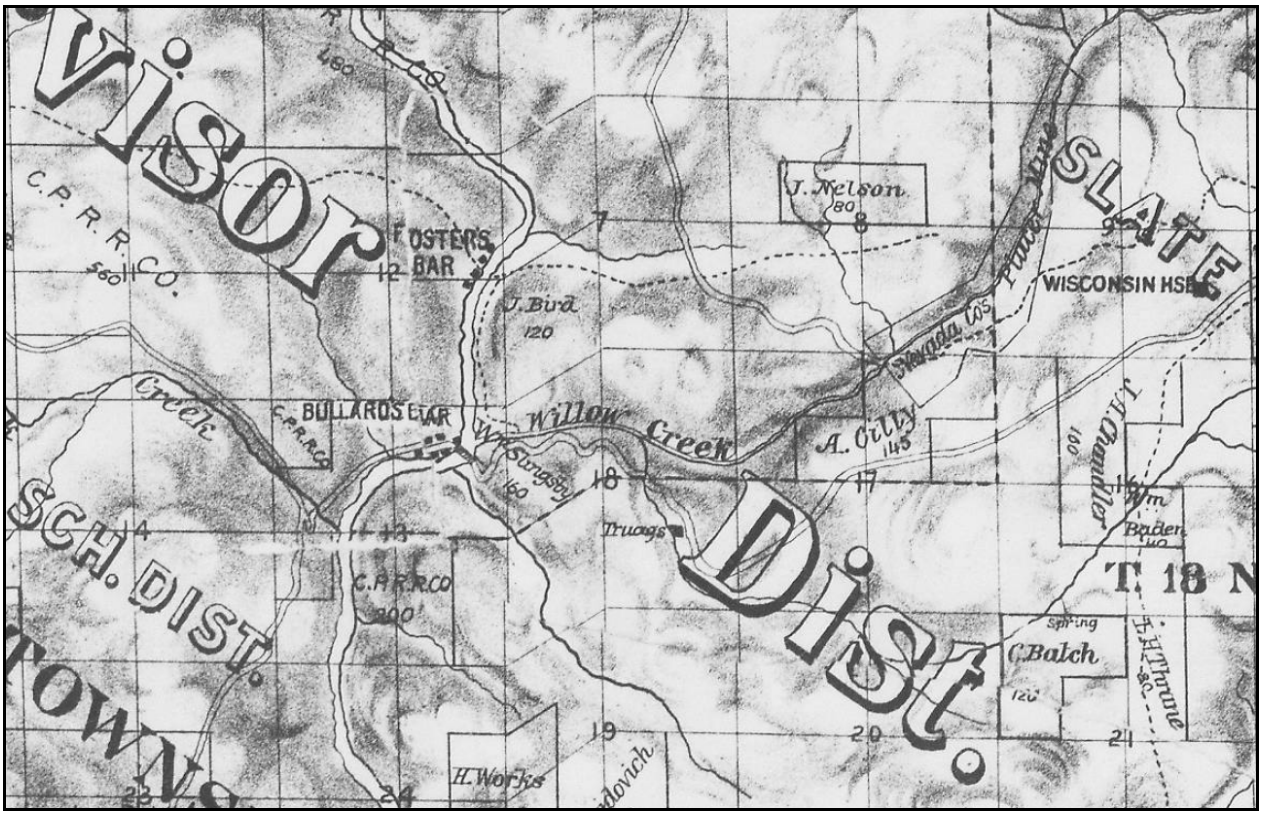
Source: Wescoatt 1861

Figure 3.3-2. Official Map of Yuba County, 1861; Bullard's Bar Vicinity.

Early miners panned for gold in stream beds, but within decades, large-scale mining operations replaced individual miners. In 1853, hydraulic mining was introduced to California, and rapid advances in technology provided greater flexibility and movement of hoses and efficiency for displacing dirt. Hydraulic mining is a process where water is delivered to a site by shooting it through a high pressure hose onto hillsides, washing away tons of boulders, gravel, dirt, and ounces of gold. After extracting gold from long wooden sluices, miners dumped remaining gravel and debris into the mountain valleys. Rivers and streams carried the resulting flood of sediment (slickens) down into the Sacramento Valley. Six-hundred eighty-five million cubic feet of debris were deposited in the Yuba River, and mine waste carried by the river subsequently raised the riverbed up to 100 ft in some areas. This resulted in raised riverbeds of the Feather and Yuba rivers so that, by 1874, at a point 12.0 miles above the city of Marysville, the Yuba River was reportedly flowing 60 ft above its original bed. The resultant floods buried farms near Marysville under gravel and mud. Lawsuits by farmers curtailed hydraulic mining in 1883 (Baumgart 2002).

During the following decade, the population of Bullards Bar grew once again; an 1887 directory described Bullards Bar as a lumber, mining, and farming community, possessing a post-office and public school, with a population of 100 (McKenney 1887). The 1887 Official County Map

notes several large property holdings near Bullards Bar, including those of William Slingsby (160 ac on the south side of the river), Central Pacific Railroad Company (200 ac extending out on both sides of the river), and J. Bird (120 ac on the east side of the river near Foster's Bar). The County map also identifies six structures on the north bank of Yuba River at Bullards Bar, the second location of Bullard's Bar Bridge, as well as a crossing at Foster's Bar to the north (Figure 3.3-3).



Source: Doyle 1887

Figure 3.3-3. Official Map of Yuba County, 1887; Bullard's Bar Vicinity.

3.3.3.3 Ranching in the Project Vicinity

During the latter portion of the nineteenth century, stock raising and ranching developed as a primary economic industry for the eastern portion of Yuba County. Due to the rugged terrain, more traditional agricultural pursuits were ill suited to the region. According to Chamberlain and Wells (1879):

> Vast bands of sheep are fed on these hills, and herds of horses and cattle live and multiply in the ranches of the little valleys. There is a limit to the height of the land upon which animals can be successfully raised. The cold winter necessitates removal of bands and herds to the valley's warmer environs.

Since the mid-1870s, environmentalists and locals vocalized concerns about over-harvesting timber in the Tahoe-Truckee basin. In the 1890s, interest in preserving properties in the Tahoe basin received considerable attention. The Sierra Club gained support for an extensive park on the California side of Lake Tahoe. After extensive debate between environmentalists and local residents concerned over the economic impact, President William McKinley signed a proclamation for a "forestry reserve and public park," setting aside 136,335 ac for Lake Tahoe Forest Reserve on April 13, 1899. In 1906, President Roosevelt consolidated the Yuba Forest Reserve, which included lands within the watershed of the forks of the Yuba River, with the Lake Tahoe Forest Reserve into the TNF (Turrentine et al. 1982).

The first grazing regulations of the Forest Service became effective on July 1, 1905. The application of the grazing system took place on the individual forests. Beginning in 1907, Madison B. Elliott, the first supervisor of the TNF, called together stock grazers in the TNF to an annual convention where permits were issued for the following season. The *Grass Valley Morning Union* reported in 1908 that 230 stockmen attended the second convention, all seeking permits to graze on the TNF.

3.3.3.4 Hydroelectric Facilities in the Project Vicinity

John Martin and Eugene J. DeSabla organized the Yuba Power Company in October 1897. The men had organized the Nevada County Electric a few years earlier and operated a dam and small power plant on the South Yuba River near Nevada City. In 1897, they began construction of a second power plant on Yuba River to supply electricity for general use in the town of Marysville and mines in the Browns Valley region. The plant used a ditch system that diverted water from the North Fork of the Yuba River for irrigation purposes in Browns Valley. As soon as the Yuba plant was completed, Martin and DeSabla reorganized their corporation, forming the Yuba Electric Power Company, and began construction on a third hydroelectric power plant: the original Colgate Power Plant.

A drought lasting from 1897 to 1898 lowered the flow of the American River, resulting in the Sacramento Electric Power and Light Company contracting with the Yuba Electric Power Company to receive power from the partially completed Colgate plant. When the plant began operation in 1899, it supplied electricity to local mines in the vicinity of Nevada City, as originally intended, and also sent power to Sacramento (JRP and Caltrans 2000).

Construction of the original Bullards Bar Dam by Harry Payne and the Yuba Development Company began in 1922 and was completed in 1924. Payne and company originally constructed the dam for local hydraulic mining interests to erect legally approved dams and catchment basins for the mountains of gravel and sands that mining washed down the river. Payne owned mining properties upstream of Bullards Bar in Sierra County and planned to impound mining debris in the lake created by the dam (Coleman 1952). The proposed 273-foot-tall dam would impound 12,000 acre-feet of water and replace a 40-foot earthen debris structure. The dam cost approximately $600,000 to build, and included a $300,000 powerhouse of 6,000-horse power capacity. The Yuba Development Company worked with the county to reroute existing roads that would be flooded by construction of the new reservoir. The Development Company spent approximately $40,000 on roads. Pacific Gas and Electric Company (PG&E) leased the

powerhouse from the Yuba Development Company until 1928 when PG&E purchased the dam and powerhouse (Marysville Appeal 06/06/1922; Hoover et al. 1966; Pagenhart 1969).

Later descriptions vary the height of the dam. Ellis (1939) described the dam:

> This dam is at elevation 1500 feet; is 188 feet in height; length 440 feet; sub-base 80 feet; base 43 feet; crest 6 feet. Water behind the dam can be drawn down only to the penstock; with 10-foot gates installed on top, the total water available for use is 16,000 acre feet; below the penstock, there is left available for storage for mining debris, 40,000,000 cubic yards which, in my opinion, it is exceedingly doubtful will ever be stored from that fork of the Yuba River. The drainage area above the dam is 540 square miles. With a head of 13 feet over the dam crest, the anticipated discharge was estimated to be 65,000 second feet but in March 1928, it actually reached 70,000 second feet, the maximum daily discharge during the period of the flood being 56,000 second feet. The dam was designed to carry its load purely as an arch, no consideration was given to gravity or cantilever action; no consideration was given for uplift under the foundation, which latter consists of a hard greenstone [sic].

In 1946, the original Colgate Powerhouse, which helped provide counties north and south of Oakland and San Francisco with power for street railways, manufacturing, and agriculture, suffered major fire damage and was shut down in 1948. In 1949, it was completely rebuilt with a state-of-the-art single generator unit.

The old Bullards Bar Dam appears on the 1940 Nevada City USGS topographic map, and served the community until the construction of the New Bullards Bar Dam in the 1960s.

In December 1955, excessive winter rain and snow in Northern California resulted in devastating floods in the Central Valley that overpowered local levees and flood control. Flooding inundated over 100,000 ac, resulted in 64 deaths, and cost millions of dollars in property damage. This resulted in both state and local initiatives to manage flood control, resulting in the construction of numerous levees, canals, and reservoirs throughout the state.

During the mid-1950s, the Yuba County Council began discussion for proposed expansion of the reservoir and hydroelectric facilities at Bullards Bar. In addition to flood control, an expanded reservoir was viewed as a means of increasing water availability for irrigation within Yuba and Sutter counties, providing electric power to the growing local population, and subsequently encouraging development within the area (Yuba County Council 1956). In November 1957, the Yuba County Council unanimously voted for the construction of a new dam at Bullards Bar to meet county flood control and water storage needs (Yuba County Council 1957). In May 1961, Yuba County voters approved, by an 11-1 margin, the $185 million in revenue bonds needed to fund the Yuba River Development Project. After several years of planning and negotiation, YCWA reached an agreement with PG&E, along with the contractor and engineer, to jointly purchase sufficient Series B subordinate lien revenue bonds to close the actual funding gap at

completion of construction. Series A Bonds were sold to a single bidder on May 24, 1966, – Blyth & Co. and Smith-Barney Inc. of San Francisco (YCWA n.d.).

On June 1, 1966, construction of the dam began under the management of the Perini-Yuba Associates construction team. Perini-Yuba Associates hired approximately 3,000 workers, including several local firms: H. Earl Parker, Baldwin Contracting Co. and Tenco. For over two years, teams of men worked 24 hours a day to complete construction of the dam and related facilities (YCWA n.d.).

The revised plan eliminated the proposed New Bullards Bar Power Plant, and proposed replacing the old PG&E Colgate Power Plant and tunnel with larger facilities. To save additional money, an irrigation diversion dam and canals, the new Narrows afterbay, and other project amenities were eliminated (YCWA n.d.). Irrigation diversions and the canals would be left for a later stage of construction.

By late 1969, workers completed construction on New Bullards Bar Dam and water was being stored in the new reservoir. In early 1970, workers completed the New Colgate Powerhouse and began trial tests to produce electricity. Within a month, cracks in the stainless steel runner resulted in the need to shut down the number two unit. Crews working 24 hours a day made the repairs, and within three weeks the powerhouse was once again in use. The New Narrows Powerhouse, completed in February 1970, also experienced problems. A generator accident resulted in a three-month delay in the generation of power (YCWA n.d.). On June 30, 1970, the YCWA's construction of the Yuba River Development Project was complete, and New Bullards Bar Reservoir was opened to the public (Mountain Messenger 1970).

3.3.3.5 Early Hydroelectric Facilities in the Western United States

In many ways, the development of the Bullards Bar facility mirrored development of other hydroelectric facilities in the western United States. The text below (taken verbatim from Shoup's 1986 Crane Valley National Register evaluation highlights the early history of hydroelectric facilities in the western region, from 1889 through 1920:

> The world's first successful hydroelectric plants were built in Europe during the second half of the 1880s. By 1889 this technology had been transferred to the United States and in that year the first western hydroelectric facility was installed near Portland, Oregon by the Willamette Falls Electric Company. It transmitted power 13 miles to Portland. During the early and mid-1890s, some twenty hydroelectric plants were constructed in the western United States, about half of these in California…
>
> Three characteristics of these early hydroelectric plants are considered important for comparative purposes. These are the number of feet of head (the distance the water falls from where it enters the penstock to where it hits the turbine), the number of miles power is transmitted, and the transmission voltage. California was the frequent leader among western states in all three categories.

As of late 1896, for example, the Tuolumne Water Company of Knights Ferry, California had the highest line voltage in the western United States and San Joaquin No.1 Powerhouse (part of the Crane Valley system) had both the highest head (about 1411 ft) and longest commercial transmission (about 38 mi) of any hydroelectric plant in the entire world. The head was far higher than any hydroelectric plant then in existence worldwide and, when put into operation, was almost three times greater than the next highest California plant.

The technology of hydroelectric generation and transmission advanced rapidly during the late 1890s and first years of the twentieth century, especially in California. One observer stated in 1905 that during the decade 1894-1904 the progress made in California "…is so remarkable as to attract the attention of engineers the world over" (Doble 1905:75). During this development period, the constant tendency was toward more and larger plants and generating units, higher head (hydraulic pressure), longer transmission lines, and higher voltages. During the 1889-1894 period, an average of only slightly more than one plant a year was constructed in the western United States. During the remaining years of the 1890s, this figure had jumped to about eight plants per year and during the first decade of the new century to more than 11 per year maximum kilowatt capacities, line voltages, and transmission length of the leading western plants also jumped in a spectacular fashion.

Between 1889 and 1894, the maximum kilowatt capacity of any existing plant in the entire western United States was only 750 kilowatts. The highest line voltage during this period was 10,000 volts and 28 miles was the longest transmission. During the 1895-1899 years, these figures jumped to 10,000 kilowatt capacity, 40,000 volts line voltage, and 83 mi transmission. The first decade of the twentieth century saw another great jump with maximum capacities of as much as 40,000 kilowatts line voltages of 100,000 volts, and transmission distances of 160 mi (Downing et al. n.d.:594-600). During the same period maximum head increased to almost 2000 ft. By 1903 the 1411 ft head of the old San Joaquin No.1 Powerhouse had been far exceeded (Doble 1905:76). Most of these pioneer plants which led the way were California plants, among them Folsom (1895), San Joaquin No.1 Powerhouse (1896), Tuolumne Water Company (1896), Santa Ana No.1 (1898), Colgate (1900), Electra (1902), Mill Creek No.3 (1903), and Las Plumas (l908). In at least some respects, California was, as the Electrical World observed in 1912, "the great center of developments, the world's laboratory of brilliant and successful experiments" (Hughes 1983:265).

By the first years of the twentieth century, the major technical problems associated with the development and transmission of hydroelectric power had virtually been solved. What followed was a process of refining these techniques and constantly expanding the size and length of all the features of these systems. The exact point at which creative pioneering gave way to primarily the constant reproduction of existing techniques in new settings is unclear, but it was certainly

prior to Robert Doble's 1905 article. As Doble pointed out in the conclusion to his article, the hydroelectric:

> ... art has grown from the rough engineering period, as instanced in many of the pioneer plants, to a high plane – representing the very best in design and construction. In the early days the tendency in hydraulic work pertaining to electric generation was to follow other lines of engineering older established. For instance, the idea of a receiver, or distributor, larger in diameter than the pipe, and which has since been discarded in the well-designed plants, was taken directly from steam engineering practice [Doble 1905:97-98].

Thus, the period between 1910 and 1919 was certainly not part of the pioneer era; rather, it was part of an era of refinement and expansion of an already existing technology. This refinement and expansion upon basic principles already established continues to the present day. The 1910-1919 years also saw continuity with the previous decade in terms of number of new plants built each year. At least 39 new plants were constructed in California between 1910 and 1919 and probably at least that number in other parts of the western United States (Bonner 1928:180-191; Downing et al. n.d.:600-601).

During the early years of the Great Depression, the need for hydroelectric power decreased and construction by private companies slowed. By the 1930s, it became much more expensive to build private hydroelectric plants. By the 1940s and 1950s, hydroelectric powerhouses were built on nearly all the prime water sources in California. Companies, including PG&E, instead began to replace older plants with modern, more efficient equipment (JRP and Caltrans, 2000). The replacement and expansion of Bullards Bar Dam and reservoir reflects this trend towards facility replacement.

3.4 Tribal Consultation and Identification of Resources

3.4.1 Tribal Consultation

All individuals contacted in June 2009 were invited to attend a Project information meeting on September 9, 2009, and invitations to the meeting were mailed on August 10, 2009, to each representative, as well as to TNF and PNF, United States Department of Interior, Bureau of Land Management, SHPO, and FERC. Two individuals, both from Save the Salmon, a non-governmental organization, attended the meeting. No tribal members or persons of agency affiliation attended.

Three tribes initially declined YCWA's invitation to participate in the Relicensing process. Two of these tribes subsequently informed YCWA of their revised interest and availability and participated in the Project Relicensing. Outreach to tribes occurred both before and during the study to augment efforts to locate potentially affected tribes with a potential interest in the Project. Table 3.4-1 lists all of the tribes and tribal representatives who were contacted

throughout the Relicensing study. Strawberry Valley Rancheria, Enterprise Rancheria, Nevada City Rancheria, and United Auburn Indian Community of the Auburn Rancheria actively participated in the Project Relicensing. Tribal consultation history is included in Attachment 13-1B.

Table 3.4-1. Tribes and tribal representatives contacted as of February 2011.

Tribe	Individual Contacted or Participating
Berry Creek Rancheria of Maidu Indians	Jim Edwards, Chairperson
	Dwayne M. Brown, Jr., Environmental Coordinator
Concow Maidu Tribe of Mooretown Rancheria	Laura Winner, Chairperson
	Guy Taylor, Director, Environmental Protection Office
Colfax-Todds Valley Consolidated Tribe[1]	Stephen Prout, Acting Chairperson
	Sandy Marks
	Judy Marks
	Alicia Juelch
	Clyde Prout
	Leon Portras
	Marjorie J. Cummins
Enterprise Rancheria of Maidu Indians[2]	Glenda Nelson, Chairperson
	Frank Watson, Vice Chairperson
	Ren Reynolds, EPA Planner
Greenville Rancheria of Maidu Indians	Kyle Self, Chairperson
	Crista Stewart, Environmental Manager
	Lacie Miles
Mechoopda Indian Tribe of Chico Rancheria	Michael DeSpain, Director OEPP
Nevada City Rancheria, Nisenan Tribe	Virginia Covert, Vice Chairperson
	Shelly Covert, Secretary
Nisenan/Maidu	April Moore
Strawberry Valley Rancheria	Cathy Bishop, Chairperson
	Rea Cichocki
Todds Valley Miwok-Maidu Cultural Foundation (Non-profit)	Jerri White Turtle
	Lois Zellner
	Brigette Zellner
Tsi-Akim Maidu Tribe	Don Ryberg, Chairperson
	Grayson Coney
United Auburn Indian Community of the Auburn Rancheria[3]	David Keyser, Chairperson
	Marcos Guerrero, Representative
Washoe Tribe of Nevada and California	Waldo Walker, Chairperson
	Darrel Cruz, THPO
	Rose Wood
	Lynda Shoshone
	Brian Wallace
Unaffiliated Individuals	Clara LeCompte
	Tyrone Gore
	Bill Jacobson
	Ralph Rose

[1] Per telephone communications on July 10, 2009, the Colfax-Todds Valley Consolidated Tribe advised YCWA that the Project is too far away from the tribe's interests, and that they would not participate in the Yuba River Development Project relicensing.

[2] By letter dated August 12, 2009, the Enterprise Rancheria advised YCWA that "*At this time Enterprise Rancheria will not be interested in the Yuba River Development Project*." At a meeting held on October 1, 2010, Enterprise Rancheria informed YCWA that they will now participate in the Yuba River Development Project relicensing.

[3] The United Auburn Indian Community of the Auburn Rancheria was unable to attend the September 9, 2009 meeting due to scheduling conflicts.

YCWA convened a meeting of interested tribal and agency representatives on October 19, 2011. The meeting was to introduce the ethnographer from Albion Environmental, Inc. and the plans to be implemented for the intensive TCP study. Those attending were as follows:

- Albion Environmental, Inc.: Clinton Blount and Stella D'Oro
- Enterprise Rancheria: Ren Reynolds
- HDR: Gaea Bailey and Dawn Ramsey Ford
- Nevada City Rancheria: Virginia (Ginger) Covert and Sarah Thomas
- Tahoe National Forest: Genice Froehlich and Carrie Smith
- United Auburn Indian Community (via teleconference): Marcos Guerrero
- YCWA: Geoff Rabone

YCWA introduced the goals and methods for the TCP study; responded to questions, primarily concerning interview methods, confidentiality, and schedule; and retrieved names of potential interviewees. The meeting ended with a resolution to tour the Project area, familiarize the tribes with the APE, and visit known archaeological resources. All Native American attendees expressed an interest in joining the tour. Of particular note at the meeting was a discussion of archaeological collections, including human remains, excavated during construction for the New Bullards Bar Dam. The collections are now housed at California State University, Sacramento, and the group expressed an interest in repatriation of the remains under the Native American Graves Protection and Repatriation Act.

YCWA followed the meeting with a letter to all potential tribes and tribal representatives who had not attended the meeting of October 19, 2011, seeking confirmation of their participation/non-participation in the project. This correspondence was sent to the following:

- Tyme Maidu Tribe of Berry Creek Rancheria
- Mechoopda Indian Tribe of Chico Rancheria
- Clara LaCompte
- Greenville Rancheria of Maidu Indians
- April Moore
- Concow Maidu Tribe of Mooretown Rancheria
- Todds Valley Miwok-Maidu Cultural Foundation
- Tsi-Akim Maidu Tribe
- Washoe Tribe of Nevada and California

Return certification was received for all but two of these letters (Tsi-Akim Maidu Tribe and Todds Valley Miwok-Maidu Cultural Foundation). No responses were received to the letters and follow-up phone calls were not returned.

As a result, the final list of active participants in the TCP study was narrowed to the tribes that had responded to initial YCWA invitations to participate, and those who had attended the meeting of October 19, 2011, although the opportunity has remained open for any additional participants who might reconsider their interest in participating. The list of participating tribes comprised the Nevada City Rancheria, United Auburn Rancheria, Strawberry Valley Rancheria, and Enterprise Rancheria. YCWA worked in earnest with these groups to identify knowledgeable participants and set a schedule for on and off-site interviews.

Consultation and interviews with individual tribal respondents (comprising on and off-site interviews) began in February 2012. A late, wet spring hampered field visits, however productive off-site interviews were conducted with participants from the Nevada City Rancheria. These included a particularly important interview with an elderly respondent affiliated with the Strawberry Valley Rancheria who was able to provide some information about a Native American gathering at the former site of Bullards Bar, now inundated. Field visits with representatives from the United Auburn Indian Community began with a day-long visit to identify traditionally useful plants in Auburn (June 4, 2012). Several attempts were made to schedule a field visit with representatives from the Nevada City Rancheria; however the Tribe's principal respondent, an elderly Nisenan gentleman, has been ill and hospitalized and unable to visit the Project location.

Representatives of the United Auburn Community indicated the possibility of a traditional fishing site in the vicinity of Englebright Dam. One United Auburn staff member recalled hearing of the site during project meetings held for another FERC relicensing, but did not recall who made the comment. United Auburn staff believed they had a record of the location in tribal archives; however, a search of their records did not reveal any mention of the site. The tribe indicated it would continue to review its records, although it is likely that information will not be forthcoming. YCWA was also unable to locate any mention of the site in the ethnographic record for the region.

YCWA ethnographers visited the Englebright Dam site in late September 2012, along with two tribal staff members. The tribal members were not able to provide any new information about the location, specifically whether the fishing site was under the present-day location of either Englebright Lake or Dam or downstream in the Yuba River Narrows. They reiterated that the place had been mentioned during meetings for another FERC relicensing, probably in 2006 or 2007. While at the location, tribal staff pointed out bedrock mortars on a flat outcrop adjacent to the Narrows 2 Powerhouse. They felt this may be an indication of a habitation site in the vicinity, possibly associated with the fishing location.

In the absence of any specific location or use information, the falls and fishing location do not meet the criteria for a TCP. In addition, any resource gathering area in the "run of the river" below Englebright Dam falls outside the project APE.

3.4.2 Identification of Resources

No potential TCPs or specific ethnographic locales were identified in or within in close proximity to the Project APE. Additionally, no Rancheria lands are located within or adjacent to

the APE. Participants from the United Auburn Indian Community have identified a number of traditionally important plants within the APE, however, these plants are common to the region and there is no indication that any particular locals within the APE were visited for resource gathering.

3.5 Archaeological Site Visits

YCWA convened a Project tour on November 3, 2011 that included a general orientation to the Project and a boat tour of the reservoir to, in part, visit archaeological sites that had been identified within the APE, in accordance with Step 4 of the FERC-approved study. Attendees from the tribes were as follows:

- United Auburn Indian Community: Vince LaPena, Danny Rey and Jeffrey Rey
- Nevada City Rancheria: Richard Johnson and Shelly Covert

Genice Froehlich of the TNF also attended. Representatives from the Strawberry Valley Rancheria did not respond to requests to participate, and Enterprise Rancheria declined, citing schedule conflicts, but indicated an interest in remaining active participants.

The group was able to view one archaeological site at the upper end of the reservoir. Other known sites of interest to the tribes were inundated, despite the low lake level at the time of the tour. The tour also served to solidify the study for individual site visits and interviews and to identify additional potential respondents.

Following the Project tour, the YCWA ethnographers met with the Cultural Committee of the United Auburn Indian Community on January 25, 2012, and with representatives of the Nevada City Rancheria on various dates throughout January and February 2012 to again present the Project relicensing details and to begin interviews. YCWA continued to attempt to engage the Strawberry Valley Rancheria in the study, although responses were never received. Continued correspondence with Enterprise Rancheria revealed continuing scheduling problems, with the tribe's cultural resource specialist indicating the Tribal Council might not authorize his time to participate in the relicensing.

3.6 National Register of Historic Places Evaluation

No potential TCPs were identified in the course of the study; therefore, no properties were evaluated for their eligibility for listing on the NRHP.

3.7 Identification and Assessment of Potential Project Effects on NRHP-Eligible Properties

NRHP-eligible properties were not identified during the study efforts described above, thus none were assessed for potential Project effects.

4.0 Discussion

The study began with the assumption that: 1) many tribal groups and individuals would choose to participate in the study and would provide pertinent information about past and present uses of the APE; 2) the archival record for the Nisenan tribal groups would contain historical information about the APE and environs; and 3) potential TCPs would be identified in the APE and evaluated for eligibility to the NRHP. While the study proceeded with these optimistic assumptions as objectives, researchers realized that information about the APE and Project Vicinity is scant to nonexistent. An exhaustive archival review revealed important data for the lower reaches of the Yuba River drainage and historical Native American settlements to the north and south of the Project; however, information specific to the APE was not gathered and recorded by the early and highly qualified ethnographers who worked with ancestral Nisenan consultants. Likewise, interviews and field visits with present day Nisenan produced no information related to TCPs. While the Nisenan are keenly interested in the area as part of their ancestral homeland, no properties fitting, even loosely, the definition of a TCP were identified by study participants.

Multiple efforts were made by YCWA and its ethnographer to broaden participation in the study. Letters, information meetings, and personal appeals through intermediaries did not result in the expected broad participation. Ultimately, only two tribal groups, the Nevada City Rancheria and the United Auburn Indian Community, formally participated in the study. In each case, tribal leaders took an active interest in the study and provided access to individual participants. The resulting number of participants, however, was low relative to the original study assumptions.

The paucity of archival data and the low study participation may be attributed to a number of interlinked factors: historical disruption and destruction of traditional tribal communities; remoteness of the region and limited use, even in pre-contact times; and inevitable changes in the present day communities, particularly the steady loss of elders with closer ties to traditional practices and use of the broad ancestral homeland.

The Yuba River drainage was exploited early and heavily during the California Gold Rush. Individual miners swarmed the drainage and were soon followed by corporate ventures that literally swept away whole sections of the natural landscape during massive hydraulic operations. The tightly knit and interlinked Nisenan tribal communities were quickly uprooted and dispersed - essentially removed from their familiar homeland in a few short years. Populations dropped due to rampant disease and policies that were just short of genocide. Tribal societies and intertribal networks that sustained life for thousands of years disappeared, as surviving populations sought refuge from the miners and settlers and were forced to adapt to a foreign and impoverished existence at the edges of the new communities in the region. These catastrophic changes occurred almost 10 generations ago, and it is not difficult to see how challenging it would be for surviving generations to maintain an intimate knowledge of the landscape and traditional practices in the face of unrelenting historical pressures. This is even reflected in the geographically variable data collected in the early twentieth century. Some areas that became post-contact refuges are well represented in the data, peripheral areas of the ancestral homeland, less so.

The Project is, for the most part, located in remote and steep river canyons. There is little doubt that in pre-contact times, the APE was part of the traditional subsistence and seasonal residential use areas of the Nisenan peoples. The paucity of the archaeological record, at least in presently accessible areas, provides probably the best testimony to the marginal nature of the area, relative to the more heavily populated areas downstream in the Yuba River drainage.

Historical changes in surviving tribal communities have had a direct effect on the retention of knowledge about traditional settlement and resource use. Recent generations of Nisenan have, by necessity, focused on economic stability for their families and communities. This means less time learning traditional ways from elders and less frequent interaction with the landscape of the ancestral homeland. Tribal groups, such as the Nevada City Rancheria or United Auburn Indian Community, are making remarkable efforts to retain and discriminate traditional knowledge and language skills; however, even tribal leaders lament what has been lost, and what is being lost with each passing generation.

5.0 Study-Specific Consultation

The FERC-approved study required YCWA conduct six study-specific consultations, each of which is described below.

5.1 SHOPS Concurrence of APE

The FERC-approved study states:

> YCWA will obtain SHPO's concurrence with the APE. (Step 1.)

YCWA obtained SHPO's concurrence with the APE on April 19, 2012 (see Section 3.1).

5.2 Selection of Ethnographer

The FERC-approved study states:

> YCWA will coordinate its selection of the ethnographer with the assistance of affected tribes and other interested cultural/tribal stakeholders (Step 3).

YCWA coordinated its selection of the qualified ethnographer with the assistance of affected tribes and other interested cultural/tribal stakeholders (see Section 2.3).

5.3 Consultation with Tribal Representatives

The FERC-approved study states:

> YCWA's ethnographer will consult with tribal representatives (i.e., tribal chair, tribal council, elders, as directed by the tribes) to determine the scope and breadth of interviews (Step 3).

YCWA's ethnographer consulted with tribal representatives (i.e., tribal chair, tribal council, elders, as directed by the tribes) to determine the scope and breadth of interviews (see Section 2.3).

5.4 Interviews

The FERC-approved study states:

> YCWA's ethnographer will contact the appropriate tribe(s) and interested tribal and cultural stakeholders to arrange for interviews at a time and location acceptable to those tribal Interviewees. All consultation will be undertaken in accordance with Section 106 of the NHPA, as amended, and shall be consistent with National Register Bulletin No. 38, *Guidelines for Evaluating and Documenting Identification of Traditional Cultural Properties* (Parker and King 1998) (Step 3).

YCWA's ethnographer contacted the appropriate tribe(s) and interested tribal and cultural stakeholders to arrange for interviews at a time and location acceptable to those tribal Interviewees. All consultation was undertaken in accordance with § 106 of the NHPA, as amended, and consistent with National Register Bulletin No. 38, *Guidelines for Evaluating and Documenting Identification of Traditional Cultural Properties* (Parker and King 1998) (see Sections 2.3, 2.4, and 3.3).

5.5 Field Visits

The FERC-approved study states:

> If field visits are needed, YCWA's ethnographer will contact by telephone, U.S. Postal Mail, and/or electronic mail to invite tribal interviewees, tribal representatives and the Forest Service, if the sites are located on Forest Service-managed land, to visit archaeological sites that may be of interest to the tribes (Step 4).

For field visits to archaeological sites identified during YCWA's relicensing Study 12.1, *Historic Properties*, YCWA's ethnographer contacted tribal interviewees, tribal representatives, and the Forest Service, for sites located on National Forest System land, by telephone, U.S. Postal Mail, and/or electronic mail to invite (see Sections 2.3, 2.4, and 3.3).

5.6 Review of Interim Technical Memorandum

The FERC-approved study states:

> Tribes, Forest Service, and other interested parties will be provided the opportunity to review the TCP report before it is sent to SHPO for concurrence (Step 7).

On October 31, 2012, YCWA provided an Interim Technical Memorandum 13-1, *Native American Traditional Cultural Properties*, for 30-day review and comment. No comments were received.

6.0 Variances from FERC-Approved Study

The study was conducted in conformance to the FERC-approved Study 13.1, *Native American Traditional Cultural Properties*, with two variances. First, two archival research sources identified in the study were not reviewed. One is the Theodoratus collection of the 1974 investigation of the Parks Bar Project on the lower Yuba River, housed at the Bancroft Library at University of California at Berkeley, and sealed for the foreseeable future. The other included collections at the regional branch of the National Archives, which were determined to not contain information significant to the present study. The second variance is that the study is slightly behind the scheduled completion date of September 30, 2012. This is due to a longer period than anticipated needed for a quality control review of the data and technical memorandum. The delay does not affect the overall relicensing schedule.

7.0 Attachments to this Technical Memorandum

This technical memorandum has two attachments:

Attachment 13-1A	Area of Potential Effects (APE) Maps - Yuba River Development Project [1 Adobe pdf file: 301 KB; 8 pages formatted to print double sided on 11 x 17 paper]
Attachment 13-1B	History of Tribal and Agency Consultation - Yuba River Development Project [1 Adobe pdf file: 5.8 MB; 10 pages formatted to print double sided on 8 ½ x 11 paper]

8.0 References Cited

Angel, M. 1882. History of Placer County. Oakland: Thompson and West.

Baumgart, Don. 2002. Pressure Builds to End Hydraulic Gold Mining. Nevada County Gold. Available online at <http://nevadacountygold.com/about/41-about/167-pressure-builds-to-end-hydraulic-gold-mining>. Accessed February 13, 2012.

Beals, R.L. 1933. Ethnography of the Nisenan. University of California Publications in American Archaeology and Ethnology 31(6):335-414. Berkeley.

Bonner, F.E., 1928. Report to the Federal Power Commission on the Water Power of California. Federal Power Commission, Washington, DC.

Chamberlain, W.H. and H. Wells. 1879. History of Yuba County, California. Oakland: Thompson and West.

Clewlow, C. W. R. D. Ambro, A. G. Pastrom, S. G. Botkin, and M. R. Walsh. 1984. CA-NEV-407 Stage II Final Report for Archaeological Data Recovery Program (03-NEV-20, P.M. R6.5/12.2 03210-029421 Contract 30925. Submitted to the Environmental Branch, California Department of Transportation, District 3, Marysville. Prepared by Ancient Enterprises, Inc., Santa Monica.

Coleman, Charles. 1952. P.G. and E. of California: The Centennial Story of Pacific Gas and Electric Company, 1852-1952. New York: McGraw-Hill Book Company, Inc.

Cook, S.F. 1955. The Epidemic of 1830-1833 in California and Oregon. University of California Publications in American Archaeology and Ethnohistory. Berkeley: University of California Press.

Cook, S.F. 1976. The Population of the California Indians, 1769-1970. Berkeley: University of California Press.

Daily Appeal. 11/28/1880. *New Bridge.*

Dougherty, J. W. 1990. The Obsidian Projectile Points of the King-Brown Site: CA-SAC-29, Sacramento County, California. Unpublished Masters Thesis, Department of Anthropology, California State University, Sacramento.

Doyle, J.M. 1887. *Official Map of Yuba County, California*. San Francisco: Britton and Company.

Downing, P.M. n.d., "Some Historical Aspects of the Development of Hydroelectric Power in California," unpublished manuscript maintained in PG&E Library Archives.

Eatough, A. 1999. Central Hill Nisenan Texts with Grammatical Sketch. University of California Publications in Linguistics, Volume 132. University of California Press, Berkeley.

Ellis, W.T. 1939. Memories: My Seventy-Two Years in the Romantic County of Yuba California. University of Oregon. Printed by John Henry Nash.

Elsasser, A.B. 1960. The Archaeology of the Sierra Nevada in California and Nevada. University of California Archaeological Survey Reports 51:1-93. Berkeley.

Fagan, B. 2003. Before California: An Archaeologist Looks at Our Earliest Inhabitants. Alta Mira, Walnut Creek.

Faye, Paul-Louis. 1923. Notes on the Southern Maidu. University of California Publications in American Archaeology and Ethnology 20(3):35-53. Berkeley.

Forbes, J. 1969. Native Americans of California and Nevada. Healdsburg: Naturegraph Publishers.

Gifford, E.W. 1927. Southern Maidu Religious Ceremonies. American Anthropologist 29(3):214-257.

Grass Valley Union, The. 1908. 11/10/08. On file, Nevada Irrigation District Archives, Grass Valley, CA.

Heizer, Robert F., and Albert B. Elsasser. 1953. Some Archaeological Sites and Cultures of the Central Sierra Nevada. University of California Archaeological Survey Reports 21:1-42, Berkeley.

Hoover, Mildred. 2002. Historic spots in California. Editor Douglas E. Kyle. Stanford, CA: Stanford University Press.

Hoover, Mildred B.; Hero and Ethel Rensch, and William N. Abeloe. 1966. Historic Spots in California. Stanford University Press.

Humphreys, S.E. 1969. The Archaeology of New Bullards Bar. San Francisco: Report to the National Park Service.

Jackson, R. J., and H. S. Ballard. 1999. Once Upon A Micron: A Story of Archaeological Site CA-ELD-145 Near Camino, El Dorado County, California. Submitted to CALTRANS District 3, Environmental Branch, Marysville. Submitted by Pacific Legacy, Incorporated. Cameron Park.

JRP Historical Consulting Services and Caltrans. 2000. Water Conveyance Systems in California: Historic Context Development and Evaluation Procedures. Caltrans Environmental Program/Cultural Studies Office; Sacramento, California. December 2000.

The Keith Companies in association with kd Anderson Transportation Engineers, Brown-Buntin Associates Inc., Earth Systems Inc., Sycamore Environmental, and David Taussig and Associates Inc. 1993. Draft Environmental Impact Report: River Highlands Community Plan, Prepared for County of Yuba, Department of Planning and Building Services, Online Document. Available online: <http://www.co.yuba.ca.us/departments /communitydevelopment/planning/SpecificPlans/RiverHighlandsCommunityPlan/default. aspx>.

Kelsey, C.E. 1971. Census of Non-Reservation California Indians, 1905-1906, edited by R.F. Heizer. Miscellaneous Papers of the Archaeological Research Facility, Department of Anthropology, University of California, Berkeley.

Kowta, Makoto. 1988. The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model, California Archaeological Site Inventory, Manuscript on file at the Northeast Information Center.

Kroeber, A.L. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Washington.

_____. 1929. The Valley Nisenan. University of California Publications in American Archaeology and Ethnology 24(4):253-290. Berkeley.

_____. 1932. The Patwin and Their Neighbors. *University of California Publications in American Archaeology and Ethnology*. University of California Press. Berkeley.

Lindstrom, S. G., S. A. Waechter, M. Rucks, and R. Reno. 2007. Volume I: Report: From Ice Age to Ice Works: Archaeological, Ethnohistorical, and Historical Studies for the Truckee River Legacy Trail Project (Phase 3). Submitted by Far Western Anthropological Research Group, Inc., Davis. Submitted to Town of Truckee. Truckee.

Littlejohn, H.W. 1928. Nisenan Geography. (Manuscript in Bancroft Library, University of California, Berkeley.)

Maloney, A.B. 1945. Fur Brigade to the Bonaventura: John Work's California Expedition 1832-1833 for the Hudson's Bay Company. San Francisco: California Historical Society.

Marysville Appeal. 06/06/1922. *Supervisors ask Change of Roads at Site of Dam*

McGuire, K., S. A. Waechter, and D. C. Young, Daron Duke. 2006. Volume I - Prehistoric Sites: Archaeological Investigations at the Alder Hill Prehistoric Basalt Quarry, Nevada County. Submitted by Far Western Anthropological Research Group, Inc., Davis. Submitted to East West Partners. Truckee.

McKenney & Co, LM. 1887. McKenney's Pacific Coast Directory 1886-1887 edition. San Francisco, L. M. McKenney & co.

Merriam C.H. 1966-1967. Ethnographic Notes on California Tribes. Robert F. Heizer, ed. 3 pts. University of California Archaeological Survey Reports 68. Berkeley.

Milleson, M., R. Adams, et al. 1851. *A Complete Map of the Feather and Yuba Rivers California: with Towns, Ranches, Diggings, Roads, Distances*. Marysville, California.

The Mountain Messenger. 06/25/1970. *Bullard's Bar to Open to Public*

Moratto, M. 1984. California Archaeology. Orlando, Florida: Academic Press.

Nevada City Rancheria. 2011. http://nevadacityrancheria.org/. Accessed July 27, 2012.

Pagenhart, Thomas. 1969. Water Use in the Yuba and Bear River Basins, California. Doctoral Dissertation for the University of California Berkeley. June 1969.

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.

Peterson, Robert M. 1977. A Case Study of a Northern California Indian Tribe: Cultural Change to 1860. San Francisco: R and E Research Associates.

Powers, S. 1976 [1877]. Tribes of California. Contributions to North American Ethnology 3. U.S. Geological and Geographical Survey of the Rocky Mountain Region, Washington. Reprinted by the University of California Press, Berkeley.

Ritter, E. W. 1970. The Archaeology of 4-Pla-101, The Spring Garden Ravine Site. In Archaeological Investigations in the Auburn Reservoir Area, Phase II-III (Eric W. Ritter, editor), pp. 270-538. Ms. On file, National Parks Service, San Francisco.

Rondeau, M. F., and J. W. Dougherty. 2009. The Twain Harte Fluted Point. *Current Research in the Pleistocene* 26:112-113.

Rosenthal, Jeffrey S. 2008. Volume I: Synthesis. The Prehistory of the Sonora Region: Archaeological and Geoarchaeological Investigations for Stage I of the East Sonora Bypass Project, State Route 108, Tuolumne County, California. Far Western Anthropological Research Group, Inc. Davis, California.

Rosenthal, J. S., G. G. White, and M. Q. Sutton. 2002. Projectile Point Typology and Chronology in the North Central Sierra Nevada. *North American Archaeologist* 23:157-183.

Shoup, Laurence, 1986. Cultural Resources of the Crane Valley Hydroelectric Project Area, Madera County, California. Prepared for Pacific Gas & Electric. March 1986.

Turrentine, W, et al. 1982. *History of Tahoe National Forest: 1840-1940. A Cultural Resources Overview History.* Prepared for the Tahoe National Forest.

Uldall, H.J. and W. Shipley. 1966. Nisenan Texts and Dictionary. University of California Press, Berkeley. UCPL 46.

United Auburn Indian Community. 2011. http://www.auburnrancheria.com/. Accessed July 27, 2012.

Voegelin, E. 1942. Cultural element distributions XX: Northeast California. University of California Anthropological Records 7(2):47–252.

Wescoatt, N. 1861 *Official Map of Yuba County, California*. San Francisco: Britton and Company.

Wilson, N.L. 1972. Notes on Traditional Foothill Nisenan Food Technology. Center for Archaeological Research at Davis Publication Number 3, pp. 32-38.

Wilson, N.L. and A.H. Towne. 1978. Nisenan. In Handbook of North American Indians, Vol. 8, California. Smithsonian Institution, Washington, D.C. pp. 387-397.

Yuba County Council Minutes
03/12/1956
11/18/1957
04/21/1958

YWCA, nd. *Development of the Agency and Its Projects.* Available online at < http://www.ycwa.com/ about/development-of-agency>. Accessed October 10, 2011.

Technical Memorandum 13-1

Native American
Traditional Cultural Properties

Attachment 13-1A

Area of Potential Effects (APE Maps)

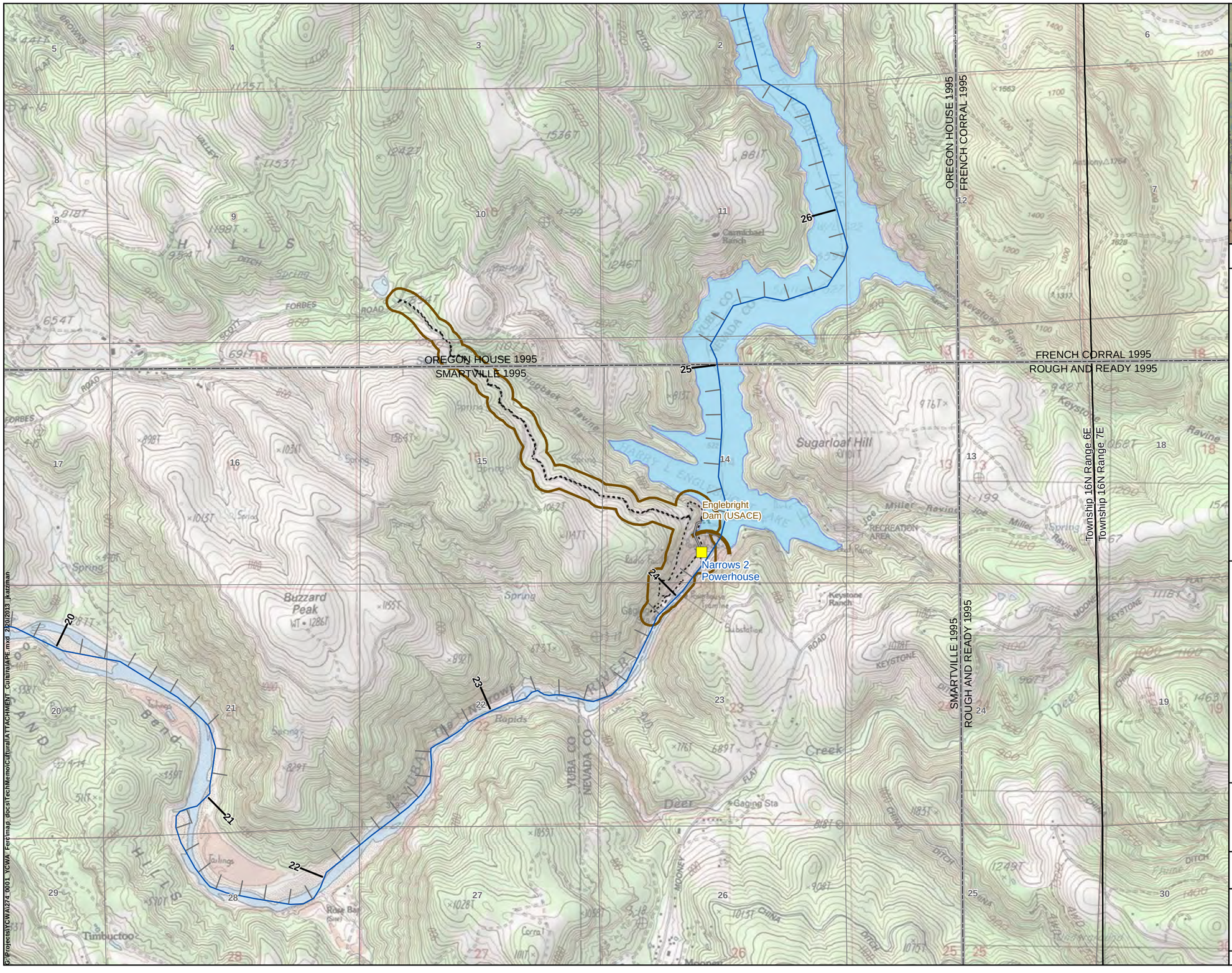
Yuba River Development Project

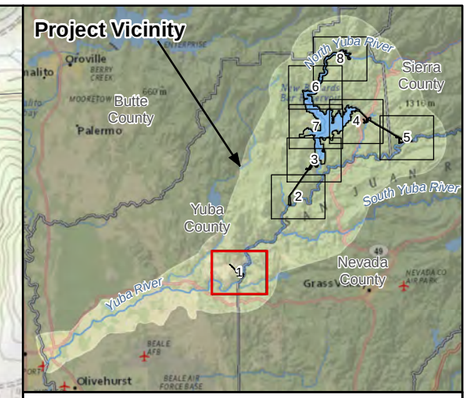
FERC Project No. 2246

December 2012

List of Figures

Page Left Blank





- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

N

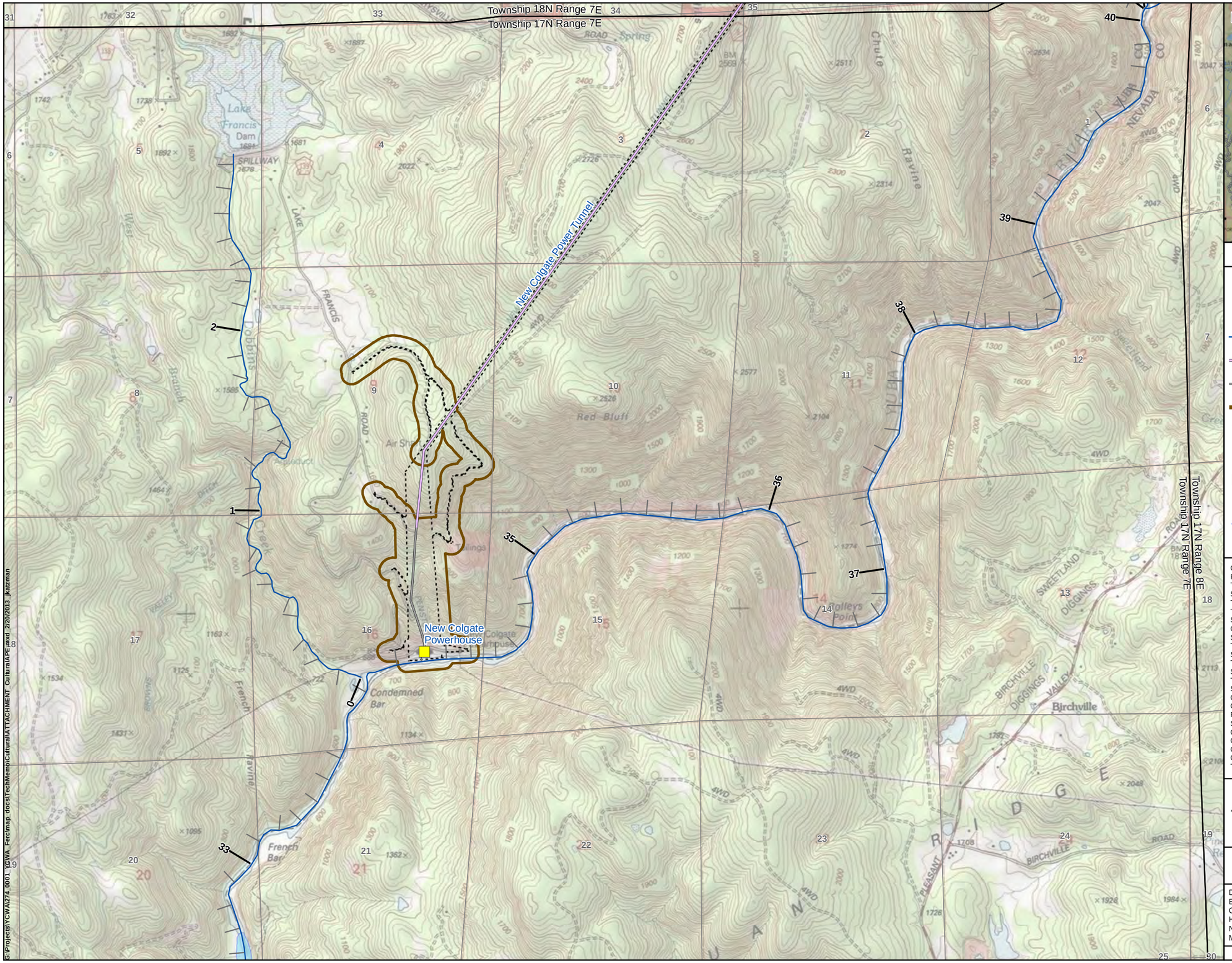
0 1,000 2,000 4,000 Feet

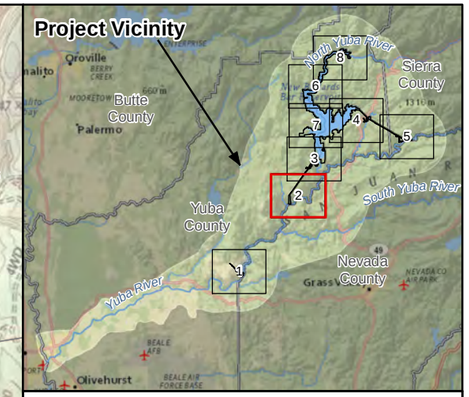
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

G:\Projects\YCWA\274.0001_YCWA_Fer\map_docs\TechMemo\Cultural\ATTACHMENT_Cultural\APE.mxd 2/20/2013 jkatzman





- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

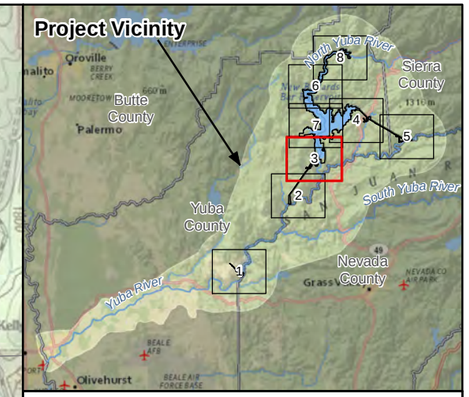
Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

0 1,000 2,000 4,000 Feet
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

G:\Projects\YCWA\274_0001_YCWA_Fercmap_docs\Tech\Memo\Cultural\ATTACHMENT_Cultural\APE.mxd 2/20/2013 jkatzman



New Bullards Bar Dam

New Bullards Mini Flow Powerhouse

New Colgate Power Tunnel

Township 18N Range 7E

Township 17N Range 7E

Township 18N Range 8E

Township 17N Range 8E

CHALLENGE 1995

FRENCH CORRAL 1995

CAMPTONVILLE 1995

NEVADA CITY 1995

- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

N

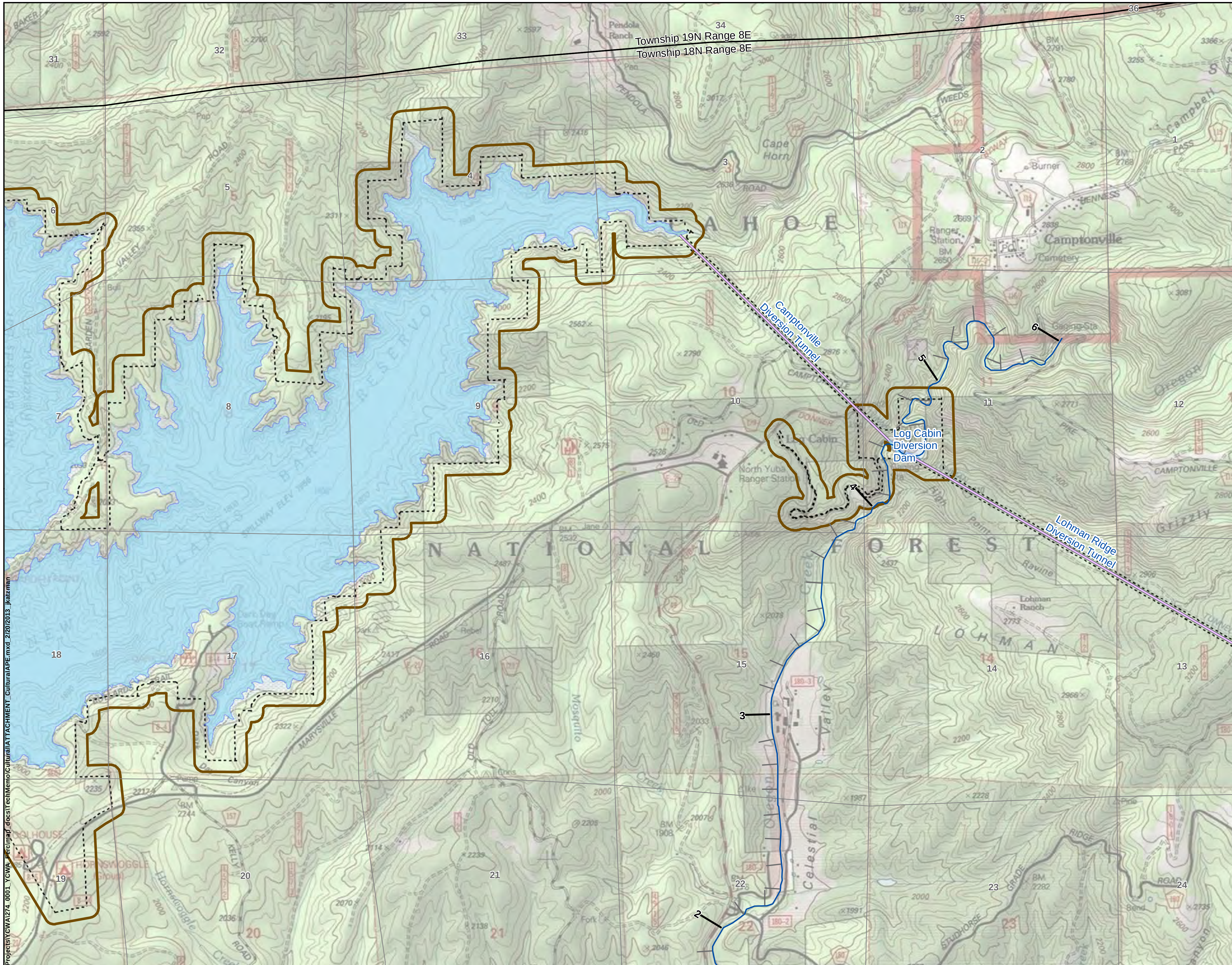
0 1,000 2,000 4,000 Feet

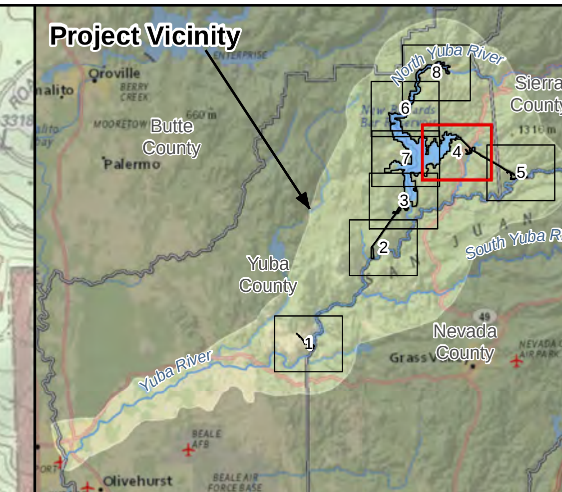
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

G:\Projects\YCWA\274_0001_YCWA_FERCmap_docs\TechMemo\Cultural\ATTACHMENT_CulturalAPE.mxd 2/20/2013 jkatzman





- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

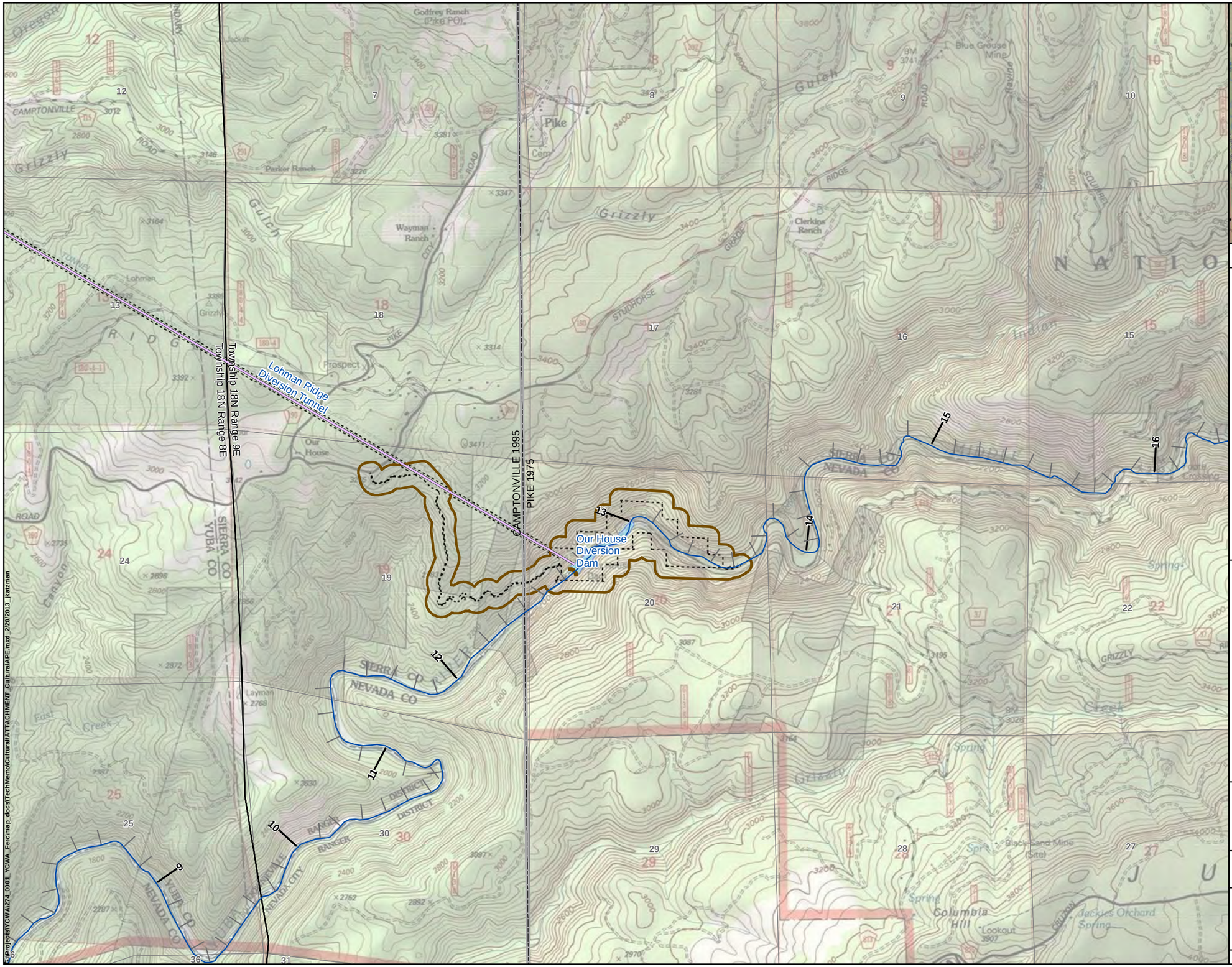
N

0 1,000 2,000 4,000 Feet

0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources. No warranty is made for its accuracy or completeness. Map projection is NAD 83 California State Plane Zone2.



Page 5 of 8

- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

N

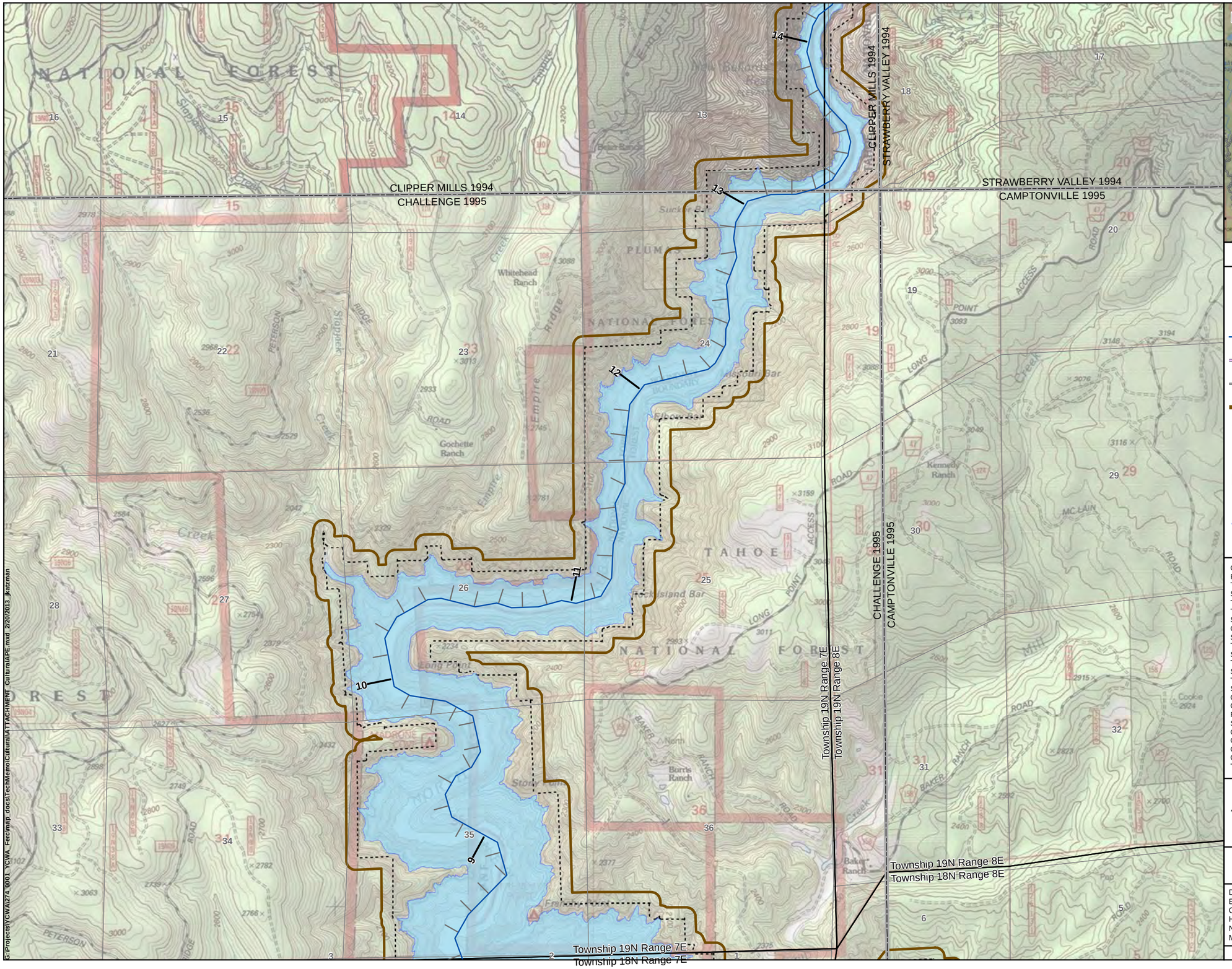
0 1,000 2,000 4,000 Feet
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

Map Prepared by: HDR |

G:\Projects\YCWA\274.0001_YCWA_FercImap_docs\Tech\Memo\Cultural\ATTACHMENT_Cultural\APE.mxd 2/20/2013 jkatzman



Page 6 of 8

- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

N

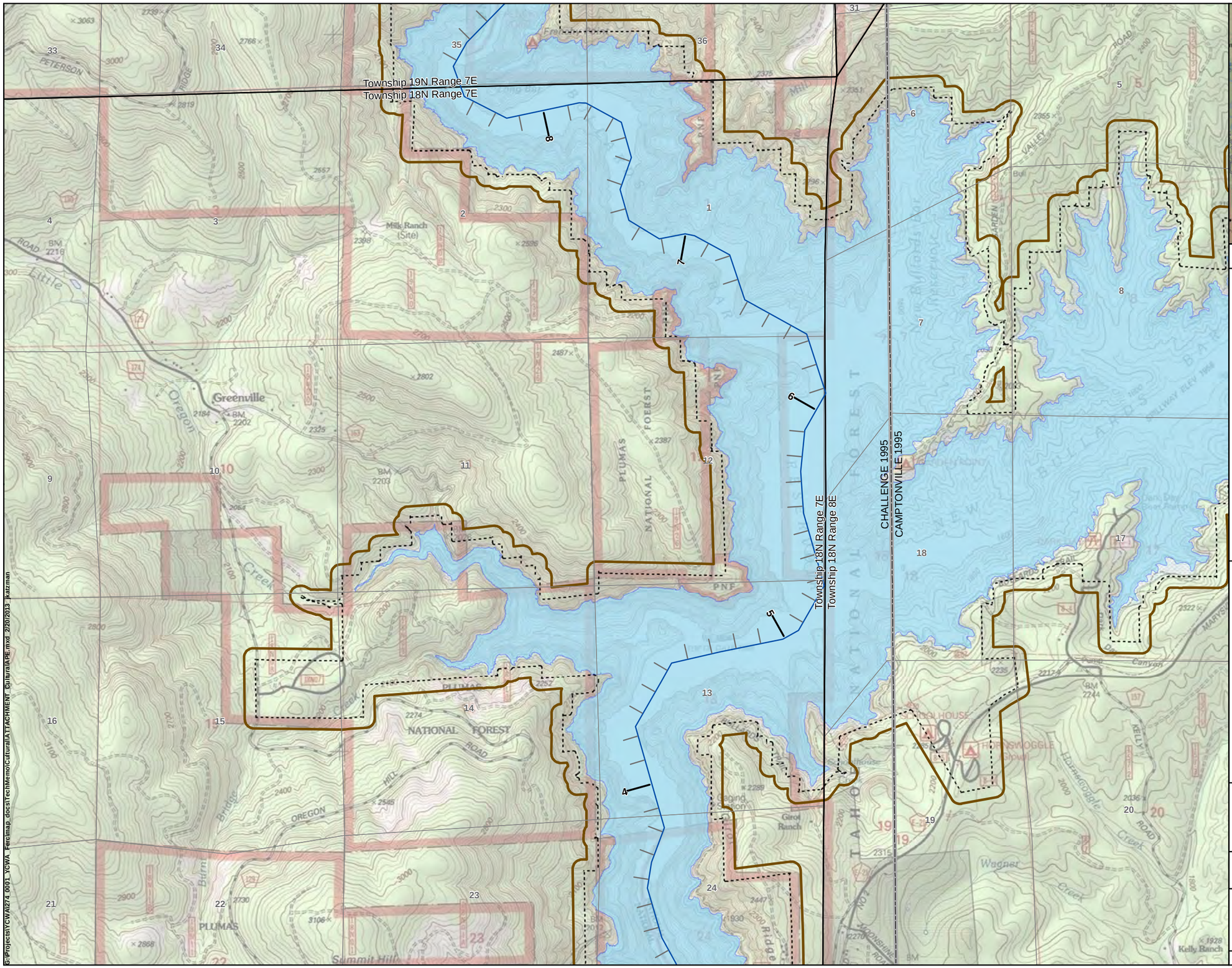
0 1,000 2,000 4,000 Feet

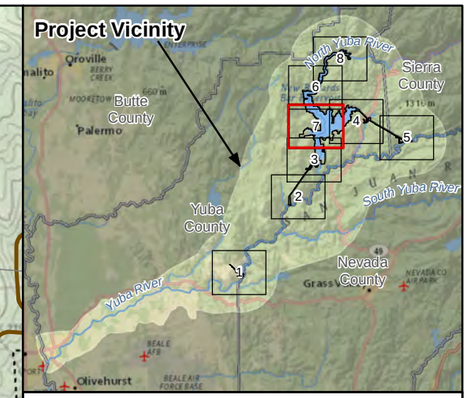
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

G:\Projects\YCWA\274_9001_YCWA_Ferc\mxd_docs\Tech\Memo\Cultural\ATTACHMENT_C\cultura\APE.mxd 2/20/2013 jkatzman





- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

N

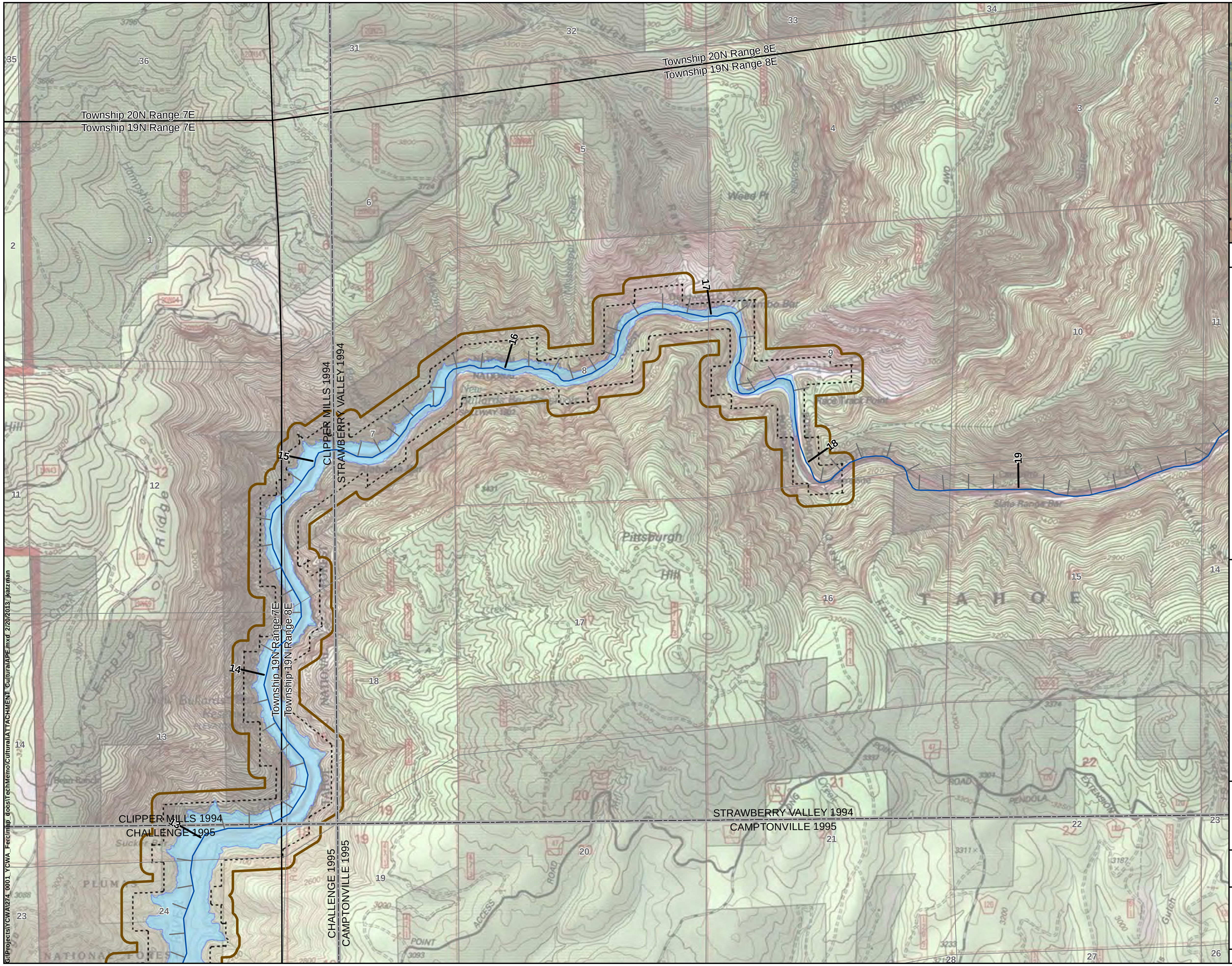
0 1,000 2,000 4,000 Feet

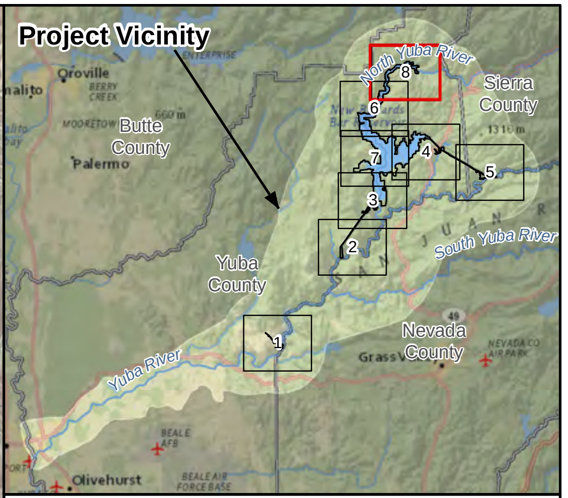
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

G:\Projects\YCWA\274_0001_YCWA_Ferc\map_docs\Tech Memo\Cultural\ATTACHMENT_C\cultural\APE.mxd 2/20/2013 jkatzman





- Powerhouse
- River Mile
- Tunnel
- Penstock
- Dam
- USGS 24K Topographic Map Boundary
- Section Boundary
- Area of Potential Effect (APE)
- Proposed FERC Boundary (2246)
- Waterbody

Quadrangle - Camptonville, T18N, R8E, Sec. 3; T18N, R8E, Sec. 4; T18N, R8E, Sec. 5; T18N, R8E, Sec. 6; T18N, R8E, Sec. 7; T18N, R8E, Sec. 8; T18N, R8E, Sec. 9; T18N, R8E, Sec. 10; T18N, R8E, Sec. 11; T18N, R8E, Sec. 13; T18N, R8E, Sec. 14, T18N, R8E, Sec. 16; T18N, R8E, Sec. 17; T18N, R8E, Sec. 18;
T18N, R8E, Sec. 19; T18N, R8E, Sec. 20; T18N, R9E, Sec. 18; T18N, R9E, Sec. 19.
Quadrangle - Challenge, T18N, R7E, Sec. 1; T18N, R7E, Sec. 2; T18N, R7E, Sec. 11; T18N, R7E, Sec. 12; T18N, R7E, Sec. 13; T18N, R7E, Sec. 14; T18N, R7E, Sec. 15; T18N, R7E, Sec. 23; T18N, R7E, Sec. 24; T18N, R7E, Sec. 25; T18N, R7E, Sec. 26; T18N, R7E, Sec. 35; T18N, R7E, Sec. 36; T18N, R8E, Sec. 30; T18N, R8E, Sec. 31; T19N, R7E, Sec. 13; T19N, R8E, Sec. 18; T19N, R7E, Sec. 23; T19N, R7E, Sec. 24; T19N, R7E, Sec. 25; T19N, R7E, Sec. 26; T19N, R7E, Sec. 27; T19N, R7E, Sec. 35; T19N, R7E, Sec. 36.
Quadrangle - Clipper Mills, T19N, R7E, Sec. 12; T19N, R8E, Sec. 7.
Quadrangle - French Corral, T17N, R7E, Sec. 3; T17N, R7E, Sec. 9; T17N, R7E,
Sec. 10; T17N, R7E, Sec. 16; T18N, R7E, Sec. 34.
Quadrangle - Oregon House, T16N, R6E, Sec. 10; T16N, R6E, Sec. 15.
Quadrangle - Pike, T18N, R9E, Sec. 20.
Quadrangle - Smartville, T16N, R6E, Sec. 14; T16N, R6E, Sec. 23.
Quadrangle - Strawberry Valley, T19N, R8E, Sec. 8; T19N, R8E, Sec. 9; T19N, R8E, Sec. 16.

N
0 1,000 2,000 4,000 Feet
0 250 500 1,000 Meters

Yuba River Development Project
FERC Project No. 2246

Data Sources: Base Map-USGS 7.5-Minute Series Topographic Maps from ESRI online; FERC Boundary-Yuba County GIS; Land Ownership-Yuba County and CD-Data; River miles - NHDHydro; Project Features and APE - HDR. Map information was compiled from the best available sources.
No warranty is made for its accuracy or completeness.
Map projection is NAD 83 California State Plane Zone2.

Technical Memorandum 13-1

Native American
Traditional Cultural Properties

Attachment 13-1B

History of Tribal and Agency Consultation

Yuba River Development Project
FERC Project No. 2246

December 2012

Table of Contents

Page Left Blank

HDR Consultation History

Date	Tribe/Agency	Action
4/27/2009	SHPO, Cheryl Foster Curley	Initial HDR|DTA left voice message
4/28/2009	Butte Tribal Council, Ren Reynolds	Initial HDR|DTA left message; not sure that number is valid as owner was not identified
4/28/2009-4/29/2009	Enterprise Rancheria of Maidu Indians, Frank Watson	Informed by tribal member that Frank Nelson is no longer vice chairperson. When asked about current vice chairperson, was directed to voicemail of Glenda Nelson
4/28-4/29	Enterprise Rancheria of Maidu Indians, Glenda Nelson	Informed by tribal member 4/28 that Glenda was out until 5/1 and should call back. When Frank Watson was called back the next day, was directed to Nelson's voicemail.
7/17/2009	Tribal Contact List	Sent PAD questionnaire to all people on the list with the exception of those who stated they are not interested.
8/10/2009	Tribal Contact List	Send all members invitation to first tribal meeting on September 9th, 2009.
9/9/2009	Tribal and Forest Service Contact List	Kick-Off Meeting to provide tribes and agencies information regarding cultural resources studies for relicensing.
4/14/2010	Tribal Contact List	Called all participating members to notify of August 12 meeting, and requested alternative dates.
6/7/2010	Tribal Contact List	Called all participating members to notify of August 12 meeting.
7/23/2010	Tribal Contact List	Email submitted to tribes to provide meeting details for Study Plans discussion on August 12, 2010.
7/26/2010	Ren Reynolds, Enterprise Rancheria	phone conversation and email w/ link to project website and instructions for opening "straw man" study proposal
8/12/2010	Strawberry Valley Rancheria, UAIC, USFS, Plumas and Tahoe Forests	Section 106 and Study Plan consultation meeting
9/20/2010	Tribal Contact List/ USFS	Licensee submitted email invitation to Study Plan discussion on October 1, 2010
10/1/2010	Strawberry Valley Rancheria, UAIC, Enterprise Rancheria, USFS, Plumas and Tahoe Forests	Section 106 Study Plan consultation meeting
11/3/2010	UAIC	Marcos Guerrero, UAIC Cultural Resources Specialist, requested hard copies and digital versions of all reports for the Yuba River Development Project be sent to the following UAIC representatives: David Keyser, Chairperson, Greg Baker, Administrator, and Marcos, himself.
1/26/2011	Nevada City Rancheria, individual, unaffiliated tribal member, Plumas and Tahoe National Forests cultural specialists and district ranger, and FERC	Historic Properties and TCP Study Plans: meeting to review and revise/finalize study plans, Section 106 consultation.
2/18/2011	Cathy Bishop, Strawberry Valley Rancheria,	Licensee left phone message 10:28am on 2/18/2011 regarding YCWA meeting.

Date	Tribe/Agency	Action
	chairperson	
2/18/2011	Geoff Rabone, YCWA Project Manager	Licensee contacted Mr. Rabone 2/18/2011 regarding availability of dates 2/22 or 2/23/11 for YCWA meeting. He was available for both dates.
2/18/2011	Ren Reynolds, Enterprise Rancheria/EPA Planner, councilman	Licensee left phone message 10:15am on 2/18/2011 regarding YCWA meeting.
2/18/2011	Genice Froehlich, Yuba River Ranger District	Licensee left phone message 10:17am on 2/18/2011 regarding YCWA meeting.
2/18/2011	Ralph, Local	Licensee contacted 2/18/2011 regarding availability of dates 2/22 or 2/23/11 for YCWA meeting. He was available for both dates.
2/18/2011	Carrie Smith, Tahoe National Forest	Licensee contacted 2/18/2011 regarding availability of dates 2/22 or 2/23/11 for YCWA meeting. She was available for the 22nd but not the 23rd.
2/18/2011	Cathy LeBlanc, Camptonville Community Partnership	Licensee left phone message 10:26 am on 2/18/2011 regarding YCWA meeting.
2/18/2011	Richard Dickard, Camptonville Community Service District	Licensee contacted Mr. Dickard on 2/18/2011 regarding availability of dates 2/22 or 2/23/11 for YCWA meeting. He was available for both dates, and said he would contact Ms. LeBlanc. Richard called at 1:10pm on the same day to confirm he and Cathy will be there on the morning of 2/22.
2/22/2011	Nevada City Rancheria, UAIC, Enterprise Rancheria, USFS - Plumas and Tahoe Forests	Historic Properties and TCP study plans development meeting held in Marysville, CA.
5/2/2011	Darrel Cruz, Washoe Tribe of Nevada and California	Mr. Cruz contacted HDR|DTA to request that his tribe would like to participate in the project. He mostly wanted information about sites near the headwaters. He also wanted to participate in the ethnographic study.
5/6/2011	See Participant List	Tribal and agency meeting held at YCWA to discuss comments on historic properties and TCP study plans for the DLA. Participants were comfortable with HDR|DTA going ahead with field studies. Only minor comments on the study plans.
6/21/2011	Tribal RPs	Sent email announcement to tribal relicensing participants for resumes for archaeological field techs for upcoming survey at YCWA
6/23/2011	Grayson Coney and Guy Taylor	Called about announcement to tribal relicensing participants for resumes for archaeological field techs for upcoming survey at YCWA
6/23/2011	Tribal RPs	Sent email announcing that revised Study Plans were uploaded back to the YCWA public website for review by relicensing participants
7/5/2011	Marcos Guerrero, UAIC	Mr. Guerrero sent two resumes for archaeological field techs for survey project
7/15/2011	Gordon Hilpert	Tried to contact Mr. Hilpert to offer him field tech position
7/18/2011	Marcos Guerrero, UAIC	Contacted Mr. Guerrero to try and locate Mr. Hilpert.
7/18/2011	Gordon Hilpert	Contacted by Mr. Hilpert, offered him the field tech position. He accepted.
7/18/2011	Marcos Guerrero, UAIC	Mr. Guerrero requested seeing the records search results for the project

Date	Tribe/Agency	Action
7/19/2011	Marcos Guerrero, UAIC	Informed Mr. Guerrero via email that he was welcome to come to the HDR|DTA office to view and copy the record search results
8/17/11-8/18/11	Marcos Guerrero, UAIC	Participated as volunteers on YCWA archaeological survey.
9/22/2011	All participating tribes/individuals	Sent all members invitation to tribal meeting on October 19, 2011.
9/26/2011	All participating tribes/individuals	Second notice sent out for October 19, 2011.
10/13/2011	Marcos Guerrero, UAIC	Mr. Guerrero emailed HDR informing them that there were collections at CSUS from excavations at Bullards bar Reservoir that may contain human remains. Informed Mr. Guerrero that HDR would set up an appointment to view the collections.
10/19/2011	Nevada City Rancheria, UAIC, Enterprise Rancheria, USFS - Plumas and Tahoe Forests	Project status meeting. Marcos Guerrero called in to the meeting, Ren Reynolds, Enterprise Rancheria, was in attendance, as well as Virginia Covert, Nevada City Rancheria;
11/3/2011	Nevada City Rancheria, UAIC, USFS -Tahoe Forest	Site visit to Bullards Bar Reservoir. Took boat around reservoir to show participants sites and discuss Historic Properties study.
1/25/2012	UAIC	Met with Allen Adams and Cultural Preservation Committee at 2:30 to present project, gather names. Met with Committee, presented project, Committee reed to provide participant names, review Tribal; census records, and arrange for ethnobotany tour with Vince Lapena, very brief discussion of potential resources in the area, mentioned Falls downstream, no other specific location information. Met Danny Ray, Vice-Chair of the United Cultural Preservation Committee. Marcos Guerrero was also in attendance.
2/20/2012	Marcos Guerrero, UAIC	Follow-up email from Mr. Guerrero on collections at CSUS. Asking if anyone has had a chance to look at the collections. Informed Mr. Guerrero that HDR was in the process of setting an appointment to view the collections.
6/25/2012	Virginia Covert, Nevada City Rancheria	Ms. Covert requested a status report on the studies at YCWA.
7/17/2012	Virginia Covert, Nevada City Rancheria	Informed Ms. Covert about the status of the studies.
8/29/2012	Marcos Guerrero, UAIC	HDR spoke with Marcos on the phone regarding TCPs at Narrows.
8/30/2012	Marcos Guerrero, UAIC	HDR emailed and held phone calls with Marcos regarding TCPs at Narrows.

Page Left Blank

Albion Consultation History

Name	Contact Information	Tribal Affiliation	Referred by	Contact Dates/	Notes
Dolly Suehead	(916) 616-5509	Auburn United	Marcos Guerrero	**1-10-2012, 1-13-2012** Phone calls to Dolly, left message	Phone number is for Dolly's caretaker, Marcos G. will participate in interviews, elderly but active and will have contact information for other respondents and tribes. Related to and close with the Enos family. Marcos indicates that Dolly is not on the interview list, per the Tribe. (Email from Marcos 2-17-2012
Allen Adams	(530) 409-1230	Auburn United	Marcos Guerrero	**1-25-2012** Met with Allen and Cultural Preservation Committee at 2:30 to present project, gather names**.** Brief notes on file. **1-10-2012** Phone calls back and forth re presentation to Preservation Committee, Allen placed Albion on agenda for Jan 25th	Chair of the Auburn United cultural Preservation Committee. Contact Allen to coordinate with Committee. On Committee agenda for January 25th at Auburn United. Met with Committee, presented project, Committee reed to provide participant names, review Tribal; census records, and arrange for ethnobotany tour with Vince Lapena, very brief discussion of potential resources in the area, mentioned Falls downstream, no other specific location information
Danny Ray	(916) 477-9130	Auburn United	Marcos Guerrero	**1-25-2012** Met at Cultural Preservation Committee, see Adams, this date. **6-4-2012** Participated in field visit. See Marcos Guerrero, this date	Vice-Chair of the Auburn United Cultural Preservation Committee
Marcos Guerrero RPA, THPO, Tribal Historic Preservation Committee	(916) 420-0213 United Auburn Indian Community of the Auburn Rancheria	Auburn United	HDR	**10-19-2011**, participated by phone at meeting with YWCA offices, notes on file. **1-6-2012,** meeting in	Cultural Resource specialist employed by Auburn United

Name	Contact Information	Tribal Affiliation	Referred by	Contact Dates/	Notes
	10720 Indian Hill Road Auburn, CA 95603			Sacramento to discuss project, consultants, and consultant rates. Notes on file **1-25-2012** Met at Cultural Preservation Committee, see Adams, this date. **2-17-2012** Email from Marcos stating that Danny Ray and Allen Adams are ready for interviews,, and that he is trying to get Rose Enos into the mix. **6-4-2012** Marcos arranged and participated in a field trip to the project area with three memnbers of the Cultural Preservation Committee. Also attending, Danny Ray, Vince LaPena, Jeromey Cayton **9-26-2012** Stella D'Oro met with Marcos and Danny Ray at the Narrows 2 PH and Englebrioght Dam to discuss possible fishing location. Notes on file and information added to report	
Ren Reynolds	(530) 532-9214 eranch@cncnet.com	Enterprise	HDR	**10-19-2011**, participated at meeting with YWCA	Cultural resource specialist for Enterprise Rancheria

Name	Contact Information	Tribal Affiliation	Referred by	Contact Dates/	Notes
	Enterprise Rancheria 1940 Feather River Blvd., Suite B Oroville, CA 95965			offices. Notes on file. **10-22-2011**, called to Ren to determine participation in the project, Ren waiting for Tribal Council OK on participation **10-30-2011** Call to Ren to determine if he would join project tour on 11-3, Ren declined but indicated possibility of later project visit	
Virginia (Ginger) Covert	(530) 205-9765 virginia@nevadacityrancheria.org	Nevada City Rancheria		**10-19-11,** participated at meeting with YWCA offices. Notes on file. **10-20-11,** Stella called Ginger to verify that she would attend the houseboat trip in the APE.	Although Ginger didn't attend the reservoir trip, her daughter Shelly attended.
Shelly Covert	(530) 205-9765 shelly@nevadacityrancheria.org	Nevada City Rancheria	Ginger Covert	**11-03-11**, attended the houseboat reservoir trip. **11-14-11**, Stella sent a follow up email which was answered. Shelly suggested we meet in mid-December, weather permitting. **11-30-11**, Stella sent a follow up email. No response. **12-08-11**, Stella sent a follow up email. No response. **1-06-12**, Stella sent a follow up email. No	Secretary, Nevada City Rancheria Tribal Council

Name	Contact Information	Tribal Affiliation	Referred by	Contact Dates/	Notes
				response. **1-06-12**, Stella phoned Shelly and left a voice mail which included $40/hour rates for consultation. **1-24-12**, Stella sent a follow up email. **2-12-12** Stella met with Shelly Covert and Carmel Burrows at Covert's home. Meeting notes on file	
Richard Johnson	richard@nevadacityrancheria.org	Nevada City Rancheria		**11-03-11**, attended the houseboat reservoir trip	Chairman, Nevada City Rancheria Tribal Council
Dwayne M. Brown Jr	5 Tyme Way Oroville, CA 95966	Tyme Maidu Tribe of Berry Creek Rancheria		**11-01-11**, he received the letter CB sent.	Environmental Coordinator
Guy Taylor	Feather Falls Casino 1 Alverda Dr. Oroville, CA 95966	Concow Maidu Tribe of Mooretown Rancheria		**11-01-11**, he received the letter CB sent.	Director, Environmental Protection Office
Crista Stewart	PO Box 279 Greenville, CA 95947	Greenville Rancheria of Maidu Indians		**10-31-11**, she received the letter CB sent.	Environmental Manager
Clara LaCompte	P.O. Box 204 Susanville, CA 96130			**11-01-11**, she received the letter CB sent.	Individual
Michael DeSpain	125 Mission Ranch Blvd Chico, CA 95926	Mechoopda Indian Tribe of Chico Rancheria		**10-31-11**, she received the letter CB sent.	Director OEPP
April Moore	19630 Placer Hills Road			**11-01-11**, she received the letter CB sent	

Name	Contact Information	Tribal Affiliation	Referred by	Contact Dates/	Notes
	Colfax, CA 95713				
Jerri White Turtle	P.O. Box 1490 Foresthill, California 95631-1490	Todds Valley Miwok-Maidu Cultural Foundation		CB's letter was not received and it was returned to Albion.	
Grayson Coney	PO Box 1316 Colfax, CA 95713	Tsi-Akim Maidu Tribe		P.O. could not find delivery information for CB's letter to the tribe	
Darrel Cruz	919 US Hwy 395 South Gardnerville, NV 89410	Washoe Tribe of Nevada and California		**10-31-11**, she received the letter CB sent	THPO
Everett"Weary" Smith	Contact through Shelly Covert	Nevada City Rancheria and Strawberry Valley Rancheria		**2-17-12** Stella D'Oro met with "Weary" Smith and Alberta Rose-Gallez at Gallez' home. Notes on file. Field trip planned after winter months. Weary frail but wants to at least visit the project area by car. **9-2012** Emails with Shelly Covert indicate that as of October 1, 2012, Weary remains in a convalescent facility and is unable to speak with us or visit the APE. Shelly feels he will be able in the future, but cannot predict when	

Page Left Blank