APPENDIX C

PHASE 1 CULTURAL RESOURCES ASSESSMENT

CULTURAL RESOURCES ASSESSMENT

BIG TUJUNGA RESERVOIR SEDIMENT REMOVAL PROJECT

Prepared For

Kristin Starbird
Psomas
225 South Lake Avenue, Suite 1000
Pasadena, California 91101

and

County of Los Angeles
Department of Public Works
900 South Fremont Avenue, 2nd Floor
Alhambra, CA 91803-1331



Prepared By

VCS Environmental
EXPERT SOLUTIONS | CEQA-NEPA . Biology . Regulatory

Patrick O. Maxon, M.A., RPA
Director, Cultural Services
VCS Environmental
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, California 92765

October 2017

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D: Forest Service Permit
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F: Personnel Qualifications

NATIONAL ARCHAEOLOGICAL DATABASE (NADB) INFORMATION SHEET

CULTURAL RESOURCES ASSESSMENT

BIG TUJUNGA RESERVOIR SEDIMENT REMOVAL PROJECT

by

Patrick Maxon, M.A., RPA

October 2017

Submitted by:

VCS Environmental
Patrick O. Maxon, M.A., RPA
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, California 92675
(949) 489-2700

Submitted to:

Kristin Starbird
Psomas
225 South Lake Avenue, Suite 1000
Pasadena, California 91101

USGS ***Condor Peak*** 7.5 Minute Quadrangle in Township 2 and 3 North; Range 12 and 13 West, Section 1 (*S.B.B.M*).

VCS Environmental

Key Words: Big Tujunga Dam and Reservoir, USGS Condor Peak, Hansen's Lodge

EXECUTIVE/MANAGEMENT SUMMARY

PURPOSE AND SCOPE

VCS Environmental (VCS) undertook this study to assess the potential impacts to Cultural Resources/Historic Properties that may result from the implementation of the Big Tujunga Reservoir Sediment Removal Project. This document has been prepared to satisfy the requirements of the U.S. Army Corps of Engineer's (USACE's) compliance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and, due to the need for a Section 404 Clean Water Act Permit, Section 106 of the National Historic Preservation Act (NHPA) of 1966 (36 CFR 800) and USACE's implementing regulations at 33 CFR 325 Appendix C. The format of this report follows *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* (Office of Historic Preservation 1990).

DATES OF INVESTIGATION

Patrick Maxon, RPA conducted a cultural resources literature review on October 6, 2011, at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton and Archaeologist Albert Knight conducted a literature review at the United States Department of Agriculture Forest Service (USFS) offices in the City of Arcadia on October 13, 2011 (Appendix A). A paleontological review request was received from Samuel McLeod of the Natural History Museum of Los Angeles County on October 27, 2011 (Appendix B). Native American consultation was initiated on September 26, 2011, with a letter to the Native American Heritage Commission (NAHC). Letters were sent to Native American tribes and individuals on September 27, 2011. (Appendix C). A cultural resources survey of the property was conducted by Albert Knight on October 13, 2011 (refer to United States Department of Agriculture Forest Service Permit #LAR9040CRI in Appendix D). A Historic Resources Evaluation Report was completed by Pam Daly of Daly and Associates in October, 2017 (Appendix E). Mr. Maxon and Christopher Drover, Ph.D. prepared and completed a California Environmental Quality Act (CEQA) draft of this technical report in July 2012, and a second version for the U.S. Forest Service's NEPA compliance in December 2012. This version of the report to meet USACE requirements, was completed in October 2017. Resumes of project staff are located in Appendix F.

FINDINGS OF THE INVESTIGATION

No previously unknown significant cultural resources were discovered within the Area of Potential Effects (APE)/Permit Area (PA) during the survey. Four recorded cultural resources are within the APE/PA. Big Tujunga Dam (USFS#05-01-55-221) has previously been evaluated and is considered eligible for listing on the National Register of Historic Places (NRHP). The remaining three resources [SCE Transmission Line Road (P-19-186877; USFS#05-01-55-187), Verdugo Circuit (P-19-186860; USFS#05-01-51-138), and the Hansen's Lodge location (USFS#05-01-55-00017) were evaluated during this project. In summation, other than the Big Tujunga Dam itself, there are no built-environment historic-period resources located within the Project APE, that appear to meet National Register and California Register criteria to be considered eligible for listing in the registries as significant historic resources.

INVESTIGATION CONSTRAINTS

Dense vegetation and non-native grasses cover as much as 70 percent of the APE/PA. Both native and non-native vegetation remains on site. The APE/PA is developed with the dam and reservoir, access roads, and the debris previously placed in Maple Canyon Sediment Placement Site.

EFFECTS ANALYSIS

This impact analysis is provided to assist the Los Angeles County Flood Control District (LACFCD) and USACE in fulfilling its compliance responsibilities under NEPA. Section 106 of NHPA and its implementing regulations at 36 CFR, 800 were used to identify historic properties within the APE/PA. The criteria of adverse effects codified at 36 CFR 800.5 were used to assess the effects of the proposed project on the four historic properties identified within the APE/PA. In summary, only the Big Tujunga Dam is eligible for listing on the California and National Registers. The remaining three are not deemed eligible. None of the four identified resources will be subject to adverse effects as a result of the project (Daly 2017).

RECOMMENDATIONS

Retention of an Archaeologist prior to ground-disturbing activities in the APE/PA, or as a monitor during implementation, is at the discretion of LACFCD and its CEQA compliance responsibilities. However, if cultural resources or human remains are discovered during any ground disturbing activities, the USACE will be notified by either the project archaeologist or by LACFCD onsite personnel. All work in the vicinity of the discovery will cease until the USACE evaluates the nature and significance of the find, and determines the level of documentation necessary and potential consultation required with the NAHC, State Historic Preservation Officer (SHPO), Native American tribes, and any others. In the case of an inadvertent discovery of Human Remains, the proponent will immediately notify the responsible Federal official and County Coroner, and once determined to be of Native American origin by the coroner, the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations at 43 CFR 10 will be followed to manage and resolve the discovery and determine the final disposition of the remains.

DISPOSITION OF DATA

This report will be filed with LACFCD; with the USACE; with Psomas; with VCS, and at the SCCIC. All field notes and other documentation related to the study are on file at VCS.

1.0 UNDERTAKING INFORMATION/INTRODUCTION

1.1 CONTRACTING DATA

Psomas retained VCS to conduct a Phase I Cultural Resources Study for the proposed Big Tujunga Reservoir Sediment Removal Project (Project). This report details the findings of the investigation and offers management recommendations and mitigation measures to reduce the impact of the project to a less than significant level. Survey activities were conducted under United States Department of Agriculture Forest Service Permit #LAR9040CRI.

1.2 UNDERTAKING

The Big Tujunga Reservoir (BTR) is located in the San Gabriel Mountains within the Angeles National Forest (ANF), which is located within the unincorporated County of Los Angeles on land owned by the U.S. Government and managed by the U.S. Forest Service (USFS). The BTR is located along Big Tujunga Canyon Road, approximately 4.5 miles north of La Crescenta-Montrose and approximately 7 miles northeast of the community of Sunland. Maple Canyon Sediment Placement Site (Maple Canyon SPS) is located approximately 1.8 miles south of BTR and just east of Big Tujunga Canyon Road.

The proposed Project involves the removal of sediment from the Big Tujunga Reservoir (BTR) and placement of the sediment in the adjacent Maple Canyon Sediment Placement Site (SPS), which is located approximately 1.8 miles (when traveling via existing access roads) from the plunge pool of BTR to the upper reach of Maple Canyon SPS. The Project does not involve new construction, expansion or alteration of the BTR, but only involves sediment removal to restore capacity to the BTR and to allow it to adequately perform its main functions of flood control, debris flow reduction, and water conservation.

The Project has the potential to remove up to 4.4 million cubic yards (mcy) of sediment from BTR, which equates to the remaining capacity for sediment placement within Maple Canyon SPS. The actual amount of sediment removal would depend on the amount of rainfall and sediment deposition in coming years. It is anticipated that sediment removal could be accomplished within five years.

Prior to the annual excavation of the accumulated sediment from BTR, the reservoir must be dewatered. All sediment removal operations that would occur within BTR—including dewatering, sediment removal activities, and equipment set-up and break-down—would be conducted annually from approximately April 16 to October 14 (i.e., the dry or non-storm season). Once the dewatering is complete, the excavation and transport of sediment from the BTR to Maple Canyon SPS via hauling trucks would commence. The LACFCD's Contractor would pave approximately 2 miles of currently unpaved haul routes (with the exception of existing access roads behind the Dam structure, which would be repaired to restore access to the reservoir bottom) to comply with South Coast Air Quality Management District thresholds for particulate matter (PM10).

If encountered during sediment excavation, large rocks would be set aside and processed/crushed in the reservoir. Some material suitable for re-use would then be temporarily placed at an on-site stockpile for subsequent beneficial reuse within the Forest by the Los Angeles County Public Works' Flood Maintenance (FMD) and Road Maintenance Divisions (RMD) for routine maintenance activities that are unrelated to the BTR Sediment Removal Project. During the storm season (i.e. October 15 to April 15), all sediment removal equipment/trucks would be removed from BTR, and normal operations would resume and the Dam would continue to perform its main functions of flood control, debris flow reduction, and water conservation.

The closure of Maple Canyon SPS is considered to be a part of the proposed Project, as sediment removal activities from BTR have the potential to fill the remaining capacity (i.e., 4.4 mcy) at Maple Canyon SPS. These closure activities are set forth in the *Maple Canyon Sediment Placement Site Revegetation and Ultimate Completion Guidance Document* and include a 5-year revegetation monitoring program; efforts to improve the visual aspects of the site upon closure of Maple Canyon SPS, including removal of irrigation and water tanks; and removal of the asphalt covering of the access road.

1.3 AREA OF POTENTIAL EFFECTS/PROJECT LIMITS

Exhibit 1 depicts the Big Tujunga Reservoir Sediment Removal Project vicinity and specific location on a portion of the U.S. Geological Survey (USGS) Condor Peak 7.5-minute quadrangle. The Study Area Boundary includes the sediment removal area behind Big Tujunga Dam, the plunge pool downstream of the Dam, the access roads for trucking, and the Maple Canyon Sediment Placement Site. Exhibit 2 depicts the Area of Potential Effects (APE)/Permit Area (PA) on an aerial photograph. The APE/PA was determined by following the Waters of the United State (WOUS) determinations from the Jurisdictional Delineation, plus a 50-foot buffer. Exhibit 2 also depicts the locations of the four cultural resources present within the APE/PA: The Big Tujunga Dam (USFS#05-01-55-221); a portion of Southern California Edison's Verdugo Circuit (P-19-186860/USFS #05-01-51-138); a portion of the USFS Transmission Line Road Alignment (P-19-186877/USFS# 05-01-55-187); and the location of the former Hansen's Lodge (USFS#05-01-55-00017).

1.4 PROJECT PERSONNEL

Albert Knight completed the USFS cultural resources literature review and background research for the project and performed the cultural resources survey. Patrick Maxon, M.A., RPA completed a literature review at the SCCIC, Pamela Daly of Daly and Associates completed the historic built environment evaluations, and Mr. Maxon and Christopher Drover, PhD., RPA authored this report. Refer to Appendix F for staff qualifications.

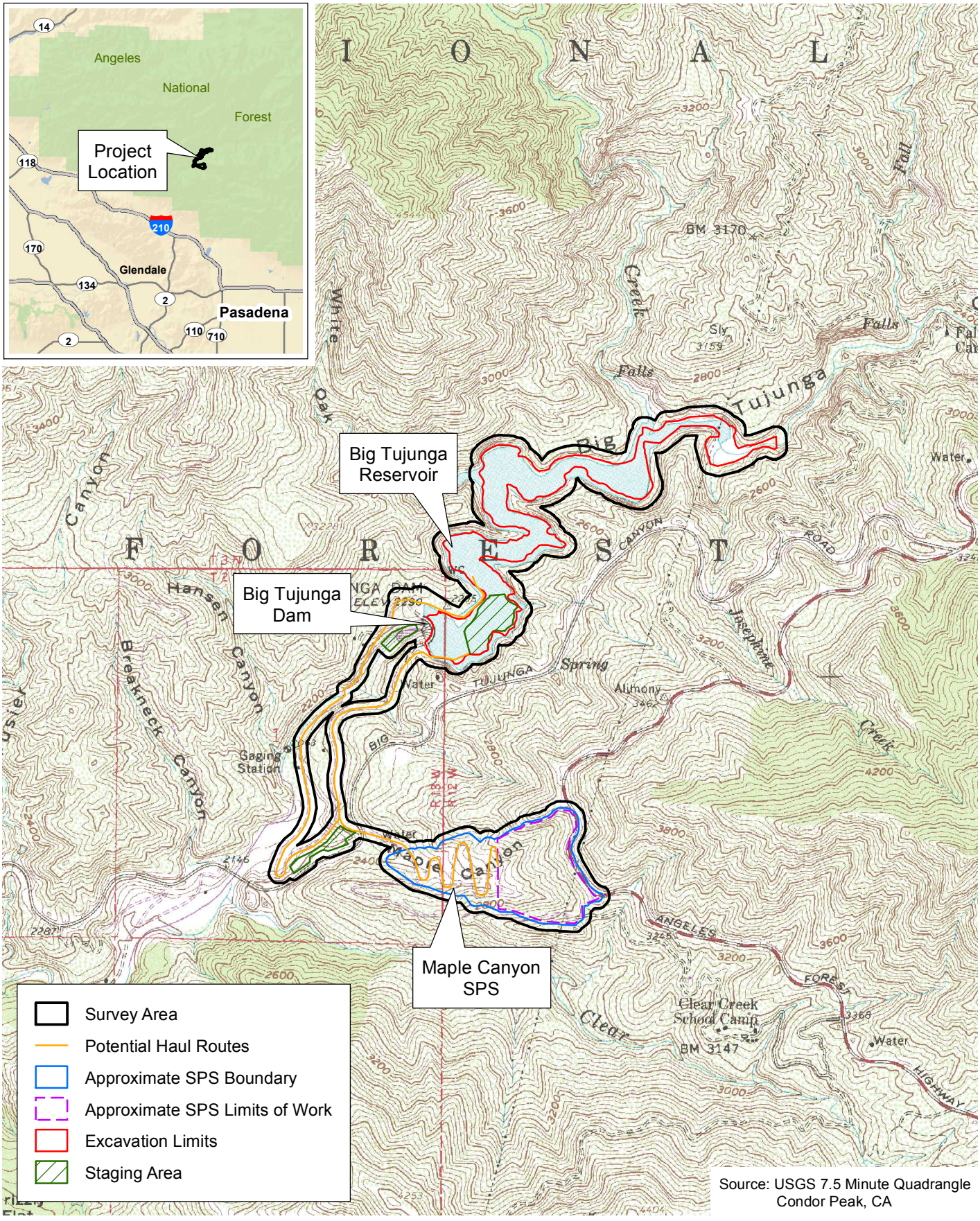
2.0 REGULATORY SETTING

This section contains a discussion of the applicable laws, ordinances, regulations, and standards that govern cultural resources and must be adhered to both prior to and during project implementation. The report is intended to satisfy the requirements for a federal action under the National Environmental Policy Act (NEPA) and an analysis pursuant to Section 106 of the National Historic Preservation Act (16 *United States Code* [USC] 470f) and its implementing regulations listed in the *Code of Federal Regulations* (36 CFR, 800, Protection of Historic Properties).

2.1 FEDERAL

Cultural resources are considered during federal undertakings chiefly under Section 106 of National Historic Preservation Act (NHPA) of 1966 (as amended) through one of its implementing regulations (36 CFR 800, Protection of Historic Properties) and NEPA. Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA. Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act (AIRFA) of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 of NHPA (16 USC 470f) requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council



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Project Site

Exhibit 1

Big Tujunga Reservoir Sediment Removal Project

N
W E
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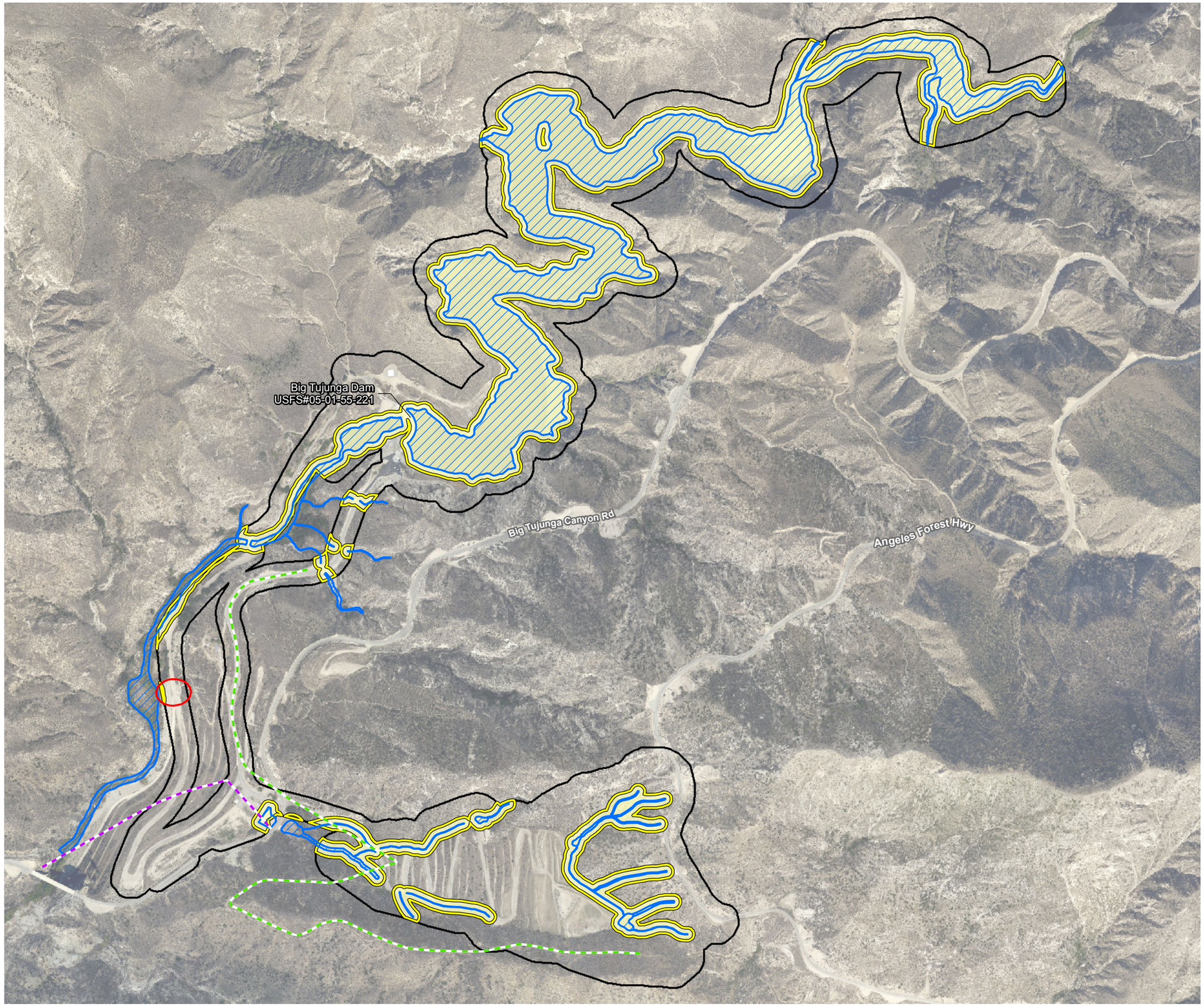
2,000 1,000 0 2,000

Feet

VCS Environmental



Area of Potential Effects (APE)

Project Area

USACE “waters of the U.S.”

Hansen’s Lodge (estimated)
USFS#05-01-55-00017

Verdugo Circuit Transmission Line
(P-19-186860)

Transmission Line Road (P-19-186877)

N
W E
S

800 400 0 800
Feet

Aerial Source: LAR-IAC 2014

Area of Potential Effects Exhibit 2

Big Tujunga Reservoir Sediment Removal Project

(Rev: 08/10/2017 MMD) R:\Projects\DPW\3DPW029305\Graphics\InHouse\ex_APE_20170810.pdf

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on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected cultural resource is assessed. If there is determined to be an effect, consultation to resolve the effect is undertaken per 36 CFR 800.6(b). Significant cultural resources are those resources that are listed or are eligible for listing in the NRHP per the criteria listed at 36 CFR 60.4 below:

> The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and that:
>
> (a) Are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) Are associated with the lives of persons significant in our past; or
>
> (c) Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) Have yielded, or may be likely to yield, information important in prehistory or history.

The USACE fulfills its Section 106 responsibilities through its implementing regulations at 33 CFR 325 Appendix C.

2.2 HUMAN REMAINS

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the Public Resources Code states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the NAHC within 24 hours which, in turn, must identify the person or persons it believes to be the most likely descended from the deceased Native American. Once determined to be of Native American origin, the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations at 43 CFR 10 will be followed to determine the final disposition of the remains.

3.0 SETTING

3.1 NATURAL

The area surrounding BTR is undeveloped and comprised of natural vegetation types, including several chaparral sub-types (e.g., chamise chaparral, scrub oak chaparral, and mixed chaparral). Much of the area surrounding BTR was burned in the 2009 Station Fire but is now recovering. Chamise chaparral, mixed chaparral, willow riparian forest, coast live oak stands, disturbed freshwater seep, and ornamental plantings are found along existing roads that would be used to haul material from BTR to Maple Canyon SPS. Scrub oak chaparral, chamise chaparral, California annual grassland, and unvegetated cliff faces are found within Maple Canyon SPS. Tributaries at the upper end of the Maple Canyon SPS contain small areas of burned riparian herb, sycamore woodland, and willow riparian scrub; however, these areas are beginning to resprout (BonTerra Consulting 2011). None of this vegetation would be disturbed as a part of the proposed project.

Steep vertical walls border the majority of the BTR to the top of the 100 percent contour (i.e. the reservoir's sediment capacity elevation contour), which is surrounded by mountains. The topography steeply slopes down into the canyon; elevations range from approximately 2,150 to 3,400 feet above mean sea level (msl).

3.2 CULTURAL

3.2.1 Prehistoric

The prehistory of coastal Southern California has been described by a number of authors who generally agree on at least four major prehistoric periods (Wallace 1955; Warren 1968; Koerper and Drover 1983). These four sequential periods of time, sometimes called Horizons and sometimes Traditions, are each characterized by time-sensitive artifacts. The periods then are not arbitrary, but likely reflect material/cultural changes at those times.

The earliest occupations of the Southern California coast are debated to begin as early as 50,000 years before present, or "B.P." (Bada et al. 1974).[1] The earliest radiocarbon dates, however, were derived from Los Angeles Man and Laguna Woman at 23,600 and 17,150 B.P. respectively (Berger et al. 1971). Unfortunately, little is known of the material culture of finds of this antiquity. The earliest archaeological culture known in any detail is that of San Dieguito, named after the drainage of the same name near Del Mar, California where implements dating to 8,000 B.P. were found. Although the subsistence strategy of this tradition is unknown, Warren (1968:2) has inferred a hunting economy (cf. Koerper and Drover 1983; Drover et al. 1983). Typical artifacts would include percussion flaked implements, elongated knives, domed scrapers, teshoa flakes, crescentics and an absence of millingstone tools. The San Dieguito culture is defined primarily from its single type site, the Harris Site of San Diego County, CA-SDi-149 (Warren 1966).

After San Dieguito, the next prehistoric period for coastal Southern California is termed "Millingstone" and "Encinitas" by Wallace (1955) and Warren (1968), respectively. The Millingstone Horizon or Encinitas Tradition are very similar as described by each author and have a time span beginning about 7,000 to 8,000 B.P. and ending between 3,000 to 4,000 B.P. The onset of Holocene climatic conditions may have brought about the cultural changes associated with this period. Processing tools like manos and metates (millingstone) reflect an increased dependence on plant foods. Projectiles are rare, but, when found, suggest the use of the atlatl or

[1] "Before Present" assumes that 1950 is "present".

throwing stick. The material culture characteristic of this period is longer-lived the further one travels south of Santa Barbara.

The third period following Encinitas, or Millingstone, is known as the “Intermediate Horizon” and “Campbell Tradition” by Wallace (1955) and Warren (1968), respectively. This period is strongly represented north of the Los Angeles area and is only suggested in the San Diego area. Numerous, smaller projectile points suggesting increased hunting and the introduction of the use of the bow and arrow characterize this period. It is during the Intermediate Horizon, or Campbell Tradition that true maritime exploitation and occupation of the Channel Islands flourishes (Meighan 1959). The duration of this period is roughly 3,000 to 1,000 B.P. In general, the emphasis seems to shift from the hard seed orientation of the Milling Stone Tradition to the growing practice of balanophagy (acorn consumption) and processing of other soft, pulpy seeds. While mortars and pestles become more common in comparison to manos and metates, the latter survive into European contact times attesting to the use of hard seeds in the diet.

In the southern end of Los Angeles County, several traits make an appearance rather late in the Tradition; these include pottery and ground painting, which give rise to speculation that significant culture contact from the southeast was occurring (Meighan 1954). This complex is thought to owe its basic cultural orientations to the Southwestern United States.

A general picture emerges through time of growing population pressure resulting in intensified land use patterns. Increases in population or siltation of coastal estuaries are examples of intensifying the local carrying capacity (e.g., Newport Bay during the Milling Stone Tradition). Occasionally, siltation may actually progress to the point of making an estuary less productive as in the case of northern Orange County (Newport Back Bay) resulting in local populations adapting to other environments such as acorn processing.

Table 1 depicts an overview of Southern California Prehistory in relation to North America.

TABLE 1
SOUTHERN CALIFORNIA PREHISTORY

<table>
<tr><th>Time BP</th><th>Newport Coast</th><th>Los Angeles</th><th colspan="2">San Diego</th><th colspan="2">Deserts</th><th>North America</th><th></th></tr>
<tr><td></td><td>Peterson et al. 1991</td><td>Wallace 1955</td><td>Warren 1968</td><td>Moriarity 1966</td><td>M. Rogers 1966</td><td>Wallace 1962</td><td>Willey + Phillips 1955</td><td>Climate</td></tr>
<tr><td></td><td>LP 2</td><td>Historic</td><td rowspan="2">Yuman-Shoshonean</td><td>Diegueno II</td><td>Diegueno-Luiseno</td><td rowspan="2">Prehistoric Yuman-Shoshonean</td><td>Post Classic</td><td rowspan="3">Medithermal</td></tr>
<tr><td>1,000</td><td rowspan="3">LP 1</td><td>Horizon IV-Late Prehistoric</td><td rowspan="4">Diegueno I</td><td rowspan="2">Prehistoric Yuman-Shoshonean</td><td>Classic-Urban</td></tr>
<tr><td></td><td rowspan="4">Horizon III-Intermediate</td><td rowspan="3"></td><td>Amargosa</td><td rowspan="3">Formative-food production</td></tr>
<tr><td>2,000</td><td rowspan="3">Intermediate Period</td><td rowspan="4">La Jollan-Amargosa II</td></tr>
<tr><td></td><td rowspan="4">Pinto</td><td rowspan="4">Little Pluvial</td></tr>
<tr><td>3,000</td><td rowspan="3">MS 3</td><td rowspan="4">Horizon II-Millingstone</td><td>La Jolla III</td></tr>
<tr><td></td><td rowspan="3">La Jolla II</td><td rowspan="3">Archaic-broad-based hunting, collecting-emphasis on plant foods</td></tr>
<tr><td>4,000</td><td rowspan="3">Campbell</td></tr>
<tr><td></td><td rowspan="3">MS 2</td><td rowspan="3">Haitus</td><td rowspan="3">Altithermal</td></tr>
<tr><td>5,000</td><td rowspan="4">Horizon I-Early Man</td></tr>
<tr><td></td><td rowspan="3">MS 1</td><td rowspan="3">Encinitas</td><td rowspan="3">La Jolla</td><td rowspan="3">Lake Mojave</td><td rowspan="3">Lithic-hunting, collecting-emphasis on hunting(?)</td></tr>
<tr><td>6,000</td><td rowspan="2">Anathermal</td></tr>
<tr><td></td><td rowspan="3">Paleo-Coastal</td><td rowspan="3">San Dieguito</td><td rowspan="3">San Dieguito</td><td>Haitus</td></tr>
<tr><td>7,000</td><td rowspan="2">San Dieguito III</td></tr>
<tr><td></td><td rowspan="2">Little Pluvial</td></tr>
<tr><td>8,000</td><td rowspan="2">Altithermal</td></tr>
<tr><td></td><td rowspan="2">Anathermal</td></tr>
<tr><td>9,000</td></tr>
<tr><td></td><td rowspan="2">Paleo-Coastal</td><td rowspan="2">San Dieguito</td><td rowspan="2">San Dieguito</td><td colspan="2">Haitus</td><td rowspan="2">Anathermal</td></tr>
<tr><td>10,000</td><td>San Dieguito III</td></tr>
<tr><td colspan="9">LP: Late Prehistoric; MS: Millingstone; BP: Before Present
Source: Christopher Drover 2012</td></tr>
</table>

3.2.2 Ethnographic

Gabrielino

While of limited use to much of prehistory, data acquired in contact times is somewhat useful as an analogy to the Late Prehistoric Period. At the time of contact in 1769, the Gabrielino Native Americans occupied the area around the APE/PA. The Spanish named the Gabrielino after the Mission San Gabriel Archangel. The Gabrielino spoke Takic (Shoshonean) languages.

Settlement

According to Bean and Smith (1978:538), the Gabrielino is, in many ways, one of the least known groups of California's native inhabitants. In addition to much of the Los Angeles Basin, they

occupied the offshore islands of Santa Catalina, San Nicolas, and San Clemente. Gabrielino populations are difficult to reconstruct. However, at any one time, as many as 50 to 100 villages were simultaneously occupied. Like the prehistoric culture before them, the Gabrielino were a hunter/gatherer group who lived in small sedentary or semi-sedentary groups of 50 to 100 persons, termed rancherias. These rancherias were occupied by at least some of the people all of the time. Location of the encampment was determined by water availability. Houses were circular in form and constructed of sticks covered with thatch or mats. Each village had a sweat lodge as well as a sacred enclosure (Bean and Smith 1978). Although the earliest description of the Gabrielino dates back to the Cabrillo expedition of 1542, the most important and extensive accounts were those written by Father Geronimo Boscana about 1822 and Hugo Reid in 1852.

Subsistence

Gabrielino subsistence relied heavily on plant foods, but was supplemented with a variety of meat, especially from marine resources. Food procurement consisted of hunting and fishing by men and gathering of plant foods and shellfish by women. Hunting technology included use of bow and arrow for deer and smaller game, throwing sticks, snares, traps, and slings. Fishing was conducted with the use of shell fishhooks, bone harpoons, and nets. Seeds were gathered with beaters and baskets. Seeds and other foods were stored in baskets. Seeds were prepared with manos and metates and/or mortars and pestles. Food was cooked in baskets coated with asphaltum, in stone pots, on steatite frying pans, and by roasting in earthen ovens (Bean and Smith 1978).

Trade

Most trade between settlements was through reciprocity (barter), indicated by strings of Olivella shell beads used as a medium of exchange throughout Southern California (Ruby 1970). Gabrielino and Juaneño from the mainland probably traded trade beads, game, and plant foods in exchange for shell beads and steatite, and plant foods from the islanders. Steatite artifacts along with fish, shell money, and animal pelts were traded by the mainlander Gabrielino into the interior for seeds and deer skin. According to Bean (1972), the Gabrielino traded with the Serrano and the Cahuilla to the east. The Gabrielino traded goods such as shell beads, dried fish, sea otter pelts, asphaltum, and steatite for goods such as salt, obsidian, deer hides, furs, and acorns. There is evidence of trade between the Arizona Hohokam and the Gabrielino, probably with the Mojave people as middleman (Koerper in Mason 1997 et al.). *Glycymeri*s shell bracelets, ceramics, and blankets may have been exchanged for Pacific shells and shell beads (Koerper in Mason 1997).

Religion

Aside from shamanistic curing rituals, principal religious activity is related to the Chinigchinich cult that emphasized correct behavior as promulgated by a mythical figure, Chinigchinich. The Chinigchinich religion developed in Gabrielino territory and spread southeast to the Juaneño/Luiseño, Cupeño, and Ipai. It is a cult that is tied into an older creation myth. Chinigchinich is said to give laws and punishment for those who are disobedient in which shamans were given responsibilities to oversee the cult. It was an extensive system of polar opposites (duality) that are united under higher principals (unity) (Applegate 1979). Male-Female dualism found in the creation myth is also present in the origin myth (Applegate 1979). Chinigchinich cult ceremonies included boys' puberty ceremonies using *toloache,* a drug made from Jimson Weed (*Datura stramonium*). During the vision quest, a personal protector or totemic animal was acquired. Such totems could be bear, coyote, crow, or rattlesnake. Other ceremonies were to obtain vengeance on enemies, to express thanks for victory, and to commemorate the dead. The focus of the ceremonies was a circular sacred enclosure found in each village. The emphasis on male rites of passage and war may be a response to the increasing population and resultant

competition for territory and access to resources. Or it may be a response to the arrival of the Spanish since the Chinigchinich religion seems to be of recent (not prehistoric) origin.

Both inhumation (burial in a grave) and cremation was practiced. During cremations, the goods of the deceased and his hut were often buried with him. Annual mourning ceremonies were held in the late summer for all who had died during the previous year. Clothes of the deceased and an image of the deceased were often burned at this time. Eagles were sacrificed for recently deceased chiefs (Applegate 1979).

3.2.3 Local History

In the 1770s, the California Mission systems were founded by Junipero Serra, who established a series of missions northward from San Diego to San Francisco, one day's horse ride apart. Mission names were often adopted to refer to Native American groups (such as "Gabrielino" derived from Mission San Gabriel). The missions controlled large areas of land until 1824, when the Mexican government declared its independence from Spain. The majority of mission lands were then secularized and distributed by land grants to specific individuals. As stated by Yamada (2011):

> One of the earliest land grants was awarded to Jose Maria Verdugo a native of Loreto, in Baja California, was serving as a military guard at the mission at San Gabriel. In 1784 he received one of the first land grants made in Alta California by the King of Spain and one of the largest ever issued during the Spanish occupation. That land now incorporates a good part of present day Glendale, Burbank, Eagle Rock, Highland Park, the west part of Pasadena and the area in the triangle formed by the junction of the Arroyo Seco and the Los Angeles River, according to Carroll W. Parcher in his chronicle, Glendale Community Book.

The general APE/PA is within the region historically occupied by Gabrielino Indians, likely the group known as Fernandeño (Bean and Smith 1978) or the Tongva. The unpublished notes of J.P. Harrington indicate the name *Magunga* as the name for Big Tujunga Canyon (Singer 1985). Most of the Gabrielino villages were abandoned around 1805 due to rapid decline from European-introduced diseases (Singer 1985). Baptismal records from Mission San Fernando and Mission San Gabriel indicate that the population of the village of Tujunga at the mouth of the canyon had a population of 92 people baptized between 1783 and 1811 (Merriam 1968:102, 120; Singer 1985).

The 20th Century development in the area included commerce, mining, and residential development often spurned by individuals seeking good health suffering from respiratory illnesses. Many health sanitoria dotted the area, which eventually attracted Dr. Homer Hansen, a prominent individual who came to develop land within the APE/PA (Hitt 2002:24).

Please refer to the Historic Resources Evaluation Report (Daly 2017) in Appendix E for a more detailed historic context.

4.0 METHODS

4.1 CULTURAL RESOURCES RECORDS SEARCH

A literature review of documents on file at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton was completed by Patrick Maxon on October 6, 2011, and Albert Knight completed a second records search at the USFS offices in Arcadia on October 13, 2011 with assistance from USFS Archaeologist Darrell Vance (Appendix A). The SCCIC review consisted of an examination of the U.S. Geological Survey's (USGS) Condor Peak, California 7.5-minute quadrangle to evaluate the APE/PA for any sites recorded or cultural resources studies conducted on the parcel and within a one-mile radius. The SCCIC is the designated branch of the California Historical Resources Information System (CHRIS) and houses records concerning archaeological and historic resources in Los Angeles, Orange, and Ventura Counties. The records search provided data on known archaeological and built environment resources as well as previous studies within one mile of the APE/PA. Data sources consulted at the SCCIC included archaeological records, Archaeological Determinations of Eligibility (DOE), historic maps, and the Historic Property Data File (HPDF) maintained by the California Office of Historic Preservation (OHP). The HPDF contains listings for the CRHR and/or NRHP, California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Additional research was undertaken by Pamela Daly of Daly and Associates during the historic evaluation of the built environment at the project site.

4.2 PALEONTOLOGICAL RESOURCES RECORDS SEARCH

A paleontological records search for the Project was requested on October 3, 2011, from the Natural History Museum of Los Angeles County. A response was received on October 28, 2011, by Samuel McLeod, Vertebrate Paleontologist (see Appendix B).

4.3 NATIVE AMERICAN CONSULTATION

An inquiry was made of the NAHC located in Sacramento to request a review of its Sacred Lands File database regarding the possibility of Native American cultural resources and/or sacred places in the project vicinity that are not documented on other databases. On September 26, 2011, the NAHC also provided a list of Native American groups and individuals who may have knowledge regarding Native American cultural resources not formally listed on any database. Each of these groups and individuals were mailed an informational letter September 27, 2011, describing the project and requesting any information regarding resources that may exist on or near the APE/PA.

Information regarding the results of the Native American coordination/consultation is provided in Appendix C.

4.4 CULTURAL RESOURCES FIELD SURVEY

A systematic archaeological survey of the APE/PA was conducted by Archaeologist Albert Knight under the supervision of Patrick Maxon, RPA on October 13, 2011. The entirety of the APE/PA was surveyed via parallel transects spaced approximately five meters apart where possible and included focused surveys in areas of concentrated cultural material. A survey of the reservoir's historic built environment was conducted by Pamela Daly on July 18, 2017.

5.0 RESULTS

5.1 CULTURAL RESOURCES RECORDS SEARCH

Sixteen archaeological surveys have been conducted within a one-mile radius of the APE/PA. Five of the surveys included at least a portion of the APE/PA.

Table 2 identifies the previous cultural resources studies that include at least a portion of the APE/PA.

TABLE 2
CULTURAL RESOURCES STUDIES WITHIN ONE MILE OF THE APE/PA

Report Number	Author(s) (Year)	Type of Study/Comments
LA1477	Clay Singer (1985)	Survey and Impact Assessment for the Proposed Maple Canyon Relief Drain.
LA3053	LSA Associates (1994)	Cultural Assessment of Angeles Forest Highway at Mile Marker 23.00.
LA7155	Bartoy (2003)	Survey for Los Angeles County Flood Control Tanks.
LA9746	Schmidt and Schmidt (2003)	Phase I Investigation; Southern California Edison, Verdugo Distribution Line Circuit. Recordation of sites 186860+186877.
LA10175	Applied Earthworks (2009)	Cultural Resources Report for the Tehachapi Transmission Project. 22 different USGS quadrangles.
USGS: U.S. Geological Survey		

Twelve previously recorded resources are located within one mile of the APE/PA. Three of these are located within the APE/PA (P-19-186860, P-19-186877, and USFS#05-01-55-221), including the Big Tujunga Dam itself; and a fourth (Hansen's Lodge - USFS#05-01-55-00017) is recorded there, but has been destroyed, leaving few surface remnants.

Table 3 describes the known cultural resources within one mile of the APE/PA. As indicated, four are within the APE/PA of the proposed project.

TABLE 3
CULTURAL RESOURCES ON OR WITHIN ONE MILE OF THE APE/PA

Site Number	Recorder (Year)	Comment	Resource Within APE/PA?
USFS#05-01-55-221	FEMA (1999)	Big Tujunga Dam	Yes
USFS#05-01-55-00017	Knight and Maxon (2011)	Extrapolated location of Hansen's Lodge (USFS)	Yes
P-19-003104	Cotterman, Peterson and Sander (2003)	4 structural foundations	No
P-19-003471	Panlagua (2003)	6 structural features (possibly early Clear Creek School Camp facilities)	No
P-19-003386	Brasket and Wallace (2004)	Concrete structural foundation	No
P-19-003986	Lichtenstein (2009)	Various cement slab features; former scenic overlook	No
P-19-100796	Norton (2009)	Plumb Bolo knife	No
P-19-186535	Arbuckle (1979)	The Angeles National Forest	No
P-19-186860 USFS#05-01-51-138	Schmidt (2003)	Wooden power poles/insulators. Verdugo Circuit	Yes

P-19-186877 USFS#05-01-55-187	Schmidt and Schmidt (2003)	26 miles of USFS road alignment; shown on USGS 1926 and 1931 maps.	Yes
P-19-186923	Vance (2001)	Mt. Lukens Road (2N76)	No
P-19-187713	Sander (2003)	Angeles Forest Highway; 25 mile alignment; Mill Creek Bridge built between 1939 and 1941; tunnel 1941	No
USFS: U.S. Forest Service FEMA: Federal Emergency Management Agency			

5.1.1 Resources Within the Area of Potential Effect/Permit Area

Big Tujunga Dam (USFS#05-01-55-221)

The Big Tujunga Dam is a variable-radius arch concrete dam. It was constructed in 1930-1931 as part of a flood control and water conservation program in Los Angeles County, passed in 1924, to build a network of dams and reservoirs to protect the growing community and provide water as demand increased. As part of the LACFCD and Federal Management Agency (FEMA) Spillway Modification/Seismic Strengthening Project, the dam was determined eligible in 1999 for listing in the National Register of Historic Places as a contributing element to the thematic district of 1924 Los Angeles County Dams by Daniel Abeyta, acting State Historic Preservation Officer (FEMA 1999). There will be no adverse effects to the dam due to the proposed project. It should be noted that the dam is not recorded on DPR 523 Site Recording forms and the SCCIC does not maintain the USFS site record in its files.

USFS Transmission Line Road Alignment (19-186877; USFS#05-01-55-187)

This site consists of a 26-mile-long alignment that includes parts of five Forest- and/or SCE-maintained roads (Schmidt and Schmidt 2003). The site includes all or part of Forest Roads 4N24, 3N27, 2N74, 2N75 and 2N77, as shown both on the 1926 and 1931 depictions of the ANF (USDAFS 1926, 1931), and on the 1936 USGS Mt Lowe 6-minute quadrangle (Schmidt and Schmidt 2003). Schmidt and Schmidt (2003) quote Robinson (1991) who describes the road as the first road “all the way across the backbone of the San Gabriels”. The SCE Verdugo Circuit (P19-186860) is directly associated with the SCE transmission line/maintenance road in the current project area-of-potential effects (APE). The service roads were used to construct the power network through the Angeles National Forest, and have continued to be used to maintain the system. The site does not appear eligible for listing on the National or California Registers under any of the four significance criteria (Daly 2017:29).

Verdugo Circuit (P-19-186860; USFS#05-01-51-138)

This site is Southern California Edison’s (SCE’s) Verdugo Circuit. It is directly associated with the SCE transmission line/maintenance road, also within the APE. The circuit is a linear arrangement of poles, the extreme western end of which extends over the access road west of the BTR where it had split. The northern fork terminates a short distance to the east, still south of the BTR; the south fork at one time extended through Maple Canyon, where it terminated at Angeles Forest Highway. The circuit now terminates near Big Tujunga Canyon Road. The poles are still in place (without power lines) on the maintenance road between where the transmission road runs along the south wall of Maple Canyon. The site does not appear eligible for listing on the National or California Registers under any of the four significance criteria (Daly 2017:28-29).

Hansen's Lodge (USFS#05-01-55-00017)

While the structures no longer visibly exist in their recorded location, a private residence and Hansen's Lodge was built within the APE/PA boundaries by Dr. Homer Hansen in the 1910s. The flood of 1926 destroyed Hansen's Lodge, but he rebuilt it, only to have it destroyed again in 1938 by one of the biggest floods to hit the area. All but stone fireplaces were destroyed and the structure was not rebuilt (Leadabrand 1970).

Hansen sold his land and buildings to LACFCD in 1930. The two-story lodge that was in the parcel was destroyed in 1938, and massive grading and hillside contouring have significantly altered the land surrounding where the lodge once stood. There is a pile of stones that are supposed to have come from the chimney that remained after the Lodge building had been demolished when the dam was crested in March of 1938 by excessive rains. The area measures approximately 298 feet long by 107 feet wide, approximately .732 acre, and there are large, mature oak trees in this location. There are no standing structures, or foundations in this site. Topographic maps and aerial photographs also provide information that the discharge from Big Tujunga Dam has changed the path of Big Tujunga Creek through the canyon, and the site where the Lodge was situated (Daly 2017). The site does not appear eligible for listing on the National or California Registers under any of the four significance criteria (Daly 2017:28).

5.2 PALEONTOLOGICAL RESOURCES RECORDS SEARCH

A paleontological records search for the proposed project was requested on October 3, 2011, from the Natural History Museum of Los Angeles County. A response was received on October 28, 2011, by Samuel McLeod, Vertebrate Paleontologist (see Appendix B). McLeod's response suggests that excavations in the igneous bedrock, which occurs throughout most of the APE/PA, as well as shallow excavations in Quaternary sedimentary deposits (gravel) in the southwestern portion of the APE/PA, near the access roads, probably would not uncover significant vertebrate fossils. He further mentioned that only deep excavation in the southwestern portion of the APE/PA may encounter significant fossil remains. Only excavations of substantial depth might require paleontological monitoring.

5.3 NATIVE AMERICAN CONSULTATION

5.3.1 CEQA Consultation

The NAHC Search of the Sacred Lands File on September 26, 2011, did not identify the presence of Native American cultural resources on the APE. In addition, the NAHC provided a list of Native American groups and individuals that may have knowledge of the religious and/or cultural significance of resources that may be in and near the APE/PA. The NAHC listed the following groups and individuals:

- Charles Cooke
- Beverly Salazar Folkes
- Randy Guzman-Folkes
- Ronnie Salas
- Ron Andrade
- John Valenzuela
- Delia Dominguez

Each of these groups and individuals were mailed an informational letter on September 27, 2011, describing the project and requesting any information regarding resources that may exist on or near the APE/PA. No responses have been received to date from the tribes and individuals contacted.

On June 21, 2012, follow-up telephone calls were made to ensure a reasonable and good faith effort to contact all tribes and individuals that were sent letters and failed to respond. Table 4 below summarizes the results of consultation, and all Native American correspondence can be viewed in Appendix C.

It should be noted that the implementation of this project predated the requirements of Assembly Bill 52.

TABLE 4
NATIVE AMERICAN CONSULTATION SUMMARY

Date Sent	Native American Contact	Date of Follow-Up Phone Call	Comments
9/26/11	Charles Cook	6/21/12	Mr. Cooke stated that the APE/PA is located in a sensitive area and that a Cultural Resources Monitor should be present on site.
9/26/11	Beverly Salazar Folkes	6/21/12	Ms. Salazar stated that, because the site is located within a sensitive area, a Native American Monitor should be present or on call.
9/26/11	Randy Guzman Folkes	6/21/12	Mr. Guzman-Folkes stated in an email that he believes Cultural Resources Monitoring is required for the Big Tujunga Sediment Removal Project.
9/26/11	Ronnie Salas	6/21/12	Rudy Ortega, responding for Mr. Salas, requested a copy of the original letter via email. The letter was emailed to Mr. Ortega.
9/26/11	Ron Andrade	6/21/12	Left voicemail. No response was received.
9/26/11	John Valenzuela	6/21/12	Mr. Valenzuela had no comments. He recommended that we contact Ann Brierty with the San Manuel Band of Mission Indians regarding the proposed project. Ms. Brierty does not appear on the NAHC contact list.
9/26/11	Delia Dominguez	6/21/12	Left voicemail. No response was received.
NAHC: Native American Heritage Commission.			

5.4 CULTURAL RESOURCES FIELD SURVEY

On October 13, 2011, Archaeologist Albert Knight conducted a pedestrian survey of the APE/PA. The survey area can be described as three distinct areas: Upstream/Reservoir-side of the Dam; downstream side of the Dam; and Maple Canyon. The photograph below, taken from the northeast and looking southwest, depicts the upstream side of the reservoir.



Big Tujunga Reservoir - View from northeast

5.4.1 Upstream/Reservoir-Side of the Dam

A large part of this area (mainly on the northwest side of the canyon) could be clearly seen from various vantage points just northwest of Big Tujunga Canyon Road. The upstream/reservoir-side of the Dam consists of a very narrow and steep gorge that is blocked by Big Tujunga Dam. The only exception is a small level area just north of the northern end of the Dam, which is well above the bottom of the canyon. This area was undoubtedly used as a staging/work area when the Dam was constructed. The BTR was nearly empty at the time and it was quite easy to see into the basin/canyon that forms the reservoir. The sides of the basin/canyon are very steep, often to vertical. This is true from the Dam all the way upstream to the head of the canyon, well above the BTR proper. With the exception of the small area near the Dam, there are no stream-side terraces or any other places where any archaeology sites, either prehistoric or historic, might be located. The material visible in the bottom of the canyon is mud, rock, and plant debris, much of which is burnt.

5.4.2 Downstream Side of the Dam

All but the northernmost end of this area could be clearly seen from various vantage points just north of Big Tujunga Canyon Road, especially from the concrete arch bridge just downstream from the Dam. The down-stream area is a continuation of the narrow and steep canyon above the Dam, although the canyon does widen out a small amount. The main drainage and the west side of the drainage are covered with natural riparian vegetation. The east side of the drainage is an embankment that is completely covered in cemented riprap to about 20 feet wide parallel to the drainage. A paved access road is immediately east of the riprap; both the road and riprap follow the drainage down-canyon from the north side of the dam to just above (north of) the arch bridge that carries Big Tujunga Canyon Road across the canyon (near contour level 2146). The hillside above (generally east) this paved road has been contoured for stability and drainage control, and much of the trace of the access road above the drainage between where the (paved) road leaves the canyon bottom and where it becomes part of the main Dam facilities (i.e., about where Maple Canyon joins Big Tujunga Canyon) has been destroyed or obscured by grading and vegetation. The section of road from the entrance of the facilities northeast to the south (or southeast) side of the dam could not be accessed. The part of this section of road that can be seen from the entrance is paved, and it may be paved all the way to the Dam.

The USFS believes that the site of Hansen's Lodge (USFS# 05015500017) was somewhere on the lower (now paved) part of the Dam access road, close by the drainage (and just southeast of Gauging Station 2063) near UTM 11:3794522N; 390151E. This part of the access road is paved and has cemented riprap between it and the active part of the drainage; any traces of the lodge, if such still exist, may be buried and not visible. This location, however, seems to be very close to the drainage. It is possible that the lodge was actually slightly higher on the hillside above the river (although the lodge is known to have been flooded at least twice). Hansen Dam, down-stream several miles, was named for the patriarch Dr. Homer Hansen, and is considered to be eligible for the NRHP. The areas where the BTR and its facilities are located were also once owned by the Hansen family, and a small canyon on the northwest side of the reservoir is still known as "Hansen Canyon".

The site location and its nearest vicinity was examined by Pam Daly of Daly and Associates during the current study. Very few remnants, other than a small pile of river rocks and large, mature oaks in this location, remain.

5.4.3 Maple Canyon

This area, as shown in the following two photographs, was easily accessed on foot via a paved access road. One of two water tanks (shown on the topographic map just above contour "2400") has the words "Maple Canyon" painted on it. The entrance to the canyon is directly east of and across the road from the entrance to the Dam complex. The bottom of the canyon and the hillsides in the lower parts of Maple Canyon above (i.e., east of) Big Tujunga Canyon Road for 100–150 meters remain natural although the vegetation was burnt in the Station Fire. There are no stream-side terraces or other places where an archaeological site might be located in this part of the canyon. Beyond (east of) this, the canyon has been filled with many tons of soil and rock deposited from earlier clearing of debris out of the Dam basin.



Maple Canyon Sediment Placement Site – View from the Northwest



Maple Canyon Sediment Placement Site – View from On Site

6.0 EFFECTS ANALYSIS

This impact analysis is provided to assist the LACFCD and USACE in fulfilling its compliance responsibilities under NEPA. Section 106 of NHPA and its implementing regulations at 36 CFR, 800 were used to identify historic properties within the APE/PA. The criteria of adverse effects codified at 36 CFR 800.5 are used to assess the effects of the proposed project on the four historic properties identified within the APE/PA. This section is summarized from Daly (2017)

6.1 ASSESSMENT OF ADVERSE EFFECTS

Big Tujunga Dam (USFS#05-01-55-221)

The Dam, determined eligible for listing in the National Register of Historic Places (FEMA 1999), is within the APE/PA of the proposed project; however, since the project entails removal of sediment from behind the dam and no alteration of the dam structure is planned, there will be no adverse effects to the dam as a result of the project.

The proposed project involves the excavation of sediment accumulated behind the Dam and the grading of a ramp that will extend into the BTR to facilitate access by grading equipment. There is, therefore, a possibility that historical and/or archaeological material would be uncovered during necessary excavations for the construction of the vehicle access road behind the Dam structure into the reservoir. Although the likelihood of encountering archaeological resources on the APE/PA is considered low, there is a possibility that buried resources are in the area.

It should be noted that the dam is not recorded on DPR 523 Site Recording forms and the SCCIC does not maintain the USFS site record in its files.

Verdugo Circuit (P-19-186860; USFS#05-01-51-138)

Unlike the systems that provided electricity to the Boulder Dam/Hoover Dam project, local circuits associated utility poles, and construction/maintenance roads are found in rural/forested areas throughout California. While the survey for the current project did not allow for the evaluation of the SCE road and Verdugo circuit outside of the APE, it appears that the utility poles and power lines within the current APE should not be considered more than ordinary and ubiquitous

structures (Daly 2017). The circuit does not appear eligible for listing on the National or California Registers under any of the four significance criteria and it will not be adversely impacted by the project. No mitigation is therefore necessary for the Verdugo Circuit.

USFS Transmission Line Road Alignment (19-186877; USFS#05-01-55-187)

Construction/maintenance roads such as the road that runs under the Verdugo Circuit in the APE are found in rural/forested areas throughout California. While the survey for the current project did not allow for the evaluation of the SCE road and Verdugo circuit outside of the APE, it appears that the utility poles and power lines should not be considered more than ordinary and ubiquitous structures. The construction/maintenance road does not appear to have the potential to be considered a historic resource as it does not meet any of the four significance criteria for eligibility (Daly 2017). The road alignment is not a historic resource and mitigation is therefore not necessary.

Hansen's Lodge (USFS#05-01-55-00017)

The flood of 1926 destroyed the lodge, but it was rebuilt, only to be destroyed again in 1938 by another, larger flood. Only stone fireplaces remained and the structure was not rebuilt (Leadabrand 1970). The last remnants of the lodge are said to have been knocked down years ago to deter weekend partygoers.

The site was investigated during the current project for any physical remains of the Hansen Lodge building. Other than three piles of river rocks that are supposed to have been from the stone chimney of the lodge, there are no physical attributes of a building that was located here. The site does not possess any physical aspects of integrity such as design, setting, materials, workmanship, feeling, and association, which could convey the history of Hansen's Lodge along Big Tujunga Creek and his patent homestead. It does not meet any of the four significance criteria for eligibility (Daly 2017).

While remnants of the lodge may be present under or adjacent to the access roads southwest of the dam, because the paving of existing roads is not anticipated to require substantial grading that could impact native sediments or require grading outside the existing access road footprint, no adverse effects to this site, if it still exists, are anticipated.

7.0 RECOMMENDATIONS

Retention of an Archaeologist prior to ground-disturbing activities in the APE/PA, or as a monitor during implementation, is at the discretion of LACFCD and its CEQA compliance responsibilities; however, if cultural resources or human remains are discovered during any ground disturbing activities, the USACE will be notified by either the project archaeologist or by LACFCD onsite personnel. All work in the vicinity of the discovery will cease until the USACE evaluates the nature and significance of the find, and determines the level of documentation necessary and potential consultation required with the NAHC, State Historic Preservation Officer (SHPO), Native American tribes, and any others. In the case of an inadvertent discovery of Human Remains, the proponent will immediately notify the responsible Federal official and County Coroner, and once determined to be of Native American origin by the coroner, the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations at 43 CFR 10 will be followed to manage and resolve the discovery and determine the final disposition of the remains.

8.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this cultural resources report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: October 2017 SIGNED:

Patrick O. Maxon, RPA
Director, Cultural Services

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1966 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In Archaic Prehistory in the Western United States, *Eastern New Mexico University Contributions in Anthropology* 1 (3):1-14.

Weeks, K. and Grimmer, A.
1995 *The Secretary of The Interior's Standards for the Treatment of Historic Properties: With Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*. U.S. Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services (Washington, D.C.).

Yamada, Katherine
2011 Glendale News-Press. http://articles.glendalenewspress.com/2011-07-01/news/tn-gnp-0703-yamada_1_julio-and-catalina-verdugo-land-carroll-w-parcher.

APPENDIX A

CULTURAL RESOURCES RECORDS SEARCH (SCCIC)

SCCIC Bibliography: Big Tujunga Reservoir

LA-01477

Author(s): Singer, Clay A.
Year: 1985
Title: Cultural Resources Survey and Impact Assessment for the Proposed Maple Canyon Relief Drain, Near Big Tujunga Dam in the Angeles National Forest, Los Angeles County, Ca
Affliliation:
Resources:
Quads: CONDOR PEAK
Pages:
Notes:

LA-01529

Author(s): McIntyre, Michael J.
Year: 1985
Title: Archaeological Reconnaissance Report: Lower Big Tujunga Vegation Management Arr
Affliliation: U.S. Forest Service
Resources:
Quads: CONDOR PEAK
Pages:
Notes:

LA-03053

Author(s): Anonymous
Year: 1994
Title: Cultural Resources Assessment Angeles Forest Highway at Mile Marker 23.00 Angeles National Forest Los Angeles County, California
Affliliation: LSA Associates, Inc.
Resources:
Quads: CONDOR PEAK
Pages:
Notes:

LA-05454

Author(s): Romani, Gwendolyn R.
Year: 2000
Title: Negative Archaeological Survey Report Southern California Edison: Fall Creek 2
Affliliation: Compass Rose Archaeological, Inc.
Resources:
Quads: CONDOR PEAK
Pages:
Notes:

LA-05510

Author(s): Romani, Gwendolyn R.
Year: 1999
Title: Sce Road Repair, Angeles National Forest, Los Angeles County Archaeological Survey Report
Affliliation: Compass Rose Archaeological, Inc.
Resources:
Quads: MT WILSON
Pages:
Notes:

SCCIC Bibliography: Big Tujunga Reservoir

LA-06789

Author(s): Storey, Noelle
Year: 2002
Title: Tom Ross Honey Company Apiary Site (special Use Permit Issuance Lar 504603) Angeles National Forest, Los Angeles County, California
Affliliation: Angeles National Forest
Resources:
Quads: CONDOR PEAK
Pages:
Notes:

LA-07154

Author(s): Bartoy, Kevin M.
Year: 2003
Title: Clear Creek School Camp Water Acquisition, Conveyance and Storage System Angeles National Forest, Los Angeles County, California
Affliliation: Pacific Legacy, Inc.
Resources:
Quads: CONDOR PEAK
Pages:
Notes: ARR # 05-01-00-868

LA-07155

Author(s): Bartoy, Kevin M.
Year: 2003
Title: La County Flood Control Tanks Angeles National Forest, Los Angeles County, California
Affliliation: Pacific Legacy, Inc.
Resources:
Quads: CONDOR PEAK
Pages:
Notes: ARR # 05-01-00-841

LA-07283

Author(s): Brasket, Kelli S.
Year: 2004
Title: Wildwood, Tujunga and Fall Creek Plantations Project Angeles National Forest, Los Angeles County, Ca (arr#05-01-000935)
Affliliation: Angeles National Forest
Resources: 19-003386
Quads: CONDOR PEAK
Pages:
Notes:

LA-08184

Author(s): Bartoy, Kevin M.
Year: 2004
Title: Clear Creek Fuelbreak Improvement Project, Angeles National Forest, Los Angeles County, California
Affliliation: Pacific Legacy, Inc.
Resources:
Quads: CONDOR PEAK
Pages:
Notes:

SCCIC Bibliography: Big Tujunga Reservoir

LA-09733

Author(s): Romani, Gwen
Year: 2004
Title: ARR #05-01-00827: Phase I Cultural Resource Investigation: LARRD Hazard Reduction, Organized Camps hazardous Fuels Reduction Project, Angeles National Forest, Los Angeles County, California.
Affiliation: Compass Rose, Inc
Resources: 19-003471
Quads: CHILAO FLAT, CONDOR PEAK, WATERMAN MTN
Pages: 40
Notes:

LA-09744

Author(s): Romani, Gwendolyn R.
Year: 1999
Title: Results of Archaeological Survey: Big Tujunga Arundo Removal (ARR No. 05-01-00569)
Affiliation: Compass Rose Archaeological, Inc
Resources: 19-001153, 19-002051
Quads: CHILAO FLAT, CONDOR PEAK, SUNLAND
Pages: 22
Notes:

LA-09746

Author(s): Schmidt, James and Gwen Romani
Year: 2003
Title: Phase I Cultural Resource Investigation: Southern California Edison, Verdugo Distribution Line Circuit, Angeles National Forest, Los Angeles County (ARR No. 05-01-00825)
Affiliation: Compass Rose Archaeological, Inc.
Resources: 19-001153, 19-001980, 19-002051, 19-186860
Quads: CONDOR PEAK, SUNLAND
Pages: 20
Notes:

LA-10175

Author(s): Unknown
Year: 2009
Title: Confidential Cultural Resources Specialist Report for the Tehachapi Transmission Project
Affiliation: Applied Earthworks, Aspen Environmental Group
Resources: 19-000806, 19-001128, 19-001299, 19-001300, 19-001315, 19-001357, 19-001382, 19-001636, 19-001770, 19-001771, 19-001783, 19-001956, 19-001957, 19-002206, 19-002212, 19-002343, 19-002350, 19-002363, 19-002411, 19-002412, 19-003009, 19-003018, 19-003025, 19-003031, 19-003032, 19-003037, 19-003090, 19-003099, 19-003136, 19-003152, 19-003295, 19-003385, 19-003477, 19-003606, 19-003638, 19-003795, 19-003852, 19-003853, 19-003854, 19-100277, 19-100439, 19-100496, 19-100644, 19-120031, 19-120032, 19-120072, 19-120074, 19-180689, 19-186545, 19-186860, 19-186870, 19-186871, 19-186872, 19-186873, 19-186875, 19-186876, 19-186877, 19-186917, 19-186921, 19-186923, 19-186925, 19-187713
Quads: ACTON, AZUSA, BALDWIN PARK, CHILAO FLAT, CONDOR PEAK, DEL SUR, EL MONTE, FAIRMONT BUTTE, LA HABRA, LAKE HUGHES, LANCASTER WEST, LITTLE BUTTES, LOS ANGELES, MT WILSON, PACIFICO MOUNTAIN, PALMDALE, PASADENA, RITTER RIDGE, SLEEPY VALLEY, WATERMAN MTN, WHITTIER, YORBA LINDA
Pages: 234
Notes: Also OR 3777

SCCIC Bibliography: Big Tujunga Reservoir

LA-10470

Author(s): Schmidt, James

Year: 2010

Title: Archaeological Monitoring Report - Southern California Edison Station Fire Emergency Transmission Line Road Maintenance Project Project, Angeles National Forest, Los Angeles County, California ARR# 05-01-1154

Affliliation: Compass Rose Archaeological

Resources: 19-000241, 19-000902, 19-001128, 19-001359, 19-001382, 19-001572, 19-002350, 19-002359, 19-002361, 19-002363, 19-002411, 19-002412, 19-002987, 19-002989, 19-002991, 19-002994, 19-002995, 19-002996, 19-002997, 19-002998, 19-003000, 19-003004, 19-003005, 19-003008, 19-003009, 19-003018, 19-003025, 19-003037, 19-003136, 19-003141, 19-003152, 19-003295, 19-003562, 19-003606, 19-003722, 19-003730, 19-003731, 19-003732, 19-100438, 19-100496, 19-186545, 19-186876, 19-186877, 19-186901, 19-186923, 19-186925, 19-187713

Quads: ACTON, AZUSA, CHILAO FLAT, CONDOR PEAK, MT WILSON, PACIFICO MOUNTAIN

Pages: 31

Notes:

APPENDIX B

PALEONTOLOGICAL RESOURCES RECORDS SEARCH (LACM)

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Vertebrate Paleontology
Telephone: (213) 763-3248
FAX: (213) 746-7431
e-mail: vrhue@nhm.org

OCT 2 8 2011

BY:

NATURAL HISTORY MUSEUM
LOS ANGELES COUNTY

27 October 2011

BonTerra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626-7969

Attn: Patrick O. Maxon, Director, Cultural Resources

re: Paleontological Resources for the proposed Big Tujunga Dam and Reservoir Post-Fire Sediment Removal Project, in Big Tujunga Canyon, Los Angeles County, project area

Dear Patrick:

I have conducted a thorough search of our Vertebrate Paleontology records for the proposed Big Tujunga Dam and Reservoir Post-Fire Sediment Removal Project, in Big Tujunga Canyon, Los Angeles County, project area as outlined on the portion of the Condor Peak USGS topographic quadrangle map that you sent to me via e-mail on 3 October 2011. We do not have any vertebrate fossil localities that lie within the proposed project boundaries, nor do we have any localities very nearby from sedimentary deposits that occur in the proposed project area.

Bedrock in most of the proposed project area is composed of plutonic igneous rocks that, of course, will be devoid of fossils. In the southwestern portion of the proposed project area there are surficial deposits of older Quaternary Alluvium, probably as a mixture of fan and fluvial deposits. Below the Big Tujunga Dam there are deposits of younger Quaternary Alluvium, albeit as coarse gravelly deposits. These latter types of sedimentary deposits typically do not contain vertebrate fossils, at least in the uppermost layers, and we do not have any vertebrate fossil localities very nearby from these deposits.

Excavations in the igneous bedrock occurring throughout most of the proposed project area will not encounter any fossils. Shallow excavations in the Quaternary deposits exposed in the southwestern portion of the proposed project area probably will not uncover significant

vertebrate fossils. Deeper excavation in the latter portion of the proposed project area, however, may encounter significant vertebrate fossils. Any substantial excavations in the sedimentary deposits exposed in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Any fossil materials uncovered during mitigation activities should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

Samuel A. McLeod
Vertebrate Paleontology

enclosure: draft invoice

APPENDIX C

NATIVE AMERICAN CONSULTATION (NAHC)

BonTerra CONSULTING

TRANSMITTAL

DATE: September 22, 2011

TO:	Mr. Dave Singleton	**FAX NUMBER:**	(916) 657-5390
	Program Analyst	**TEL NUMBER:**	(916) 653-6251
	Native American Heritage Comm.	**PROJECT:**	**Big Tujunga Reservoir Sediment Removal**
	915 Capitol Mall, Rm. 364		
	Sacramento, CA 95814	**FROM:**	Patrick Maxon, RPA

☒ Fax / Pages_ ☒ E-Mail ☐ Fed Ex / Overnite Express ☐ Delivery / Courier

REGARDING: Sacred Lands File Search and Contact List Request

Dear Mr. Singleton:

BonTerra Consulting has been retained to complete a cultural resources study for three proposed **Big Tujunga Reservoir Sediment Removal Project** located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines).

At your earliest convenience, please conduct searches of the Sacred Lands File for the **Big Tujunga Reservoir Sediment Removal Project** and a one-mile radius. The project site is located on a portion of the USGS ***Condor Peak, CA*** 7.5 Minute Quadrangles in Township 2 and 3 North; Range 12 and 13 West (*S.B.B.M*).

The project entails the removal of alluvial sediment deposited into the Big Tujunga Reservoir. The project includes grading and widening of access roads to and from the reservoir.

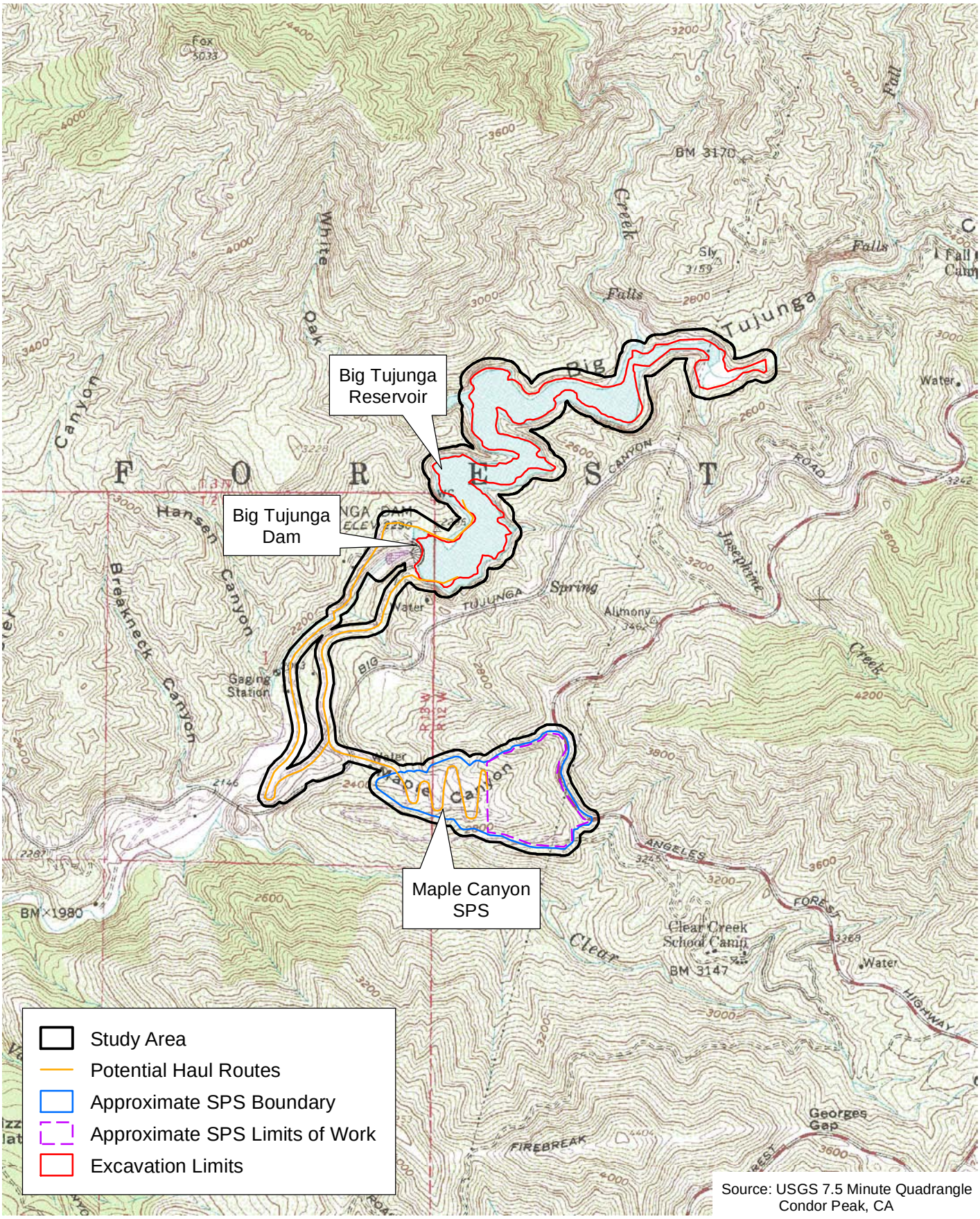
Please fax the results to me at (714) 444-9599, or e-mail to pmaxon@bonterraconsulting.com, referencing your letter to the "**Big Tujunga Reservoir Sediment Removal Project** ".

If you have any questions or require any additional information, please do not hesitate to contact me at (714) 444-9199 or via email.

Sincerely,

BONTERRA CONSULTING

Patrick Maxon, RPA
Director, Cultural Resources



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U.S. Geological Survey 7.5-Minute Quadrangle

Exhibit 2

Big Tujunga Dam and Reservoir Post-Fire Sediment Removal Project

N W E S

2,000 1,000 0 2,000 Feet

BonTerra CONSULTING

(Rev: 6-21-2011 CJS) R:\PAS\Projects\CoLADPW\J162\Graphics\Bio\Ex2_LV_quad.pdf

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

September 26, 2011

Mr. Patrick Maxon, RPA, Director, Cultural Resources
Bonterra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

Sent by FAX to: 714-444-9599
No. of Pages: 4

Re: Sacred Lands File Search and Native American Contacts list for the **"Big Tujunga Reservoir Sediment Removal Project;"** located in the Tujunga Canyon; Los Angeles County, California

Dear Mr. Maxon:

The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search of the 'area of potential effect,' (APE) based on the USGS coordinates provided and **Native American cultural resources were not identified** in the USGS coordinates you specified. Also, please note; the NAHC Sacred Lands Inventory is not exhaustive and do not preclude the discovery of cultural resources during ground braking activity. There are Native American cultural resources in close proximity to the APE.

The California Environmental Quality Act (CEQA – CA Public Resources Code §§ 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. CA Government Code §65040.12(e) defines "environmental justice" provisions and is applicable to the environmental review processes.

Early consultation, even during Initial Study or First Phase surveys with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Local Native Americans may have knowledge of the religious and cultural significance of the historic properties of the proposed project for the area (e.g. APE). Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). We urge consultation with those tribes and interested Native Americans on the list of Native American Contacts we attach to this letter in order to see if your proposed project might impact Native American cultural resources. Lead agencies should consider avoidance as defined in §15370 of the CEQA Guidelines when significant cultural resources as defined by the CEQA Guidelines §15064.5 (b)(c)(f) may be

affected by a proposed project. If so, Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "substantial," and Section 2183.2 which requires documentation, data recovery of cultural resources. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Partnering with local tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 4(f), Section 110 (f)(k) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

Also, California Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery', another important reason to have Native American Monitors on board with the project.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. An excellent way to reinforce the relationship between a project and local tribes is to employ Native American Monitors in all phases of proposed projects including the planning phases.

Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton

Attachment: Native American Contact List

Native American Contacts
Los Angeles County
September 26, 2011

Charles Cooke
32835 Santiago Road
Acton , CA 93510
suscol@intox.net

(661) 733-1812 - cell
suscol@intox.net

Chumash
Fernandeno
Tataviam
Kitanemuk

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, CA 91362
folkes@msn.com
805 492-7255
(805) 558-1154 - cell
folkes9@msn.com

Chumash
Tataviam
Ferrnandeño

Fernandeno Tataviam Band of Mission Indians
Ronnie Salas, Cultural Preservation Department
601 South Brand Boulevard, Suite 102
San Fernando CA 91340
rsalas@tataviam-nsn.gov
(818) 837-0794 Office

(818) 837-0796 Fax

Fernandeno
Tataviam

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
981 N. Virginia
Covina , CA 91722
deedominguez@juno.com
(626) 339-6785

Yowlumne
Kitanemuk

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838
Newhall , CA 91322
tsen2u@hotmail.com
(661) 753-9833 Office
(760) 885-0955 Cell
(760) 949-1604 Fax

Fernandeño
Tataviam
Serrano
Vanyume
Kitanemuk

Randy Guzman - Folkes
655 Los Angeles Avenue, Unit E
Moorpark , CA 93021
ndnRandy@yahoo.com
(805) 905-1675 - cell

Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed "Big Tujunga Reservoir Sediment Removal Project;" located in the Angeles National Forest area; Los Angeles County, California for which a Sacred Lands File search and Native American Contacts list were requested.

BonTerra CONSULTING

PASADENA COSTA MESA

T: (714) 444-9199 F: (714) 444-9599
www.BonTerraConsulting.com
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 27, 2011

Mr. Ron Andrade
LA City/County Native American Indian Comm.
3175 W. 6th Street, Rm. 403
Los Angeles, California 90020

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Mr. Andrade:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

Location

The project site is located on a portion of the USGS Condor Peak, *CA* 7.5 Minute Quadrangles in Township 2 and 3 North; Range 12 and 13 West (*S.B.B.M*). See attached exhibit.

Project

The Project entails the removal of alluvial sediment deposited into the Big Tujunga Reservoir. The project includes grading and widening of access roads to and from the reservoir. BonTerra will produce a cultural resources report that will identify any significant issues related to any cultural resources on the property.

NAHC Notification

A Sacred Lands File Search conducted by the Native American Heritage Commission (NAHC) did not identify the presence of Native American cultural resources on the project site. The NAHC also provided BonTerra Consulting with a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area. Your name and contact information was included on the list and serves as the basis for this letter.

Records Search/Survey

An archaeological/historic records search will be conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton to evaluate the existing conditions of the project site. A survey of the project site will be completed after the records search to identify any exposed cultural resources.

Your participation in this local planning process is important. If you have any additional knowledge of Native American Sacred Lands or other cultural resources on or near the study area, or any comment on the project, please contact me at your earliest convenience at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com, with a subject line referencing the "Big Tujunga Reservoir Sediment Removal Project".

Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

R:\Projects\CoLADPW-S\J167\Cultural\NA Scoping BigT-092711.docx

BonTerra CONSULTING

PASADENA COSTA MESA

T: (714) 444-9199 F: (714) 444-9599
www.BonTerraConsulting.com
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 27, 2011

Mr. Charles Cooke
Tehachapi Indian Tribe
32835 Santiago Road
Acton, California 93510

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Mr. Cooke:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

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BonTerra CONSULTING

PASADENA COSTA MESA

T: (714) 444-9199 F: (714) 444-9599
www.BonTerraConsulting.com

151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 27, 2011

Ms. Delia Dominguez
Kitanemuk & Yowlumne Tejon Indians
981 N. Virginia
Covina, California 91722

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Ms. Dominguez:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

Location

The project site is located on a portion of the USGS Condor Peak, *CA* 7.5 Minute Quadrangles in Township 2 and 3 North; Range 12 and 13 West (*S.B.B.M*). See attached exhibit.

Project

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

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BonTerra CONSULTING

PASADENA COSTA MESA

T: (714) 444-9199 F: (714) 444-9599
www.BonTerraConsulting.com
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 27, 2011

Mr. Randy Guzman-Folkes
655 Los Angeles Avenue
Unit E
Moorpark, California 93021

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Mr. Guzman-Folkes:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

Location

The project site is located on a portion of the USGS Condor Peak, *CA* 7.5 Minute Quadrangles in Township 2 and 3 North; Range 12 and 13 West (*S.B.B.M*). See attached exhibit.

Project

The Project entails the removal of alluvial sediment deposited into the Big Tujunga Reservoir. The project includes grading and widening of access roads to and from the reservoir. BonTerra will produce a cultural resources report that will identify any significant issues related to any cultural resources on the property.

NAHC Notification

A Sacred Lands File Search conducted by the Native American Heritage Commission (NAHC) did not identify the presence of Native American cultural resources on the project site. The NAHC also provided BonTerra Consulting with a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area. Your name and contact information was included on the list and serves as the basis for this letter.

Records Search/Survey

An archaeological/historic records search will be conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton to evaluate the existing conditions of the project site. A survey of the project site will be completed after the records search to identify any exposed cultural resources.

Your participation in this local planning process is important. If you have any additional knowledge of Native American Sacred Lands or other cultural resources on or near the study area, or any comment on the project, please contact me at your earliest convenience at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com, with a subject line referencing the "Big Tujunga Reservoir Sediment Removal Project".

Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

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Costa Mesa, CA 92626

September 27, 2011

Mr. Ronnie Salas
Fernandeno Tataviam Band of Mission Indians
601 South Brand Blvd. Suite 102
San Fernando, California 91340

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Mr. Salas:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Records Search/Survey

An archaeological/historic records search will be conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton to evaluate the existing conditions of the project site. A survey of the project site will be completed after the records search to identify any exposed cultural resources.

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

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www.BonTerraConsulting.com

151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 27, 2011

Ms. Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, California 91362

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Ms. Salazar Folkes:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Records Search/Survey

An archaeological/historic records search will be conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton to evaluate the existing conditions of the project site. A survey of the project site will be completed after the records search to identify any exposed cultural resources.

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

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Costa Mesa, CA 92626

September 27, 2011

Mr. John Valenzuela
San Fernando Band of Mission Indians
P.O. Box 221838
Newhall, California 91322

Subject: Big Tujunga Reservoir Sediment Removal Project

Dear Mr. Valenzuela:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Big Tujunga Reservoir Sediment Removal Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director – Cultural Resources

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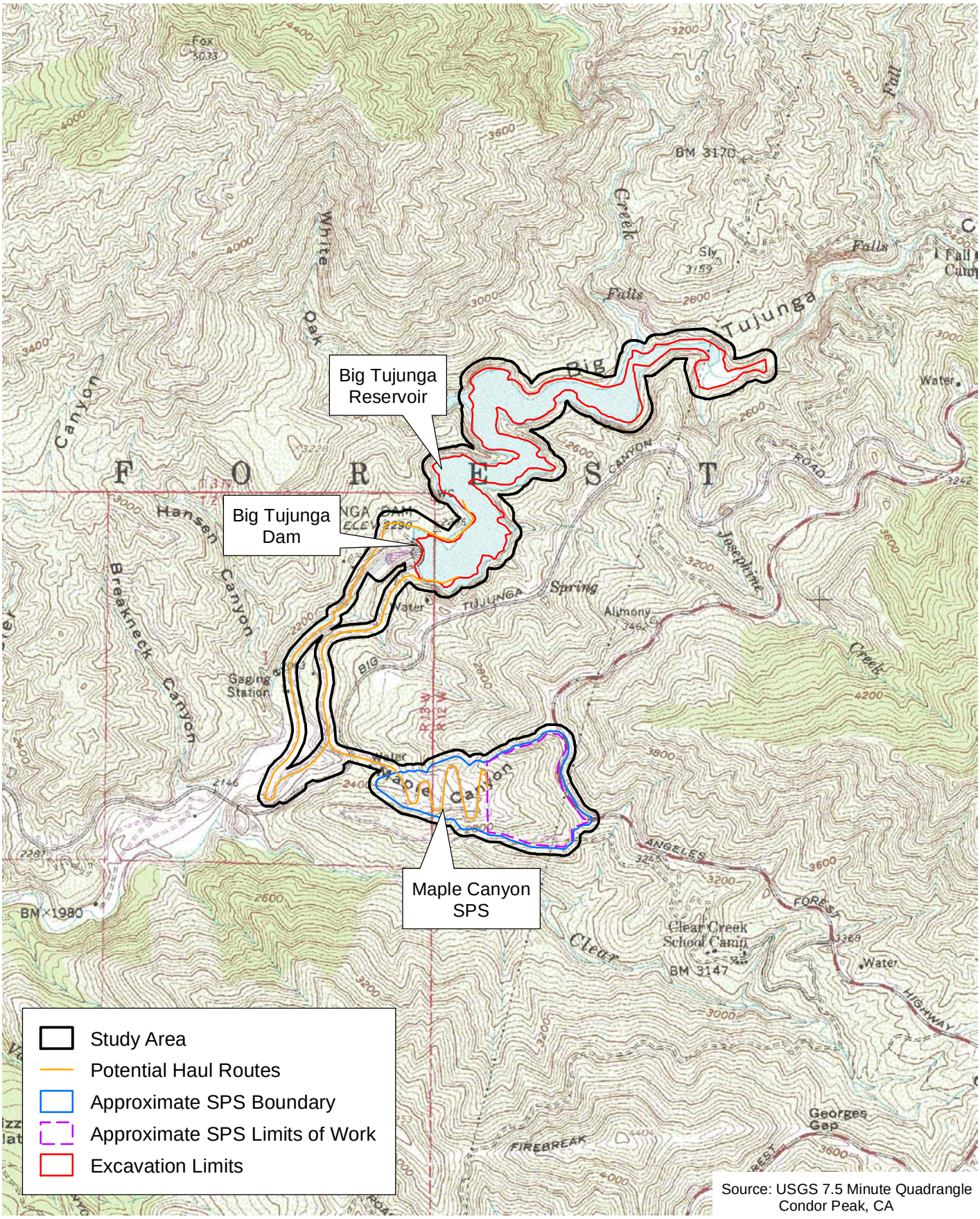

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U.S. Geological Survey 7.5-Minute Quadrangle

Exhibit 2

Big Tujunga Dam and Reservoir Post-Fire Sediment Removal Project

N W E S

2,000 1,000 0 2,000 Feet

BonTerra CONSULTING

(Rev: 6-21-2011 CJS) R:\PAS\Projects\CoLADPW\J162\Graphics\Bio\Ex2_LV_quad.pdf

APPENDIX D

FOREST SERVICE PERMIT

SEP 29 2011

Authorization ID: LAR9040CRI
Contact ID: BON TERRA
Expiration Date: 09/26/2012

FS-2700-32 (10/09)
OMB No. 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

PERMIT FOR ARCHAEOLOGICAL INVESTIGATIONS

Authority:
The Antiquities Act of 1906, 16 U.S.C. 431-433
The Organic Act of 1897, 16 U.S.C. 551

1. Holder **BON TERRA CONSULTING**	**2. Date of corresponding application** 9/13/2011
3. Address Attn: Patrick Maxon 151 Kalmus, E-200 Costa Mesa, CA 92626	**4. Telephone numbers** 714/444/9199(office) **5. Email addresses** pmaxon@bonterraconsulting.com
6. Name of authorized officer Michael J. McIntyre, District Ranger Telephone numbers 818/899/1900 x223 Email addresses	**7. Name of principal investigators** Patrick Maxon Telephone numbers 714/444/9199(office) Email addresses pmaxon@bonterraconsulting.com
8. Name of field directors authorized to carry out field projects Patrick Maxon and Albert Knight	**Telephone numbers** 714/444/9199(Maxon) 818/426/4730(Knight) **Email addresses** pmaxon@bonterraconsulting.com ahunknight@msn.com

9. Activities authorized

Consulting: Project-specific
Non-ground-disturbing activities (such as surveys)

10. Description of National Forest System lands authorized for use (hereinafter referred to as "the permit area")

Cultural resource study for the excavation of sediment within the Big Tujunga Reservoir and the deposition of the sediment in the Maple Canyon Sediment Placement Site within Big Tujunga Canyon.

11. Permit term
From September 26, 2011 To September 26, 2012
12. Name and address of the curatorial facility in which collections, records, data, photographs, and other documents resulting from activities conducted under this permit shall be deposited for permanent preservation on behalf of the United States Government. USDA Forest Service Attn: Darrell Vance 701 N. Santa Anita Ave. Arcadia, CA 91006

TERMS AND CONDITIONS

I. GENERAL TERMS

A. AUTHORITY. This permit is issued pursuant to The Organic Act of 1897, 16 U.S.C. 551, 36 CFR Part 251, Subpart B, 36 CFR Part 296, the Uniform Rules and Regulations of the Antiquities Act of 1906, 43 CFR Part 3, and applicable Forest Service policies and procedures and is subject to their provisions.

B. AUTHORIZED OFFICER. The authorized officer for this permit is the Forest Supervisor or a subordinate officer with delegated authority.

C. ANNUAL REVIEW. If this permit is issued for more than one year, it shall be reviewed annually by the authorized officer.

D. RENEWAL AND EXTENSION. This permit is not renewable. The holder may request an extension of this permit for a limited, specified period to complete activities authorized under this permit. Requests for an extension must be submitted in writing at least one month before expiration of this permit.

E. AMENDMENT. This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms that may be required by law, regulation, the applicable land management plan, or projects and activities implementing a land management plan pursuant to 36 CFR Part 215. Any amendments to individuals named in or activities authorized by this permit that are needed by the holder must be approved by the authorized officer in writing.

F. COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER LEGAL REQUIREMENTS. In exercising the privileges granted by this permit, the holder shall comply with all present and future federal laws and regulations and all present and future state, county, and municipal laws, regulations, and other legal requirements that apply to the permit area, to the extent they do not conflict with federal law, regulations, or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, and other legal requirements that fall under the jurisdiction of other governmental entities.

G. NON-EXCLUSIVE USE. The use and occupancy authorized by this permit are not exclusive. The Forest Service reserves the right of access to the permit area, including a continuing right of physical entry to the permit area for inspection, monitoring, or any other purpose consistent with any right or obligation of the United States under any law or regulation. The holder shall allow the authorized officer or the authorized officer's representative full access to the permit area at any time the holder is in the field for purposes of examining the permit area and any recovered materials and related records. The Forest Service reserves the right to allow others to use the permit area in any way that is not inconsistent with the holder's rights and privileges under this permit, after consultation with all parties involved.

H. ASSIGNABILITY. This permit is not assignable or transferable.

II. OPERATIONS

A. OPERATING PLAN. The application corresponding to this permit is incorporated as the operating plan for this permit and is attached as Appendix A. The authorized officer may supplement the information contained in the application as appropriate or necessary.

B. REQUIRED PERMITS. The holder shall obtain all other permits required for conducting the activities authorized by this permit.

C. QUALIFIED INDIVIDUALS. Archaeological project design, literature review, development of regional historical contexts, site evaluation, conservation and protection measures, and recommendations for subsequent investigations shall be developed with direct involvement of an individual who meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation. Fieldwork shall be overseen by an individual who meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation.

D. CONDITION OF OPERATIONS. The holder shall maintain the authorized improvements and permit area to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this permit. Standards are subject to periodic change by the authorized officer.

E. PROHIBITION ON USE OF MECHANIZED EQUIPMENT IN WILDERNESS AREAS. The holder shall not use mechanized equipment in wilderness areas and shall not use mechanized equipment in proposed or potential wilderness areas without prior written approval from the authorized officer.

F. PROHIBITION ON FLINT KNAPPING AND LITHIC REPLICATION EXPERIMENTS. The holder shall not conduct any flint knapping or lithic replication experiments at any archaeological site, aboriginal quarry source, or non-archaeological site that might be mistaken for an archaeological site as a result of such experiments.

G. PROHIBITION ON IMPEDING OR INTERFERING WITH OTHER USES. The holder shall perform the activities authorized by this permit so as not to impede or interfere with administrative or other authorized uses of National Forest System lands.

H. RESTRICTION ON MOTOR VEHICLE USE. The holder shall restrict motor vehicle use to designated roads, trails, and areas, unless specifically provided otherwise in the operating plan.

I. MINIMIZING GROUND DISTURBANCE. The holder shall keep ground disturbance to a minimum consistent with the nature and purpose of the authorized fieldwork.

J. RESOURCE PROTECTION. The holder shall conduct all activities so as to prevent or minimize scarring, erosion, littering, and pollution of National Forest System lands, water pollution, and damage to watersheds. In addition, the holder shall take precautions at all times to prevent wildfire. The holder may not burn debris without prior written approval from the authorized officer.

K. PREVENTION OF INJURY. The holder shall take precautions to protect livestock, wildlife, the public, and other users of National Forest System lands from accidental injury at any excavation site.

L. DESTRUCTION AND REMOVAL OF TREES. The holder shall not destroy or remove any trees on National Forest System lands without prior written approval from the authorized officer.

M. RESOURCE MANAGEMENT FACILITIES. The holder shall not disturb resource management facilities, such as fences, reservoirs, and other improvements, within the permit area without prior written approval from the authorized officer. Where disturbance of a resource management facility is necessary, the holder shall return it to its prior location and condition.

N. BACKFILLING. The holder shall backfill all subsurface test and excavation sites as soon as possible after recording the results and shall restore subsurface test and excavation sites as closely as possible to their original contour.

O. REMOVAL OF STAKES AND FLAGGING. The holder shall remove temporary stakes and flagging installed by the holder upon completion of fieldwork.

P. SITE RESTORATION. The holder shall restore all camp and work areas to their original condition before vacating the permit area. Refuse shall be carried out and deposited in disposal areas approved by the authorized officer.

Q. TITLE TO ARTIFACTS AND ASSOCIATED DOCUMENTATION. Archaeological and historical artifacts excavated or removed from National Forest System lands and any associated documentation shall remain the property of the United States.

R. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION (NAGPRA). In accordance with 25 U.S.C. 3002 (d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall make a reasonable effort to protect and secure the items. The holder shall immediately notify the authorized officer by telephone of the discovery and shall follow up with written confirmation of the discovery. The activity that

resulted in the inadvertent discovery may not resume until 30 days after the authorized officer certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a binding written agreement has been executed between the Forest Service and the affiliated Indian tribes that adopts a recovery plan for the human remains and objects.

S. ADDITIONAL REQUIREMENTS. Prior to beginning any fieldwork under the authority of this permit, the holder shall contact the authorized officer responsible for administering the lands involved to obtain further instructions regarding current land and resource conditions.

III. REPORTING REQUIREMENTS

A. PRELIMINARY REPORT. The holder shall submit a preliminary report to the authorized officer within 30 days of completion of the first stage of fieldwork. The preliminary report shall enumerate what was done during the first stage of fieldwork, how it was done, by whom, where, and with what results, including maps, global positioning satellite data, an approved site form for each newly recorded archaeological site, and the holder's professional recommendations regarding resource significance, as appropriate. Depending on the scope, duration, and nature of the work, the authorized officer may require progress reports periodically for the duration of the authorized activities.

B. DRAFT FINAL REPORT. Within 60 days of completion of fieldwork, the holder shall submit an edited draft final report to the authorized officer for review to ensure conformance with applicable laws, regulations, policies, and procedures and the terms and conditions of this permit.

C. FINAL REPORT. The holder shall submit the original final report and at least two copies to the authorized officer within 90 days after completion of fieldwork.

D. BLANKET SURVEY CONSULTING PERMIT. If this is a multi-year survey consulting permit, at the end of each calendar year, the holder shall submit to the authorized officer a report enumerating all activities conducted under this permit.

E. DEPOSIT OF MATERIALS AND DOCUMENTS WITH A CURATORIAL FACILITY. Within 90 days of the date the final report is submitted to the authorized officer, the holder shall deposit all artifacts, samples, and collections and original or clear copies of all records, data, photographs, and other documents resulting from activities authorized by this permit with the curatorial facility named in block 12.

F. CATALOGUE AND EVALUATION OF DEPOSITED MATERIALS. The holder shall provide the authorized officer with a catalogue and evaluation of all materials deposited with the curatorial facility named in block 12, including the facility's accession or catalogue numbers, and confirmation, signed by an authorized curatorial facility official, that artifacts, samples, and collections were deposited with the approved curatorial facility. The confirmation shall include the date the materials were deposited and the type, number, and condition of the deposited materials.

G. CONFIDENTIALITY OF SENSITIVE RESOURCES. The holder agrees to keep the specific location of sensitive resources confidential. Sensitive resources include but are not limited to threatened, endangered, and rare species; archaeological sites; caves; fossil sites; minerals; commercially valuable resources; and traditional cultural properties.

H. CONFIDENTIALITY OF INFORMATION IDENTIFYING ARCHAEOLOGICAL SITES. Without the authorized officer's prior written approval, the holder shall not publish any locational or other information identifying archaeological sites that could compromise their protection and management by the federal government.

I. IDENTIFICATION OF FOREST SERVICE PERMIT. Any published article, paper, or book containing results of work conducted under this permit shall specify that the work was performed in the Angeles National Forest under a Forest Service permit.

J. SUBMISSION OF WRITTEN MATERIALS. The holder shall submit a copy of any published or unpublished report, article, paper, or book resulting from the authorized activities (other than reports required by clauses III.A, B, and C) to the authorized officer and the appropriate official of the curatorial facility named in block 12. The holder shall submit tabular and spatial data to the authorized officer in the format specified in Appendix A.

IV. RIGHTS AND LIABILITIES

A. LEGAL EFFECT OF THE PERMIT. This permit, which is revocable and terminable, is not a contract or a lease, but rather a federal license. The benefits and requirements conferred by this authorization are reviewable solely under the

procedures set forth in 36 CFR Part 251, Subpart C, and 5 U.S.C. 704. This permit does not constitute a contract for purposes of the Contract Disputes Act, 41 U.S.C. 601. The permit is not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

B. VALID OUTSTANDING RIGHTS. This permit is subject to all valid outstanding rights. Valid outstanding rights include those derived from mining and mineral leasing laws of the United States. The United States is not liable to the holder for the exercise of any such right.

C. ABSENCE OF THIRD-PARTY BENEFICIARY RIGHTS. The signatories of this permit do not intend to confer any rights on any third party as a beneficiary under this permit.

D. DAMAGE TO UNITED STATES PROPERTY. The holder has an affirmative duty to protect from damage the land, property, and other interests of the United States. Damage includes but is not limited to fire suppression costs, and all costs and damages associated with or resulting from the release or threatened release of a hazardous material occurring during or as a result of activities of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees on, or related to, the lands, property, and other interests covered by this permit. For purposes of clause IV.F, "hazardous material" shall mean any hazardous substance, pollutant, contaminant, hazardous waste, oil, and/or petroleum product, as those terms are defined under any federal, state, or local laws or regulations.

E. INDEMNIFICATION. The holder shall indemnify, defend, and hold harmless the United States for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the holder in connection with the use and occupancy authorized by this permit. This indemnification and hold harmless provision includes but is not limited to acts and omissions of the holder or the holder's family, guests, invitees, heirs, assignees, agents, employees, contractors, or lessees in connection with the use and occupancy authorized by this permit which result in (1) violations of any laws and regulations which are now or which may become applicable; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States; or (4) the release or threatened release of any solid waste, hazardous waste, hazardous materials, pollutant, contaminant, oil in any form, or petroleum product into the environment. The authorized officer may prescribe terms that allow the holder to replace, repair, restore, or otherwise undertake necessary curative actions to mitigate damages in addition to or as an alternative to monetary indemnification.

F. CONTINUATION OF LIABLITY BEYOND EXPIRATION. The holder shall not be released from requirements of this permit until all outstanding obligations have been satisfied, regardless of whether the permit has expired.

V. PERMIT FEES

A. LAND USE FEE. The holder shall pay an annual land use fee of $30.00 for the period from September 26, 2011 to September 26, 2012 and thereafter annually on N/A, in the amount of N/A.

B. MODIFICATION OF THE LAND USE FEE. The land use fee may be revised whenever necessary to reflect the market value of the authorized use or when the fee system used to calculate the land use fee is modified or replaced.

C. TERMINATION FOR NONPAYMENT. This permit shall terminate without the necessity of prior notice and opportunity to comply when any permit fee payment is 90 calendar days from the due date in arrears. The holder shall be responsible for the delinquent fees, as well as any other costs of restoring the site to its original condition, including hazardous waste cleanup.

VI. REVOCATION, SUSPENSION, AND TERMINATION

A. REVOCATION AND SUSPENSION. The authorized officer may revoke or suspend this permit in whole or in part:

1. For noncompliance with federal, state or local law.
2. For noncompliance with the terms and conditions of this permit.
3. For abandonment or other failure of the holder to exercise the privileges granted.
4. With the consent of the holder.
5. For specific and compelling reasons in the public interest.

Prior to revocation or suspension, other than immediate suspension under clause C, the authorized officer shall give the holder written notice of the grounds for revocation or suspension. In the case of revocation or suspension based on clause

VI.A.1, 2, or 3, the authorized officer shall give the holder a reasonable period, not to exceed 90 days, to cure any noncompliance.

B. RELINQUISHMENT OF ARTIFACTS AND DOCUMENTS. Within 30 days of revocation or suspension of this permit, the holder shall deliver to the Forest Service all artifacts and originals of all photographs, negatives, catalogues, field notes, analysis sheets, reports in any stage of preparation, computer files, and any other records resulting from any activity conducted under this permit.

C. IMMEDIATE SUSPENSION. The authorized officer may immediately suspend this permit in whole or in part when necessary to protect public health or safety or the environment. The suspension decision shall be in writing. The holder may request an on-site review with the authorized officer's supervisor of the adverse conditions prompting the suspension. The authorized officer's supervisor shall grant this request within 48 hours. Following the on-site review, the authorized officer's supervisor shall promptly affirm, modify, or cancel the suspension.

D. APPEALS AND REMEDIES. Written decisions made by the authorized officer relating to administration of this permit are subject to appeal pursuant to 36 CFR Part 251, Subpart C, as amended. Revocation or suspension of this permit shall not give rise to any claim for damages by the holder against the Forest Service.

E. TERMINATION. This permit shall terminate when by its terms a fixed or agreed upon condition, event, or time occurs without any action by the authorized officer. Examples include but are not limited to expiration of the permit by its terms on a specified date. Termination of this permit is not subject to administrative appeal and shall not give rise to any claim for damages by the holder against the Forest Service.

VII. MISCELLANEOUS PROVISIONS

A. MEMBERS OF CONGRESS. No member of or delegate to Congress or Resident Commissioner shall benefit from this permit either directly or indirectly, except to the extent the authorized use provides a general benefit to a corporation.

B. SUPERIOR CLAUSES. If there is any conflict between any of the preceding clauses and any subsequent clauses or appendices, the preceding clauses shall control.

THIS PERMIT IS ACCEPTED SUBJECT TO ALL ITS TERMS AND CONDITIONS.

BEFORE ANY PERMIT IS ISSUED TO AN ENTITY, DOCUMENTATION MUST BE PROVIDED TO THE AUTHORIZED OFFICER OF THE AUTHORITY OF THE SIGNATORY FOR THE ENTITY TO BIND IT TO THE TERMS AND CONDITIONS OF THE PERMIT.

ACCEPTED:

Patrick Maxon, Director - Cultural Resources Bon Terra Consulting	[signature]	9/22/11
HOLDER NAME, PRECEDED BY NAME AND TITLE OF PERSON SIGNING ON BEHALF OF HOLDER, IF HOLDER IS AN ENTITY	SIGNATURE	DATE

APPROVED:

Michael J. McIntyre District Ranger	[signature]	9/28/11
NAME AND TITLE OF AUTHORIZED OFFICER	SIGNATURE	DATE

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

Appendix A

Use Code: 411
Authorization ID: LAN 9040 CAL
Contact ID: Bon Terra

FS-2700-30 (Rev 05/06)
OMB No. 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

APPLICATION FOR PERMIT FOR ARCHAEOLOGICAL INVESTIGATIONS

<USER NOTES FOR AUTHORITY>
<Select all authorities that apply. Delete any that do not apply.>

Authority:
Archaeological Resources Protection Act of 1979,
16 U.S.C. 470aa-mm

Antiquities Act of 1906,
16 U.S.C. 431-433

Organic Act of 1897
16 U.S.C. 551

Instructions: Complete and return two copies of this application form and required attachments to the appropriate Forest Service administrative unit. All information requested must be completed before the application will be considered. Use separate pages if more space is needed to complete a section.

1. Name of applicant (individual, institution, corporation, partnership, or other entity)
Patrick Maxon, RPA
BonTerra Consulting

2. Mailing address
151 Kalmus, E-200
Costa Mesa, Ca 92626

3. Telephone numbers
714-444-9199 (office)
949-677-2393 (mobile)

4. Email addresses
pmaxon@bonterraconsulting.com

5. Nature of archaeological work proposed

- ☒ Survey and recordation
- ☐ Limited testing (shovel tests, scrapes, probes)
- ☐ Formal testing and/or surface collection (project-specific)
- ☐ Excavation and/or removal (project-specific)
- ☐ Conservation and protection, e.g., ruin stabilization, restoration, rock art conservation, ARPA damage assessments (project-specific)

6. Location of proposed work (attach additional sheets)

Project is in Los Angeles County with the majority of the project site on Angeles National Forest lands.

Project area is shown on the USGS 7.5 minute Condor Peak, CA quadrangle (1995); Township 2 and 3 North, Range 12 and 13 West, portions of Section 1 and unsectioned. A copy of the attachaed map showing the specific project area depicts the proposed survey area. The green polygon shows the non-public lands within the project area.

The Forest Service administrative unit is the Angeles National Forest Los Angeles River Ranger District

7. Duration of proposed work

Duration of entire project: From September 12, 2011 To September 12, 2012

Duration of fieldwork: 1 day of field work From 9/12/11 To 9/12/12

8. Principal investigator

Patrick Maxon

Principal investigator contact information
949-677-2393 (mobile)
pmaxon@bonterraconsulting.com

9. Field directors	Field director contact information
Patrick Maxon Albert Knight	**Maxon:** 714-444-9199 (office) 949-677-2393 (mobile) pmaxon@bonterraconsulting.com **Knight** 818-426-4730 (mobile) ahunknight@msn.com
10. Permit holder Patrick Maxon, RPA Name of individual who will be responsible for fulfilling the terms and conditions of the permit or who has authority to bind the entity applying for the permit to its terms and conditions.	**Permit holder contact information** Telephone numbers: 714-444-9199 (office) 949-677-2393 (mobile) Email addresses: pmaxon@bonterraconsulting.com

11. The applicant must attach the following to the application form:

a. A description of the purpose, nature, and extent of the work proposed, including how and why it is proposed to be conducted (include research design, methods, and curation).

b. A summary of support capabilities, including the location and a description of necessary facilities and equipment, the personnel to be involved in the proposed work, and, in the case of an applicant that is an entity, its organizational structure and staffing.

c. A summary of the applicant's experience in completing the kind of work proposed, including similar projects and government contracts and federal permits that were previously held, that are currently in force, with their effective dates, and that are pending or planned, by agency and region or state, reports or publications resulting from similar work, and any other pertinent experience.

d. For each individual named in blocks 8 and 9, a resume including education, training, and experience in the kind of work proposed and in the role proposed.

e. A written certification, signed by an authorized official of the proposed curatorial facility, attesting to the facility's capability and willingness to accept any collections, records, data, photographs, and other documents generated during the proposed permit term and to assume permanent curatorial responsibility for those materials on behalf of the United States Government pursuant to 36 CFR Part 79. Archaeological and historical artifacts excavated or removed from National Forest System lands and their associated documentation shall remain the property of the United States. Custody of any Native American human remains or cultural items subject to the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3001-3013, that are removed from National Forest System lands shall be determined in accordance with NAGPRA and its implementing regulations at 43 CFR Part 10.

12. Proposed publications for results of work conducted under the permit

Section 106 compliant Cultural Resources Assessment report using Archaeological Resource Management Reports (ARMR) guidelines.

13. Signature of individual named in block 10	14. Date signed
Patrick Maxon	9/13/11

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800) 975-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

ARPA Permit Attachment

a. The County of Los Angeles Department of Public Works proposes to conduct the Big Tujunga Dam and Reservoir Sediment Removal Project, which involves the excavation of sediment within the Big Tujunga Reservoir (BTR) and the deposition of the sediment in the Maple Canyon Sediment Placement Site (SPS), located in Big Tujunga Canyon, Angeles National Forest. Excavations of up to 4.4 million cubic yards (mcy) of sediment would be conducted over an area of approximately 83 acres within the BTR. Maple Canyon SPS currently holds less than 2.5 mcy of sediment over an area of approximately 28 acres. The additional 4.4 mcy of sediment from this Project would cover a total area of 32 acres, including 22 acres of previously undeveloped area within the SPS.

   The purpose of the cultural resources study is to ensure that the proposed project does not adversely impact significant cultural resources. The study will consist of (1) records searches at the South Central Coastal Information Center at the California State University, Fullerton and the Forest Service Los Angeles River Ranger District office; (2) NAHC and Native American scoping; (3) a one-day pedestrian survey of the Area of Potential Effects (APE) by Patrick Maxon and/or Albert Knight; and (4) completion of a technical cultural resources report (following Archaeological Resource Management Report [ARMR] guidelines) that summarizes the findings of the study and offers management recommendations.

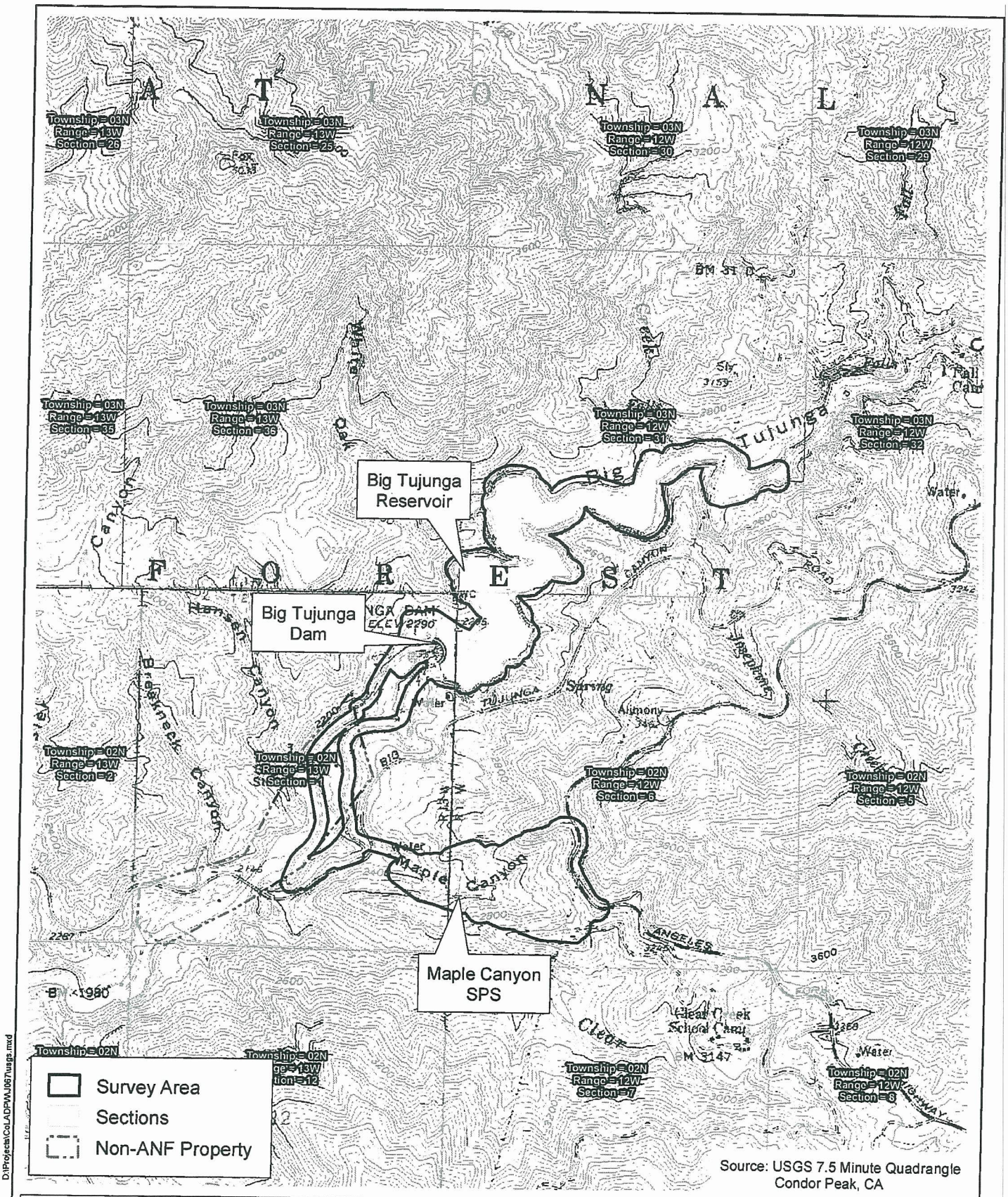
b. Patrick Maxon (Principal Investigator) and Albert Knight (Archaeology Field Director) will be involved in the study. They meet the Secretary of Interior's Professional Qualification Standards for Archaeology.

   BonTerra Consulting office support will consist of GIS capabilities to construct project maps, staff support, and computers for documentation purposes. No specialized equipment is necessary.

c. Mr. Maxon has completed scores of reconnaissance studies over the past 17 years. Mr. Maxon has held ARPA and other use Permits for the Forest Service, Bureau of Reclamation, and USACE; BLM use permits; and permits for the California Energy Commission. In 2010 a Forest Service archaeological investigation permit (LAR9036CRI) was issued to survey portions of Big Tujunga Canyon Road for the County of Los Angeles Department of Public Works (LADPW), and most recently in April 2011 a archaeological permit (LAR9039CRI) was acquired from the Forest Service for a sediment removal project by the LADPW at the Pacoima Reservoir.

d. Resumes for Patrick Maxon and Albert Knight are attached.

e. By agreement with the Angeles National Forest, no collections will be made. All items of historical or archaeological nature will be left in place within the Forest and remain property of the United States Government.



Source: USGS 7.5 Minute Quadrangle
Condor Peak, CA

U.S. Geological Survey 7.5-Minute Quadrangle

Big Tujunga Dam and Reservoir Post-Fire Sediment Removal Project

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Bonterra CONSULTING

APPENDIX E

HISTORIC RESOURCES EVALUATION REPORT
Daly (2017)

HISTORIC RESOURCES EVALUATION REPORT

of

Big Tujunga Reservoir Sediment Removal Project, Los Angeles County, California

Prepared for:
Psomas
225 South Lake Avenue, Suite 1000
Pasadena, CA 91101

Prepared by
Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

October 2017

EXECUTIVE SUMMARY

This assessment report documents and evaluates the federal significance and eligibility of the Big Tujunga Reservoir Sediment Removal Project (Project) area-of-potential effect (APE). This document has been prepared to satisfy the requirements of the U.S. Army Corps of Engineers' (USACE's) compliance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and, due to the need for a Section 404 Clean Water Act Permit, Section 106 of the National Historic Preservation Act (NHPA) of 1966 (36 CFR 800) and USACE's implementing regulations at 33 CFR 325 Appendix C). The project is also required to be reviewed under the California Environmental Quality Act (CEQA).

The fieldwork for this historic resource assessment and evaluation of the Project APE was conducted by Pamela Daly, M.S.H.P., Principal Architectural Historian, on July 18, 2017. In order to identify and evaluate the subject features and site as potential historic resources, a multi-step methodology was utilized. The fieldwork consisted of inspecting previously identified individual components found therein, and evaluating them as individual resources. The fieldwork was combined with a review of local and regional historic archives regarding the history of the Project area, and an examination of historic maps was performed to document existing conditions and assist in evaluating the resources potential for significance.

A Phase I study of the Project APE was prepared by BonTerra Psomas in July 2012. The Phase 1 report identified three resources that either needed to be inspected and evaluated by a qualified architectural historian, or would benefit from the contribution of a qualified historian to provide historic context to a historical archaeology site. In assessing the historical significance of the subject resources, federal, state, and in the case of the Hansen Lodge site, County of Los Angeles, evaluation criteria were applied.

The previously recorded sites that were investigated within this Historic Resource Evaluation Report are:

1. Hansen Lodge site
2. Verdugo Circuit (P19-186860; USFS #05-01-51-138)
3. SCE Construction/Maintenance Road Alignment (P19-186877; USFS #05-01-55-187)

While the history of the San Gabriel Forest Timber Reserve and the development of the Los Angeles County Flood Control System was an integral part of the history of Southern California, there is no evidence that the resources within the Project APE are eligible for listing in the National Register or California under Criterion A/1.

Under the National Register or California Register criterion relating to the identified resources in the Project APE's direct association with persons of historic importance, none of the resources appear to qualify as significant resources. Research has not revealed any association between the identified resources within the Project APE and with persons

important during their time of significance, on either a regional or national level. There is no evidence that any of the identified resources is eligible for listing in the National Register or California Register under Criterion B/2.

Under National Register or California Register Criterion C/3, relating to the distinctive characteristics of a type, period, region, or method of construction, none of the resources appear to be significant. Not only were the built-environment resources found not to be significant historic sites, structures, or features, through evaluation, the resources also lacked the majority of their aspects of historic physical integrity.

The individual historic-period resources within the Project APE that are identified in this report do not appear to have the capacity to yield information important to the history of the Big Tujunga Canyon, Angeles National Forest, or Los Angeles County. The identified resources do not appear eligible for listing in the National Register or California Register under Criterion D/4.

As the Hansen Lodge site is situated on land owned by the County of Los Angeles, it was also evaluated for significance under the designation criteria for listing as a Historic Landmark in Los Angeles County. The Hansen Lodge site did not satisfy any of the relevant criteria (criterion 1, 2, 3, or 4) to be found eligible as a historic landmark.

In summation, there are no built-environment historic-period resources located within the Project APE, that appear to meet National Register and California Register criteria to be considered eligible for listing in the registries as significant historic resources.

Disposition of Data: Copies of this report will be filed with Psomas, and the South Central Coastal Information Center at California State University - Fullerton. Original documentation will remain on file at Daly & Associates, Riverside.

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I. INTRODUCTION

A. PROJECT DESCRIPTION

The Los Angeles County Department of Public Works (LACDPW) proposes to conduct the Big Tujunga Reservoir Sediment Removal Project (Project), which involves the excavation of sediment within Big Tujunga Reservoir (BTR) and the deposition of the sediment in the Maple Canyon Sediment Placement Site (SPS). (Figures 1 and2) The Project consists of various activities, per the *Big Tujunga Reservoir Sediment Removal Project Description*[1] as described below.

Excavations of up to 4.4 million cubic yards (mcy) of sediment would be conducted over an area of approximately 83 acres within the BTR. The actual amount of sediment removal would depend on the amount of rainfall and sediment deposition on coming years. If 4.4 mcy of sediment is required to be removed from BTR, the remaining capacity of the Maple Canyon SPS would be eliminated. As sediment is deposited into Maple Canyon SPS, drainage facilities would be extended into new fill areas of the SPS, which would ultimately be re-vegetated in compliance with the Maple Canyon Debris Disposal Site Re-vegetation Plan.

Prior to beginning any sediment removal, portions of the existing access roads would be re-established to accommodate the proposed truck traffic. Portions of the access roads would require improvements, with approximately two miles of unpaved sections and three miles of paved sections. The access roads may need to be improved periodically throughout the entire Project schedule due to erosion or damage that may occur from storms and/or the Project. Behind the dam structure, an access road will be graded to allow trucks to access the lower portions of the BTR as sediment is removed.

The project will consist of completely dewatering BTR through valve releases and mechanical pumping. The proposed cleanout will keep the reservoir in compliance with LACDPW's operational standards required for both flood protection and water conservation needs of the downstream communities. Water diversion structures will be constructed to allow natural flows from Big Tujunga Creek to bypass the reservoir.

The sediment will be transported to the Maple Canyon SPS by using low emission equipment. An estimated 20 trucks would cycle continuously between the reservoir and Maple Canyon SPS. During sediment removal operations this would total approximately 400 trucks trips per day. Prior to beginning any sediment removal, the existing reservoir access roads will be re-graded to allow truck traffic to enter the reservoir. Trucks would travel on the access roads to the nearby Maple Canyon SPS. Trucks will cross Big Tujunga Canyon Road for which normal traffic will be controlled.

[1] Los Angeles County Department of Public Works. "Big Tujunga Reservoir Sediment Removal Project Description". Accessed July 22, 2017 at: http://dpw.lacounty.gov/swd/Projects/bigtujunga/Expanded_Project_Description.pdf

Sediment will be removed from approximately 46 acres of the reservoir using heavy equipment such as excavators and bulldozers. In order to extend the useful life of the remaining capacity of the Maple Canyon SPS, a portion of the sediment with quality conducive to re- use for aggregate industry will be stockpiled to a staging area next to the Big Tujunga Dam (BTD) entrance gate and transported to offsite aggregate companies in Sun Valley after construction activities to reduce any air quality impacts.

Maple Canyon SPS

Maple Canyon SPS was established in 1981 for previous cleanouts of the reservoir with the current remaining capacity up to 4.4 mcy. It currently holds approximately 3 mcy of sediment and the existing fill covers an area of approximately 28 acres. Excavated material will be transported approximately 1.8 miles to the existing SPS. Bulldozers and other heavy equipment would be operated continuously at the Maple Canyon SPS in order to spread and compact the sediment. The addition of 4.4 mcy of sediment from this project will increase the SPS footprint by 29 acres. Areas within the increased fill footprint would be cleared and grubbed prior to the placing of sediment.

The Maple Canyon SPS design incorporates underground drainage pipes and surface drainage facilities such as gutters, inlets, and surface drains conveying surface runoff through the SPS. Debris basins were installed at the upstream end of each underground drainage pipe to catch eroded sediment from the natural drainages. These drainage facilities will be relocated to the top of the new Maple Canyon SPS.

Excavation will occur until the remaining ultimate capacity of the Maple Canyon SPS has been exhausted or until the reservoir cut template is achieved. Sediment removal and placement operations would mostly occur during the dry season between approximately April 16th and October 15th, during which time the reservoir would be dewatered. After October 15th, work will continue until the first storm is forecasted which will require the contractor to remove equipment from the reservoir until the end of the storm season. The reservoir will be operated according to standard flood control operating guidelines during the rainy season from October 15th through April 15th.

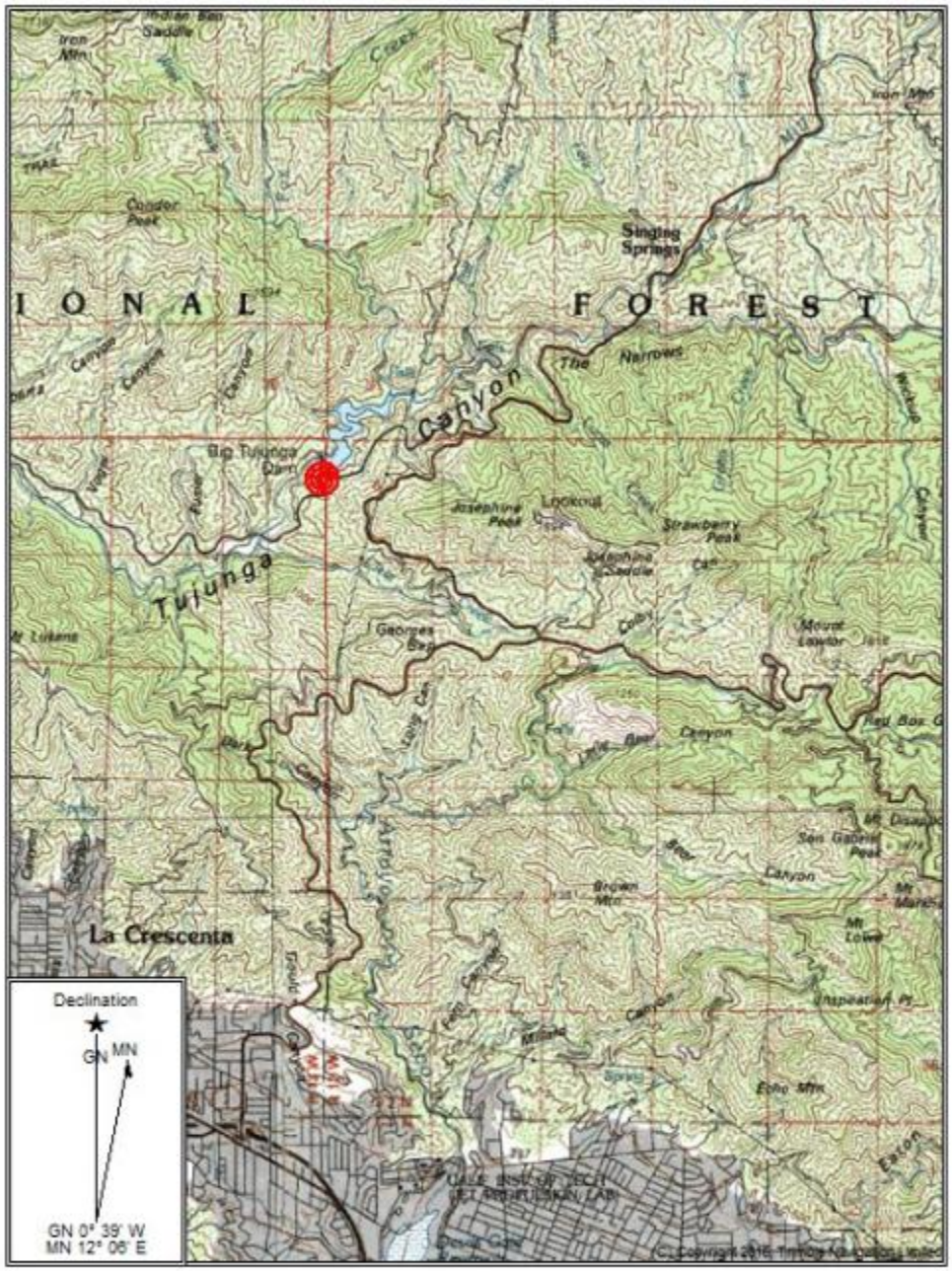
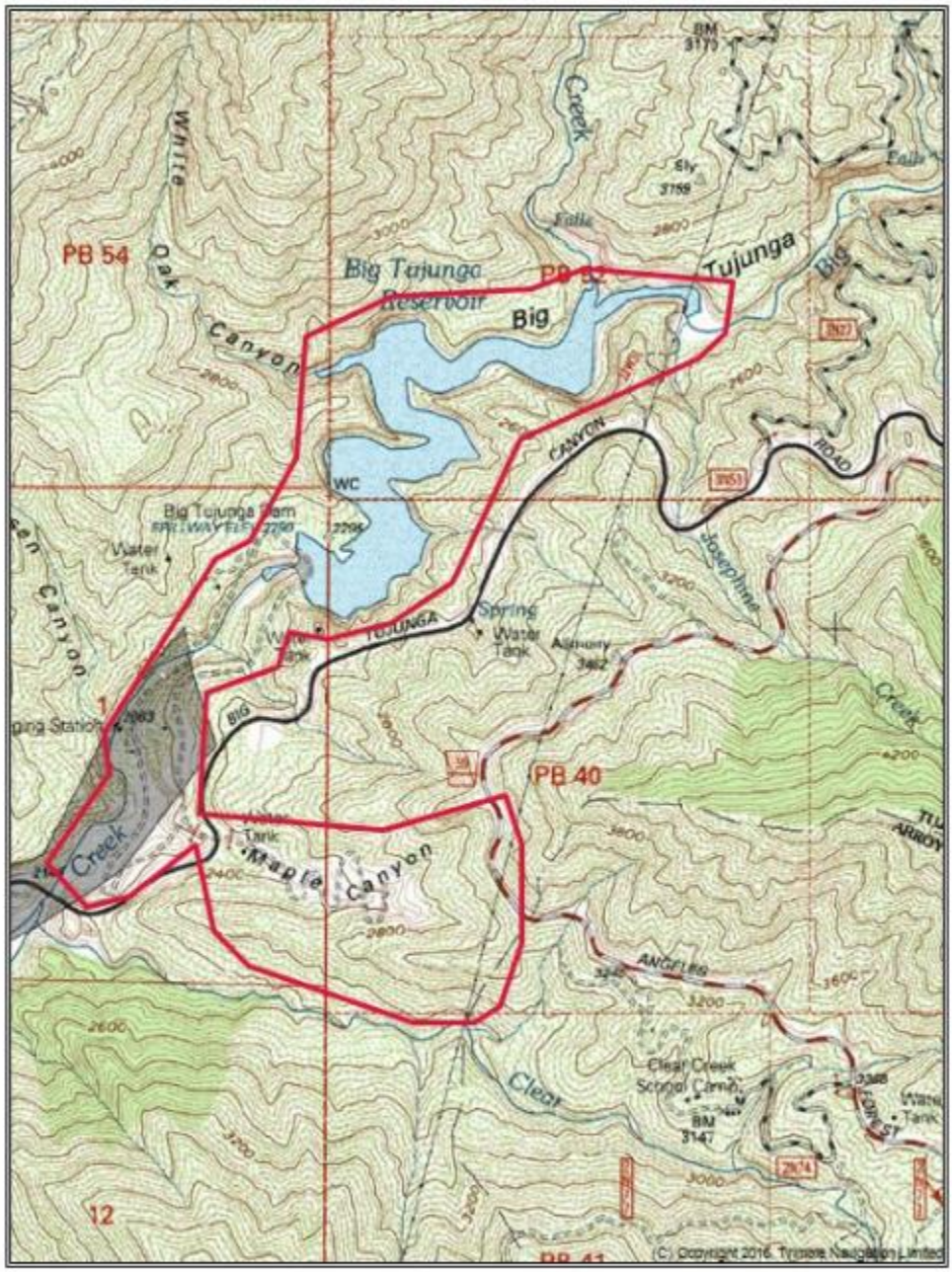


Figure 1: Project Vicinity
Big Tujunga Reservoir
Sediment Removal Project
Los Angeles County, CA



SCALE 1:24000

0 1000 2000 3000 4000

Feet

Figure 2: Project Location
Big Tujunga Reservoir
Sediment Removal Project
Angeles National Forest, CA

B. SITE DESCRIPTION

The BTR is located in the San Gabriel Mountains within the Angeles National Forest (ANF), on land owned by the U.S. Government and managed by the U.S. Forest Service (USFS). The Project area-of-potential-effect (APE) also includes an "in-holding" of privately owned land. The "in-holding" is owned by the County of Los Angeles, and is comprised of the Homestead Entry for Homer A. Hansen granted in 1921. The Project APE is located along Big Tujunga Canyon Road, approximately 4.5 miles north of La Crescenta-Montrose and approximately 7 miles northeast of the community of Sunland.

Traveling from the intersection of the 210 Freeway (Foothill Freeway) and Sunland Boulevard, head east on Sunland Boulevard, Sunland Boulevard becomes Foothill Boulevard, make a left at Oro Vista Avenue, Oro Vista Avenue becomes Big Tujunga Canyon Road, and continue for 9.4 miles on Big Tujunga Canyon Road and turn left to the BTD entrance gate. The entrance to Maple Canyon SPS is located directly across Big Tujunga Canyon Road from the entrance gate to BTD.

C. BACKGROUND

The Station Fire started on August 26, 2009, in the Angeles National Forest near the USFS ranger station on the Angeles Crest Highway (State Highway 2) and burned over 160,000 acres before containment on October 16, 2009. Approximately 87 percent of the watershed tributary to BTR was affected. BTR is supplied with water from Big Tujunga Creek. On average, a watershed will take five years or more to recover from a forest fire burn. During this time, increased amounts of debris production are anticipated from the denuded ground surface. Base on the current survey, the total amount of accumulated sediment in the BTR is approximately 2 mcy. Additional sediment is expected to flow into the reservoir over the next few years from the recovering watershed.[2]

D. CULTURAL RESOURCES RECORDS SEARCH

Pre-field research included a cultural resources records search of the California Historical Resources Information System (CHRIS), performed by the South Central Coastal Information Center (SCCIC) on October 6, 2011.[3] The search included a review of previous survey reports, excavation reports, and site records for all sites documented within one mile of the APE. As part of this review, the SCCIC also examined databases for the California Points of Historical Interest (PHI), California Historical Landmarks (CHL), California Register of Historical Resources (CRHR), National Register of Historic Places (NRHP), and the CHRIS Historic Resources Inventory. No properties listed in the PHI, CHL, CRHR, or NRHP were identified by the search.

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[2] Los Angeles County Department of Public Works. "Big Tujunga Reservoir Sediment Removal Project Description". Accessed July 22, 2017 at: http://dpw.lacounty.gov/swd/Projects/bigtujunga/Expanded_Project_Description.pdf

[3] Drover, Christopher and Patrick Maxon. "Phase I Cultural Resources Assessment: Big Tujunga Reservoir Sediment Removal Project", July 2012; BonTerra Consulting, Pasadena, CA.

E. PREVIOUSLY RECORDED HISTORIC-PERIOD SITES

The CHRIS record search indicated that two previous cultural resources investigations have been conducted within one mile of the APE. The two previous studies resulted in the recording of built-environment resources.

Table 1: Previously Recorded Built-Environment Resources

Site Number	Recorder (Year)	Comment
P19-186860	Schmidt (2003)	Wood poles and associated features of Southern California Electric's (SCE) Verdugo Circuit.
P19-186860-update	Garcia and Norton (2009)	Large portions of the Verdugo Circuit no longer exist due to damage from the Station Fire in August 2009. (Note: the Big Tujunga Dam and Maple Canyon were within the burn area of the fire.)
P19-186877	Schmidt and Schmidt (2003)	26 miles of USFS and SCE service/maintenance road alignment using historic topographic maps and USFS historic maps to document the roads in the forest.

In addition to the documents and reports identified by the SCCIC, other previous work not yet on file with CHRIS also informed the current study. Outside of the CHRIS archives, two built-environment resources have been considered as cultural resources.

- **Big Tujunga Dam (1931)**. The BTD was surveyed in 1999 and included in a discontiguous district of dams and reservoirs constructed by the Los Angeles County Flood Control District as a result of the 1924 Bond Act for Flood Control. Communication between Federal Emergency Management Agency (FEMA) and State of California Office of Historic Preservation (SHPO) stated that SHPO considered the BTD "as eligible for listing in the National Register of Historic Places as a contributing resource to a thematic district of 1924 Los Angeles County dams. This district is composed of 10 dams and their related features funded in part of a 1924 Los Angeles County flood control bond issue."[4]

  The LACDPW applied for a FEMA grant to bring the BTD up to state seismic safety standards after the 1994 Northridge earthquake. The proposed Big Tujunga Dam Seismic Safety Modification Project would consist of thickening the existing dam approximately 97 feet, by constructing a buttress across the full downstream face of the dam, spillway modifications, a new pedestrian walkway, and installing reinforcing steel shear dowels in the upper half of the dam within the buttress.[5] It was determined by FEMA, and concurred by SHPO, that the

[4] Communication from David Fukutomi, Deputy Disaster Recovery Manager, to Daniel Abeyta, Acting State Historic Preservation Officer, regarding Seismic Safety Modification of Dams: Big Tujunga Dam, November 18, 1999.

[5] Communication from Maryann VanderVis on behalf of Harry W. Stone, County of Los Angeles Director of Public Works, to Andrew Petrow, Hazard Mitigation Program Manager, Governor's Office of Emergency Services, September 23, 1999.

proposed project activities would "not meet the Standards [*Secretary of the Interior's Standards for the Treatment of Historic Properties*] and meets two criterion as defined in 36 CFR §800.5(2) (ii and v) of an undertaking that will adversely affect the identified historic property."[6]

FEMA prepared a Historic American Engineering Record (HAER) document with photographs, and copies of original construction drawings of the BTD to mitigate the adverse effects to the historic property per a Standard Mitigation Measures Agreement executed between FEMA and SHPO in July 2000.[7] The HAER document was submitted to the Library of Congress in July 2000.[8]

- **Hansen's Lodge on Big Tujunga Creek (1926-1938)**. The site of the second Hansen's Lodge, built after the first lodge was irreparably damaged from flood waters in 1926, and has been considered a romanticized site of local interest for many years.

F. METHODOLOGY

The historic resource assessment and evaluation for this report was conducted by Pamela Daly, M.S.H.P., Principal Architectural Historian. In order to identify and evaluate the previously identified historic resources, a multi-step methodology was utilized. An inspection of the existing structure and associated features, combined with a review of accessible archival sources for these structures and features was performed to document existing conditions and assist in assessing and evaluating the built-environment resources for significance.

Archival resources used for this study included:

California Digital Newspaper Collection – University of California Riverside
GeneologyBank.com
Los Angeles Public Library Map Collection
Los Angeles Public Library Photograph Collection
Los Angeles Times Archives
NETR Historic Aerial Photographs
NewspaperArchive.com
Newspaper.com
United States Geological Survey (USGS) Historical Topographic Map Explorer

Historic maps referenced for this project included:

1876 U.S. Surveyor Generals Office; Township 2 North, Range 13 West, San Bernardino Base Meridian; Plat No. 2862151
1900 USGS Tujunga 1:62,500 scale map

[6] Communication from David Fukutomi, Deputy Disaster Recovery Manager, to Daniel Abeyta, Acting State Historic Preservation Officer, regarding Seismic Safety Modification of Dams: Big Tujunga Dam, November18, 1999.

[7] Communication between Stephen Mikesell, Deputy State Historic Preservation Officer to Allesandro Amagli, FEMA, November 30, 2005.

[8] Lee, Clint. Big Tujunga Dam HAER CA-287-17 (HAER CAL, 19-SUNL.V1-). Library of Congress: https://www.loc.gov/resource/hhh.ca2932.photos?st=gallery

1910 U.S. Surveyor Generals Office; Homestead Survey Number 84, Homer A. Hansen Entryman; Plat 2801781
1911 U.S. Surveyor Generals Office; Township 2 North, Range 13 West, San Bernardino Base Meridian; Plat No. 2862131
1934 USGS Mt. Lowe 1:24,000 scale map
1939 USGS Mt. Lowe 1:24,000 scale map
1940 USGS Acton 1:62,500 scale map
1959 USGS Acton 1:62,500 scale map
1959 USGS La Cresenta 1:24,000 scale map
1959 USGS Condor Peak 1:24,000 scale map
1988 USGS Condor Peak 1:24,000 scale map
1995 USGS Condor Peak 1:24,000 scale map

In addition to evaluating the significance of the resources within the APE under National Register and California Register criteria, a portion of the APE (APN 5869-001-902; Hansen's Homestead Patent) is located within the legal boundary of the County of Los Angeles. The County of Los Angeles has a Historic Preservation Ordinance to recognize the importance of preserving the County's distinctive architectural and cultural history.

The following tasks were performed for the study:

- The National Register and the California Historical Resources inventories were searched.
- Site-specific research was conducted on the subject property utilizing maps, city directories, newspaper articles, historical photographs, and other published sources.
- Background research was performed at local historic archives and through internet resources.
- Ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs were reviewed and analyzed.

II. REGULATORY FRAMEWORK

Historic resources fall within the jurisdiction of several levels of government. Federal laws provide the framework for the identification, and in certain instances, protection of historic resources. Additionally, states and local jurisdictions play active roles in the identification, documentation, and protection of such resources within their communities. The National Historic Preservation Act (NHPA) of 1966, as amended, particularly Section 106 of the NHPA, and the California Environment Quality Act (CEQA) are the primary laws and regulations governing the evaluation and significance of historic resources of national, state, regional, and local importance. A description of these relevant laws and regulations is presented below.

In analyzing the historic significance of the subject property, criteria for designation under federal, state, and local landmark programs were considered. Additionally, the California Office of Historic Preservation (OHP) survey methodology was used to survey and rate the relative significance of the built-environment and historic-era deposits found within the APE.

A. FEDERAL LEVEL

1. National Register of Historic Places

First authorized by the Historic Sites Act of 1935, the National Register was established by the NHPA as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[9] The National Register recognizes properties that are significant at the national, state and local levels.

To be eligible for listing in the National Register, the quality of significance in American history, architecture, archaeology, engineering, or culture must be in a district, site, building, structure, or object that possesses integrity of location, design, setting, materials, workmanship, feeling and association, and:[10]

A. is associated with events that have made a significant contribution to the broad patterns of our history; or

B. is associated with the lives of persons significant in our past; or

C. embodies the distinctive characteristics of a type, period, or method of construction or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. yields, or may be likely to yield, information important to prehistory or history.

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[9] Code of Federal Regulations (CFR), 36 § 60.2.

[10] *Guidelines for Completing National Register Forms, National Register Bulletin 16,* U.S. Department of the Interior, National Park Service, September 30, 1986. This bulletin contains technical information on comprehensive planning, survey of cultural resources, and registration in the National Register of Historic Places.

A property eligible for listing in the National Register must meet one or more of the four criteria (A-D) defined above. In addition, unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for National Register listing.

In addition to meeting the criteria of significance, a property must have integrity. "Integrity is the ability of a property to convey its significance."[11] According to *National Register Bulletin 15*, within the concept of integrity, the National Register criteria recognize seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity a property will always possess several, and usually most, of these seven aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance.[12] The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. The following is excerpted from *National Register Bulletin 15,* which provides guidance on the interpretation and application of these factors.

- Location is the place where the historic property was constructed or the place where the historic event occurred.[13]
- Design is the combination of elements that create the form, plan, space, structure, and style of the property.[14]
- Setting is the physical environment of a historic property.[15]
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.[16]
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.[17]
- Feeling is property's expression of the aesthetic or historic sense of a particular period of time.[18]
- Association is the direct link between an important historic event or person and a historic property.[19]

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[11] *National Register Bulletin 15*, page 44.

[12] Ibid.

[13] "The relationship between the property and its location is often important to understanding why the property was created or why something happened. The actual location of historic property, complemented by its setting is particularly important in recapturing the sense of historic events and persons. Except in rare cases, the relationship between a property and its historic associations is destroyed if the property is moved." Ibid.

[14] "A property's design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors of surface materials; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape." Ibid.

[15] *National Register Bulletin 15*, page 45.

[16] "The choice and combination of materials reveals the preferences of those who created the property and indicated the availability of particular types of materials and technologies. Indigenous materials are often the focus of regional building traditions and thereby help define an area's sense of time and place." Ibid.

[17] "Workmanship can apply to the property as a whole or to its individual components. It can be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. In can be based on common traditions or innovative period techniques." Ibid.

[18] "It results from the presence of physical features that, taken together, convey the property's historic character." Ibid.

In assessing a property's integrity, the National Register criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must, however, retain the essential physical features that enable it to convey its historic identity.[20]

For properties that are considered significant under National Register criterion A and B, *National Register Bulletin 15* states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).[21]

In assessing the integrity of properties that are considered significant under National Register criterion C, National Register Bulletin 15 provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.[22]

The primary effects of listing in the National Register on private property owners of historic buildings is the availability of financial and tax incentives.[23] In addition, for projects that receive federal funding, the NHPA Section 106 clearance process must be completed (published at 36 CFR Part 800). State and local laws and regulations may apply to properties listed in the National Register. For example, demolition or inappropriate alteration of National Register eligible or listed properties may be subject to the CEQA.

B. STATE LEVEL

The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also carries out the duties as set forth in the Public Resources Code (PRC) and maintains the California Historical Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions.

1. California Register of Historical Resources

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to

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19 "A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to the observer. Like feeling, associations require the presence of physical features that convey a property's historic character…Because feeling and association depend on individual perceptions, their retention alone is never sufficient to support eligibility of a property for the National Register." Ibid.

20 *National Register Bulletin 15*, page 46.

21 Ibid.

22 "A property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, patter of windows and doors, texture of materials, and ornamentation. The property is not eligible, however, if it retains some basic features conveying massing but has lost the majority of features that once characterized its style." Ibid.

23 See 36 CFR 60.2(b) (c).

indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[24] The criteria for eligibility for the California Register are based upon National Register criteria.[25] Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.[26]

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed in the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places;
- California Registered Historical Landmarks from No. 770 onward;
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion in the California Register.[27]

Other resources which may be nominated to the California Register include:

- Individual historical resources;
- Historical resources contributing to historic districts;
- Historical resources identified as significant in historical resources surveys with significance ratings of Category 1 through 5;
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as a historic preservation overlay zone.[28]

To be eligible for listing in the California Register, a historic resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Additionally, a historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or

[24] California Public Resources Code § 5024.1(a).
[25] California Public Resources Code § 5024.1(b).
[26] California Public Resources Code § 5024.1(d).
[27] California Public Resources Code § 5024.1(d).
[28] California Public Resources Code § 5024.1(e).

appearance to be recognizable as a historic resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.[29]

Integrity under the California Register is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. The resource must also be judged with reference to the particular criteria under which it is proposed for eligibility. It is possible that a historic resource may not retain sufficient integrity to meet criteria for listing in the National Register, but it may still be eligible for listing in the California Register.[30]

2. California Office of Historical Preservation Survey Methodology

The evaluation instructions and classification system prescribed by the California Office of Historic Preservation in its Instructions for Recording Historical Resources provide a three-digit evaluation rating code for use in classifying potential historic resources. The first digit indicates one of the following general evaluation categories for use in conducting cultural resources surveys:

1. Listed in the National Register or the California Register;
2. Determined eligible for listing in the National Register or the California Register;
3. Appears eligible for listing in the National Register or the California Register through survey evaluation;
4. Appears eligible for listing in the National Register or the California Register through other evaluation;
5. Recognized as Historically Significant by Local Government;
6. Not eligible for any Listing or Designation; and
7. Not evaluated for the National Register or California Register or needs re-evaluation.

The second digit of the evaluation status code is a letter code indicating whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a number that is used to further specify significance and refine the relationship of the property to the National Register and/or California Register. Under this evaluation system, categories 1 through 4 pertain to various levels of National Register eligibility. The California Register, however, may include surveyed resources with evaluation rating codes through level 5. In addition, properties found ineligible for listing in the National Register, California Register, or for designation under a local ordinance are given an evaluation status code of 6.

C. LOCAL LEVEL

1. County of Los Angeles

On September 1, 2015, the Board of Supervisors recognized the importance of preserving the County's distinctive architectural and cultural history by adopting the Historic Preservation Ordinance ("HPO") that:

[29] California Code of Regulations, California Register of Historical Resources (Title 14, Chapter11.5), Section 4852(c).

[30] Ibid.

- Specifies criteria and procedures for the designation of landmarks and historic districts;
- Prohibits work, including demolition, on property nominated but not yet designated as a landmark or historic district;
- Encourages adaptive reuse of landmarks and historic district contributors by providing relief from parking requirements;
- Provides for the enhancement of historic districts by the establishment of development guidelines and standards, and by allowing streetscape improvements that are compatible with the areas historic character;
- Specifies criteria and procedures for reviewing proposed work on designated landmarks or on property within historic districts;
- Requires maintenance of landmarks and historic district contributors to prevent deterioration; and
- Establishes penalties for unauthorized work, including demolition, on landmarks or historic district contributors.[31]

22.52.3060 Criteria for Designation of Landmarks and Historic Districts.[32]

A. A structure, site, object, tree, landscape, or natural land feature may be designated as a landmark if it is 50 years of age or older and satisfies one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of the history of the nation, State, County, or community in which it is located;

2. It is associated with the lives of persons who are significant in the history of the nation, State, County, or community in which it is located;

3. It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of significance to the nation, State, County, or community in which it is located; or possesses artistic values of significance to the nation, State, County, or community in which it is located;

4. It has yielded, or may be likely to yield, significant and important information regarding the prehistory or history of the nation, State, County, or community in which it is located;

5. It is listed, or has been formally determined eligible by the United States National Park Service for listing, in the National Register of Historic Places, or is listed, or has been formally determined eligible by the State Historical Resources Commission for listing, on the California Register of Historical Resources;

6. If it is a tree, it is one of the largest or oldest trees of the species located in the County; or

[31] County of Los Angeles. "Historic Preservation Ordinance." http://planning.lacounty.gov/preservation/ordinance

[32] County of Los Angeles – Code of Ordinances; Title 22: Planning and Zoning; Division1: Planning and Zoning; General Regulations 22.52; Part 28: Historic Preservation Ordinance (Ord. 2015-0033 § 3, 2015).

7. If it is a tree, landscape, or other natural land feature, it has historical significance due to an association with an historic event, person, site, street, or structure, or because it is a defining or significant outstanding feature of a neighborhood.

B. Property less than 50 years of age may be designated as a landmark if it meets one or more of the criteria set forth in subsection A of this Section, and exhibits exceptional importance.

C. The interior space of a property, or other space held open to the general public, including but not limited to a lobby, may be designated as a landmark or included in the landmark designation of a property if the space qualifies for designation as a landmark under subsections A or B of this Section.

D. Historic districts. A geographic area, including a noncontiguous grouping of related properties, may be designated as an historic district if all of the following requirements are met:

1. More than 50 percent of owners in the proposed district consent to the designation;

2. The proposed district satisfies one or more of the criteria set forth in subsections A.1 through A.5, inclusive, of this Section; and

3. The proposed district exhibits either a concentration of historic, scenic, or sites containing common character-defining features, which contribute to each other and are unified aesthetically by plan, physical development, or architectural quality; or significant geographical patterns, associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of parks or community planning.

22.52.3120 - Designation of County-Owned Property as a Landmark.

A. The Board of Supervisors may designate any County-owned property as a landmark, if the Board of Supervisors determines that the property satisfies the applicable criteria set forth in Section 22.52.3060.

B. The designation of a County-owned property as a landmark may be made by written resolution which shall:

1. Contain a detailed description of the property subject to the landmark designation, including the character-defining features that justify the designation and should be preserved;

2. Delineate the location and boundaries of the landmark; and

3. Discuss the criteria for the designation of landmarks set forth in Section 22.52.3060 as applied to the landmark.

The resolution may also establish guidelines and standards for future proposed changes to the landmark, and may impose any other restrictions or regulations on future work on or use of the landmark.

C. Effective Date of Designation. A landmark designation of a County-owned property shall be effective as of the date the resolution approving the designation is adopted by the Board of Supervisors.

D. Upon the effective date of the designation of the County-owned property as a landmark, the Landmarks Commission shall promptly enter the property into the County Register as a "Los Angeles County Landmark," and shall specify the effective date of the landmark designation.

E. Recordation. The Director shall cause a document titled "Notice of Landmark Designation" to be promptly recorded with the County Registrar-Recorder /County Clerk upon the effective date of the designation of a County-owned property as a landmark. The Notice of Landmark Designation shall include:

1. A legal description of the property designated as the landmark;

2. The effective date of the landmark designation; and

3. A certified copy of the resolution adopted by the Board of Supervisors designating the landmark.

F. A County-owned property designated by the Board of Supervisors as a landmark shall be subject only to the guidelines, standards, restrictions, or regulations set forth in the designating resolution, or in any subsequent resolution adopted by the Board of Supervisors regarding the landmark designation, and shall not otherwise be subject to the provisions of this part. The Director shall assist County departments or commissions to determine whether proposed work on or use of a County-owned landmark is consistent with its landmark designation, at the request of such departments or commissions.

III. EVALUATION

A. HISTORIC CONTEXT

1. Spanish/Mexican Period (1689-1848)

Spanish presence in the region of Los Angeles County began with Gaspar de Portola's expedition through the Los Angeles Basin in 1769. The founding of the San Gabriel Mission in 1771 marked the end of the land patterns used by the local Gabrielino peoples. The Gabrielinos were encouraged to move to the Missions where they were taught how to plant seasonal crops and raise cattle. This attempt to assimilate the native culture into the Catholic Church was accelerated with the founding of El Pueblo de Nuestra Señora la Reina de los Angeles (the Town of Our Lady Queen of the Angels) in 1781. El Pueblo de los Angeles would become the city of Los Angeles in the 1830s. Finding the ways of the western Europeans incompatible with their way of life, the Gabrielinos moved away from the new settlements.

The land where the community of Sunland is situated was associated with the Rancho Tujunga. It was granted in 1840 by Mexican governor Juan Alvarado to Francisco Lopez and Pedro Lopez. In 1845, the Lopez brothers traded the 6,661-acre Rancho Tujunga to Miguel Triunfo, an Indian who had been a trusted worker at the San Fernando Mission. Triunfo sold a half-interest in Rancho Tujunga back to Francisco Lopez in 1850, and then sold the other half-interest to Los Angeles merchants David W. Alexander and Francis Mellus. In 1851, Francisco Lopez sold his half-interest to Agustin Olvera.

2. American Transition Period (1848-ca. 1880)

After the Mexican-American War, the 1848 Treaty of Guadalupe Hidalgo provided that the land grants would be honored. As required by the Land Act of 1851, Alexander, Mellus and Olvera filed a claim for Rancho Tujunga in 1852, and the grant was patented to in 1874. Alexander and Mellus sold their half-interest to Olvera in 1856. In 1875, Olvera sold the entire Rancho Tujunga to Andrew Glassell. Boundary disputes continued into 1888.

3. The American Period (1880s to Present)

In 1858, Henry Hancock, a surveyor with the United States Land Commission, submitted the land survey map for the area in California that included Rancho Tujunga, Rancho La Canãda, Rancho San Rafael, in what is now known as the San Fernando Valley.[33] The U.S. Surveyor General's Office would send out W. H. Norway in 1875, to survey the land to the north and west of the old ranchos recorded by Hancock, and the foothills of the "unsurveyable mountains" that would become the San Gabriel Forest Reserve (San Gabriel Timber Land Reserve) in 1892.[34/35] San Gabriel Timber Land

[33] U.S. Department of the Interior, Bureau of Land Management. "Survey Map for Township 2 North, Range 13W" submitted by W.H. Norway; 1875. DM #286216.

[34] Ibid.

Reserve was the first federal forest in California formed under the Forest Reserve Act of 1891, and it extended from Pacoima to the Cajon Pass. The San Gabriel Timber Land Reserve was coalesced with other federal forest lands to create the Angeles National Forest in 1908.

In the 1880s, just to the east and south of Big Tujunga Canyon, and north of La Canãda, the U.S. Government had opened up a limited amount of land in Sections 31 and 32 of Township 2 North, Range 12 West of the San Gabriel Mountain foothills for private ownership. John Hartwell, Eugene and Clara Giddings, Jason and Owen Brown all received patents accessed by the Arroyo Seco for acreage in Section 32 wherein lay Fern Canyon, El Prieto Canyon, and Millard Canyon, from 1883 to 1891, more than 20 years before Homer A. Hansen filed for his patent on Big Tujunga Creek.[36] Owen and Jason Brown, descendants of the Kansas abolitionist John Brown, constructed their homestead in a San Gabriel Mountain canyon that would be named after them, in 1886.

Farther north in the Arroyo Seco canyon, C. Perry Switzer established one of the most ambitious mountain resorts of the San Gabriel Mountains. The "Commodore" as he was known, built a tourist-resort camp far into the mountains in 1884 that was accessible from a trail that followed the Arroyo Seco Creek deep into the mountains.[37] Switzer's resort was located, by today's roads, just seven-and-a-half miles to the east from where Homer A. Hansen's would file for patent lands along the Tujunga Creek.

Two of the first known residents of Big Tujunga Canyon were Pedro Ybarra who built his home in the canyon in 1880, and Silas Hoyt who built his cabin about 1890.[38] By the time the U.S.G.S. *Tujunga* Quadrangle map was issued in 1900 (upon a survey in 1897), there were numerous permanent buildings, ranches, and cabins, noted along the path of the Big Tujunga Creek in Township 2 North/Range 13 West of the San Bernardino Base Meridian. [39] "Hoyts Ranch being noted on the map a short distance to the south from where Hansen would file for a Homestead Land Act patent in 1910.

In 1898, the City of Los Angeles reviewed a proposal by the Los Angeles Mountain Water Company to direct water to the City from the Big Tujunga Canyon's 134 square miles of watershed area.[40] The proposal by the Los Angeles Mountain Water Company was to build three dams along Big Tujunga Creek, and then send the water southward in a steady discharge to a reservoir at Griffith Park. The estimate to buy the water rights and construct the water delivery system to the Griffith Park reservoir was $1,561,540.[41]

Charles M. Hansen, older brother of Homer A. Hansen, would become the attorney for one of the officers of the Los Angeles Mountain Water Company in 1901, and be involved in the dissolution of that water company soon after his client won his claiming mismanagement of the

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[35] Davis, Richard C. "The National Forests of the United States" with appendix, September 29, 2005. http://www.foresthistory.org/ASPNET/places/National%20Forests%20of%20the%20U.S.pdf

[36] General Land Office records. www.glorecords.blm.gov

[37] Ibid, page 371.

[38] *Trails Magazine*. "Cabins of the Big Tujunga", Winter 1936, Volume 3, Number 1, page 14.

[39] U.S.G.S. *Tujunga* Quadrangle, 1900.

[40] *Los Angeles Times*. "Mountain Water Supply", March 1, 1898.

[41] Ibid.

company. Charles Hanson's involvement with the Los Angeles Mountain Water Company would lead to Homer Hansen's eventual purchase of land in the Big Tujunga Canyon, and for the building of Hansen's Lodge

Homer Alfred Hansen was born in Logan, Ohio, in 1872, the fourth of six children born to John Hansen, a bank clerk, and Mary M. Hanson.[42] He attended Rush Medical College in Chicago, and eventually graduated from Toledo Medical School in 1895.[43] Homer married Maud S. Dack/Dock in 1896, and was living in Shell Creek, Platte, Nebraska, with his wife and in-laws, and working as a physician in 1900.[44]

While Homer was still in medical school, his older brother Charles M. Hansen had left Ohio after first studying to become a Presbyterian minister, a physician, and eventually the law.[45] Charles married Lou J. Miller in Ohio, in 1891, and then became involved with various land deals and building projects in Salt Lake City, Omaha, and in Ohio. Charles continued westward and was living in San Diego in 1896.[46] He was admitted to practice law in California in October of 1897 and had an office in San Diego where he specialized in commercial real estate. [47]/[48]

In California, one of Charles' clients, a Mr. N.B. Everett, had hired him in 1901 to sue the Los Angeles Mountain Water Company for mis-management of the company of which Everett was a partner.[49] The Los Angeles Mountain Water Company was located in the Big Tujunga Canyon, and was in the planning stages of building a reservoir to capture winter storm runoff.[50] Charles won the case for his client, which led to the dissolution of the company. In its stead, Charles, his brother Homer, and Homer's father-in-law Thomas M. Dack, worked to reorganize the company with other investors, and created the Big Tujunga Water Company.[51] Charles and his wife had divorced in 1902, and he moved to Los Angeles where he lived until his death in 1904 at only 36 years of age. [52]/[53]

It appears that Homer Hansen may have headed west from Nebraska to Nevada with his wife and in-laws in 1903, when through Charles' connections, and Homer's business skills, the Hansen brothers worked with a consortium of investors to create the Searchlight Railroad and the Searchlight Bank. An article in the *San Bernardino Sun* about the Searchlight Railroad deal called "Dr. Homer A. Hansen, a capitalist of this [Los Angeles] city".[54] (Figure 3)

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[42] U.S. Census Bureau. *Tenth Census of the United States, 1880*. Accessed at Ancestry.com.
[43] *Mojave Desert News*. "Dr. Homer Hansen Taken in Death", December 1, 1960.
[44] U.S. Census Bureau. *Twelfth Census of the United States, 1900*. Accessed at Ancestry.com.
[45] *Los Angeles Times.* "C.M. Hansen Funeral", March 21, 1904.
[46] California State Library, California History Section; Great Registers, 1866-1898; Collection Number: 4 - 2A; CSL Roll Number: 40; FHL Roll Number: 977095
[47] *Los Angeles Times*, October 12, 1897.
[48] *San Diego Evening Tribune*. Advertisement for "C.M. Hansen, Attorney-at-Law", October 15, 1898.
[49] *San Diego Evening Tribune*. "That Water Scrap", August 4, 1901.
[50] *Los Angeles Times*. "Mountain Water Supply", March 1, 1898.
[51] Ibid.
[52] *Los Angeles Herald*. "Legal News", August 9, 1902.
[53] *Los Angeles City Directory 1903*. "Charles M Hansen, attorney", page 555.
[54] *San Bernardino Sun*. December 3, 1905.



Searchlight Nevada

To Whom it May Concern:—

To certify that we the undersigned, doing business in the Original Townsite of Searchlight, Nev., hereby go on record to refute any statements made to the effect that we intend moving our present place of business to the Addition platted recently, adjoining the depot of the Santa Fe railroad. The present townsite is the logical and best fitted location for the town, being located on a nearly level plateau above the depot site some one hundred feet.

The following are a list of some of the improvements made in our city at a cost of thousands of dollars: A water system costing $25,000, and water mains now being laid; an electric light plant established and equipped at a cost of $20,000; Mr. Wallbrecht, president of the Searchlight Development Co., has also lately installed an ice and cold storage plant of the capacity of 15 tons per day; the Searchlight Bank and Trust Co., established some two years ago, with a capital of $50,000; the Searchlight hotel, built at a cost of $10,000; the Kennedy House, built at a cost of $5000, and some fifty places of business built at a cost of $75,000.

The property values along Hobson street have reached the value of $100 00 per front foot; and over three blocks nearly solidly built up on Hobson street alone, while on Main street and Broadway and Surprise street there are many more places of business, such as blacksmith shops, bakery, newspaper office, school and other small places of business.

We may add that in such mining towns as Butte, Mont., the depot is about one and one-third miles from the center of town; Goldfield, Nev., two miles; Rossland, B. C., three-quarters of a mile; Grandforks, B. C., one mile; Bingham, Utah, two and one-half miles; Tonopah, Nev., nearly one mile, and for that matter scores of other cities have their depot sites generally located from a half mile to two and one-half miles from town.

There will in all probability be clustered around the present depot site in Searchlight, such places of business as a lumber yard, coal yards and oil tanks, but that any of the undersigned intend removing to such a location is a wilfully absurd statement.

In conclusion, it has taken six years and over three-quarters of a million dollars to build the present town of Searchlight, and so sure are the merchants that the present town is the proper location for the city that nearly every one of them are adding additions on to their present business buildings, while Carl Leonardt of Los Angeles has extended his electric light poles through the place, and the Water Works Company are laying their mains thereon.

THOMAS GAHAGAN,
Large Mine Owner.

A. B. DAY,
Locator Searchlight Mining and Milling Co.; Owner Nevada Searchlight Mine.

W. F. WALLBRECHT,
Owner Ice Plant and Water Works.

HOMER A. HANSEN,
Pres. Searchlight Bank and Trust Co.

W. USREY,
Large Mine Owner.

THOMAS DACK,
Owner of Searchlight Hotel.

L. NEEDHAM,
Wealthy Property Owner.

G. H. M'CLINTOCK,
Cashier Searchlight Bank.

JOSEPH M'ARTHUR,
Pres. Stanley Forbes M. & M. Co.

And 100 business men and property owners of Searchlight.

Figure 3: Advertisement noting Homer A. Hansen as President of Searchlight Bank and Trust Company, 1905.

Meanwhile, the *Los Angeles Herald* noted in an article on November 26, 1905, about the Searchlight Railroad, that "Dr. Hansen's profits for two years' work are said to exceed $200,000." (The sum of $200,000 would be worth approximately $4.9 million in 2017).

Once he left Nevada to permanently settle in Los Angeles, Homer Hansen was installed as president and manager of the Big Tujunga Water Company in 1910. During that same year, the Tujunga Water & Power Company tried to sell water supply from Tujunga Creek to the City of Pasadena. Pasadena did not accept the proposal because the Tujunga Water & Power Company "in

no case would the company agree to sell its title and interest in the Tejunga [sic] basin".[55] The *Los Angeles Times* article went on to state that "the Tejunga [sic] Company does not lay claim to the normal flow of the Tejunga [sic] River, or the underground waters, but only the flood waters it proposes to impound and sell. It alleges it has a patent to the land and a decision from the courts giving it the flood waters."[56] (Figure 4)

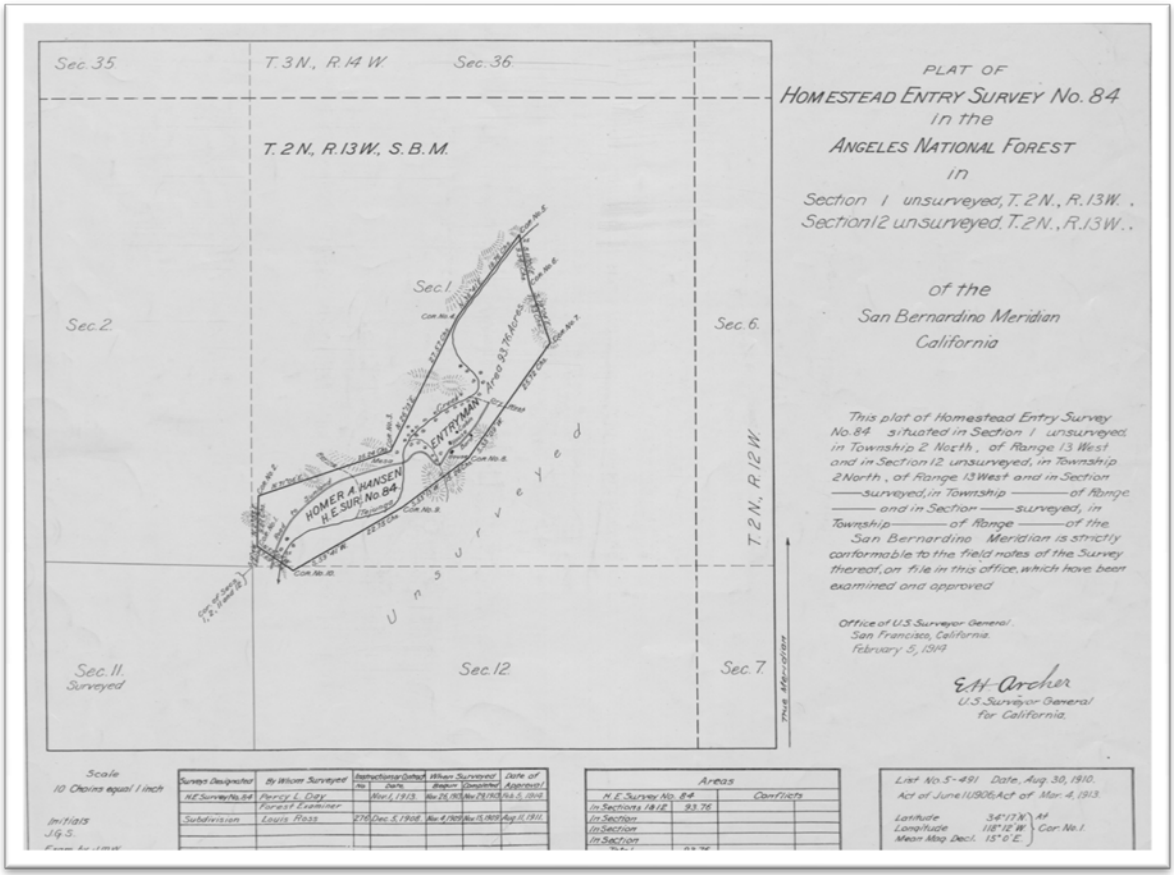

Figure 4: Survey plat map for Hansen's patent entry, 1910.

In 1910, Homer and Maud were living with her parents at 729 South Bonnie Brae Street in the city of Los Angeles, and continued to do so for the next few years. Homer kept an office in the Bradbury Building at 304 South Broadway in downtown Los Angeles, for his real estate and water management activities.[57] (Figure 5)

With the passing of the 1924 Flood Relief Bond Act in Los Angeles County, the County Flood Control District (LACFCD) was going to finally follow-up on the plans that the Los Angeles Mountain Water Company had proposed to both the Cities of Los Angeles and Pasadena for the control of flood waters in the Big Tujunga Creek watershed.[58] Unlike the prior plans though, LACFCD would

[55] *Los Angeles Times*. "Offer Water Ask Million", November 4, 1910.
[56] Ibid.
[57] *Los Angeles City Directory 1908*. "Homer A. Hansen", page 570.
[58] *Los Angeles Times*. "Los Angeles County Voters Authorize Huge Project", January 1, 1925.

only be constructing dams on Big Tujunga Creek for flood control and as a reservoir for water supply.

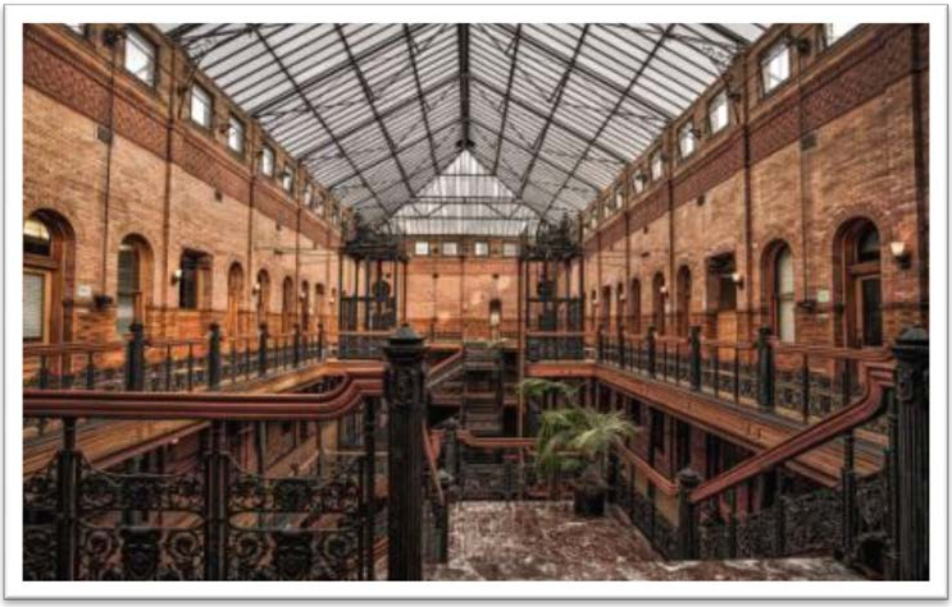

Figure 5: Interior view of the Bradbury Building that still stands on South Broadway in downtown Los Angeles.

There were plans for the construction of a total of four dams on the creek, with the "Upper Hansen" Dam located at its current location and next dam down the creek to be located at the approximate of Hoyts Ranch.[59] The proposed dam at Hoyts Ranch would lead to all of Hansen's land in Big Tujunga Canyon to be underwater.[60]

Trails Magazine described Hansen's property in their 1936 Winter issue as such:

> *Just below the Big Tujunga Flood Control Dam, under a fine oak tree, on a little flat near the road [old Tujunga Creek Road], stands a little log cabin, with a big stone chimney. Though it looks ancient in it more modern surroundings it is not so old as it seems, and was built by Dr. Homer A. Hansen, who filed a homestead on this property in 1910. Later, Dr. Hansen built a large and very beautiful log home which was destroyed in the flood of April 7, 1926, and in that same year the big, two-story Lodge which now stands on the property, was completed. Constructed of big spruce logs and great boulders, this big rustic building is an object of interest and wonder to many who drive to the end of the Big Tujunga Road.* [61]

Hansen sells the land, his road right-of-way, Hansen's Lodge, and other buildings along the Big Tujunga Creek to the County of Los Angeles in 1930 for $85,000 ($45,000 for the land, and $40,000 for the lodge and other improvements).[62]/[63] The County paid to Hansen a profit of $39,859

[59] *Los Angeles Times*. "Dam Land Deal Ordered", January 14, 1930.
[60] *Los Angeles Times*. "Dam Land Deal Ordered", January 14, 1930.
[61] *Trails Magazine*. "The Big Tujunga: Hansen's Lodge", Volume 3, Number 1, 1936; page 14.
[62] *Los Angeles Times*. "Dam Land Deal Ordered", January 14, 1930.

for his payment of $141 for the 94 acres of Government patent lands. At the start of the Great Depression, Hansen makes a profit of approximately 28,270%. Meanwhile, Hansen and his second wife Marie and their children, have been living in a custom designed house that he built in 1918 on the ranch land that would become the site of the U.S. Army Corps of Engineer's Hansen Dam in 1940.

During the construction of Big Tujunga Dam in 1930-1931, the old road up the canyon was widened so that men and materials could have easy access to the dam site.[64] "At Hansen Lodge near the dam site, numbers of tents have been placed to house engineers, inspectors and others who are at work on the big job."[65] The County had no intention of operating the Lodge, and at the time of purchase was intending to build a dam below the Lodge, in the approximate area of Hoyts Ranch, which would submerge Hansen's Lodge.[66] Even though LACFCD owned the old lodge, they did not use it to house the workers and managers of the project. LACFCD had Hansen's Lodge inspected for termite damage In April of 1931, but the lodge was still vacant and no decision had been made for its future.[67]

In March 1938, the runoff from winter rains crested the spillway of Big Tujunga Dam, and a five-foot wall of water charged down Big Tujunga Creek, demolishing Hansen's Lodge leaving only the stone chimney standing.[68]

Hansen and his family had moved to South Pasadena in 1940, and for the next twenty years he managed large land development projects and personal land holdings in Riverside, San Bernardino, Kern, and San Diego Counties. [69] His development in the Jawbone Canyon, Mojave, and Tehachapi Mountain areas, located northeast of Tehachapi Pass along Cache Creek, was comprised of 35,000 acres of land.[70] Homer A. Hansen passed away November 25, 1960 at 88 years of age.[71]

In 1966, the BTD operator, Bill Croke and his family lived in a wood cabin that was situated on the north side of the Big Tujunga Creek, built at the same time as the dam.[72] The assistant dam operator lived in a river rock and timber house on the south side of the stream.[73] The *Los Angeles Times* wrote that Croke had grown up in the area and knew that the "rock house (on the south side of the stream) used to be the private home of a man named Dr. Homer Hansen. Just a few yards downstream, he had a larger rock building which was a kind of nightclub and lodge where they had dancing and entertainment. They used to serve bootleg whiskey there [Hansen's Lodge]. When it came time to drive home, a lot of the customers were a little unsteady."[74]

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[63] Los Angeles County Assessor's Office property data for APN 5869-001-902
[64] *Los Angeles Times*. "Three Shifts Used at Big Tujunga Dam", May 11, 1930.
[65] Ibid.
[66] Ibid.
[67] *Los Angeles Times*. "Comment and Opinion", April 19, 1931.
[68] *Los Angeles Times*. "Big T – A Rugged Canyon Full of Desert Wonder", February 20, 1966.
[69] *Mojave Desert News*. "Dr. Homer Hansen Taken in Death", December 1, 1960.
[70] *Los Angeles Times*. "Funeral Services Set Tuesday for Dr. Hansen, 88", December 2, 1960.
[71] *Mojave Desert News*. "Dr. Homer Hansen Taken in Death", December 1, 1960.
[72] *Los Angeles Times*. "Dam Caretakers to Switch Houses", July 17, 1966.
[73] Ibid.
[74] Ibid.

BTD was designed to be a "big gulp" reservoir.[75] The reservoir behind the dam is intentionally kept at a low level so that it can capture a large amount of runoff from seasonal storms. Then, the dam keepers can slowly release the water to spreading grounds and percolation fields downstream to restore the underground water table. The BTD was seismic retrofitted in 2011 to meet state safety standards by thickening the dam wall, replacing the dam crest, stabilizing he canyon walls, and installing new dam controls.[76]

B. HISTORIC RESOURCES IDENTIFIED IN THE APE

A site visit and pedestrian-level inspection of the historic-era resources within the project area was performed by Pamela Daly, M.S.H.P., on July 18, 2017. Photographs were obtained during the pedestrian survey of the sites and structures previously identified as being located within the APE.

1. Hansen Lodge and Cabins site (USFS #05-01-55-00017)

Homer A. Hansen filed for a Homestead Land Patent Entry for approximately 94 acres primarily located in Township 2 North; Range 13 West; of Section 1; San Bernardino Base Meridian in 1910.[77] Contrary to local lore, it appears that he purchased the U.S. Government land for access to the water rights from Big Tujunga Creek, and a site for a future dam and reservoir. Hansen was aware of the value of this land and location from his professional association with the Tujunga Water and Power Company. The Homestead Entry patent was granted to Hansen in 1921. In 1924, a bond act was passed in Los Angeles County to finance a major flood control project to build a network of dams, reservoirs, and other structures.

Hansen sold his land and buildings to LACFCD in 1930. The two-story lodge that was in the parcel was destroyed in 1938, and massive grading and hillside contouring have significantly altered the land surrounding where the lodge once stood. There is a pile of stones that are supposed to have come from the chimney that remained after the Lodge building had been demolished when the dam was crested in March of 1938 by excessive rains. The area measures approximately 298 feet long by 107 feet wide, approximately .732 acre, and there are large, mature oak trees in this location. There are no standing structures, or foundations in this site. Topographic maps and aerial photographs also provide information that the discharge from BTD has changed the path of Big Tujunga Creek through the canyon, and the site where the Lodge was situated.

2. SCE Transmission Line Road Alignment in the USFS (P19-186877; USFS #05-01-55-187)

Within the current project APE is a segment of the SCE transmission line/maintenance road. In 2003, Schmidt and Schmidt recorded that the resource was a 26-mile-long alignment that includes parts of five Forest- and/or SCE-maintained roads. The road is depicted on the 1934 USGS Mt Lowe 1:24,000 quadrangle map, and the 1939 Mt. Lowe 1:24,000 quadrangle map.

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[75] *Los Angeles Times*. "Big Tujunga Dam in the Angeles National Forest Ready for 'Big Gulp'", February 3, 2014.
[76] Ibid.
[77] Bureau of Land Management, General Land Office Records; Homer A. Hansen patent: BLM Serial No. CALA 0011812/Accession Number 829972.

The SCE Verdugo Circuit (P19-186860) is directly associated with the SCE transmission line/maintenance road in the current project APE. The service roads were used to construct the power network through the Angeles National Forest, and have continued to be used to maintain the system. The utility poles and associated service road are considered ordinary and ubiquitous structures, as these rural power systems are found throughout California.

3. Verdugo Circuit (P19-186860; USFS #05-01-51-138)

The SCE Verdugo Circuit (P19-186860) is directly associated with the SCE transmission line/maintenance road in the current project APE. Our inspection revealed that the SCE Verdugo Circuit power lines no longer run from the base of Maple Canyon (near Big Tujunga Road), to the west towards Angeles Forest Highway, to where the maintenance road goes under the Vincent Circuit lines. The poles are still in place (without power lines) on the maintenance road between where the transmission road runs along the south wall of Maple Canyon SPS.

4. Big Tujunga Dam (USFS#05-01-55-221)

The Big Tujunga Dam is a variable-radius arch concrete dam. It was constructed 1930-1931 as a result of a Los Angeles County bond act passed in 1924 to finance a major flood control project to build a network of dams, reservoirs, and other structures. (Figures 6 and 7) Section 1, E., of this report summarizes the affects to the BTD as a result of seismic upgrades in 2011.

There will be no adverse effects to the dam due to the proposed Project. It should be noted that the dam is not recorded on DPR 523 Site Recording forms and the SCCIC does not maintain the USFS site record in its files.



Figure 6: Big Tujunga Dam, image date January 2008



Figure 7: Big Tujunga Dam, image date April 2015

C. SIGNIFICANCE

The APE of the Project contains a variety of identified historic-period resources. The site that has been identified as being the location of Hansen's Lodge, is situated on Los Angeles County land. The three other resources, the SCE Verdugo Power lines, SCE service road, and BTD, are all located on federal forest land. The built-environment resources, and the vacant site, have been evaluated under criterion for listing in the National Register and California Register. The Hansen Lodge site has also been evaluated for significance under the relevant County of Los Angeles Historic Preservation Ordinance.

1. Resource on County of Los Angeles land

a. Hansen's Lodge site

The site was investigated for any physical remains of the Hansen Lodge building. Other than three piles of river rocks that are supposed to have been from the stone chimney of the lodge, there are no physical attributes of a building that was located here. The site does not possess any physical aspects of integrity such as design, setting, materials, workmanship, feeling, and association, which could convey the history of Hansen's Lodge along Big Tujunga Creek and his patent homestead. The site does not appear eligible for listing in the National Register or California Register under criteria A/1 or B/2 for association with important events or persons, or as a County of Los Angeles Historic Landmark under criteria 1 and 2.

There are no remaining physical aspects of the Lodge that can be evaluated as a type or period of architecture, or a method of construction. The site does not appear eligible for listing in the National Register or California Register under criterion C/3, or as a County of Los Angeles Historic Landmark under criterion 3.

Our investigation did not find any evidence that the site has the potential to yield information about the history of the local area. We found evidence of at least 12 instances between 1938 and 2016, when the average annual rainfall was exceeded by almost double the amount of rain, and this would have led to substantial and sustained runoff over and around the site where the Lodge building once stood. The site does not appear eligible for listing in the National Register or California Register under criterion D/4, or as a County of Los Angeles Historic Landmark under criterion 4.

2. Resources on Federal land

a. Verdugo Circuit P19-186860; USFS #05-01-51-138

Unlike the electric transmission lines and supporting structures of systems such as the San Bernardino Line that provided electric to the Boulder Dam/Hoover Dam project, local circuits and associated utility poles, and construction/maintenance roads, are found in rural/forested areas throughout California. While the survey for the current project did not allow for the evaluation of the SCE road and Verdugo circuit outside of the APE, it appears that the utility poles and power lines should not be considered more than ordinary and ubiquitous structures.

The few utility poles and power lines that remain of the Verdugo Circuit in the APE do not appear eligible for listing in the National Register or California Register under criteria A/1 or B/2 for association with important historic events or persons.

The remaining utility poles and power lines of the Verdugo Circuit in the APE do not possess important engineering values, or add to the history of the use of electricity in Southern California. The segment of the Verdugo Circuit does not appear eligible for listing in the National Register or California Register under criterion C/3.

The short segment of the Verdugo Circuit in the APE does not appear to have the capacity to provide information important to the history of the local area, and be considered a significant historic resource under criterion D/4.

As the Verdugo Circuit transmission line no longer forms a continuing circuit through the APE, even though some utility poles are still evident along the construction/maintenance road at the west end of Maple Canyon, the Verdugo Circuit has lost the aspects of design, setting, materials, workmanship, and feeling, from regular maintenance to the line and the decision not to restore part of the line after the Station Fire.

b. SCE Transmission Line Road Alignment in the USFS P19-186877; USFS #05-01-55-187

Construction/maintenance roads such as the road that runs under the Verdugo Circuit in the APE are found in rural/forested areas throughout California. While the survey for the current project did not allow for the evaluation of the SCE road and Verdugo circuit outside of the APE, it appears that the utility poles and power lines should not be considered more than ordinary and ubiquitous structures. The construction/maintenance road does not appear to have the potential to be considered a historic resource.

The construction/maintenance road in the APE does not appear eligible for listing in the National Register or California Register under criteria A/1 or B/2 for association with important historic events or persons.

The construction/maintenance road in the APE has not been found to possess important engineering values, or add to the history of the building of electrical systems in Southern California. The segment of the SCE maintenance road does not appear eligible for listing in the National Register or California Register under criterion C/3.

The segment of the construction/maintenance road in the APE does not appear to have the capacity to provide information important to the history of the local area, and be considered a significant historic resource under criterion D/4.

Even though the Verdugo Circuit system does not appear to be carried along the original path through the APE, some utility poles are still evident along the construction/maintenance road, and the construction/maintenance road appears to have kept some aspects of integrity where the road has not been removed by alterations to the landscape.

Summary

Three resources were evaluated within the APE; a segment of the Verdugo Circuit, a segment of the SCE construction/maintenance road, and the vacant site where Hansen's Lodge was located until 1938. The resources evaluated within the BTR Sediment Removal Project APE do not appear eligible for listing in the National Register or the California Register as significant historic resources, as they do not meet any of the criteria necessary for listing in the registries. The Hansen Lodge site was also found not to meet the criteria necessary for being determined a County of Los Angeles Historic Landmark.

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APPENDIX A: Preparers Qualifications



Pamela Daly, M.S.H.P., Principal Architectural Historian
Daly & Associates, 2242 El Capitan Drive, Riverside, CA 92506
(951) 369-1366 daly.rvrsde@sbcglobal.net

Ms. Daly is a 36 CFR 61 Qualified Architectural Historian with more than 20 years experience in historic resource management and consulting in California, Vermont, New York, and Nevada. She earned a Bachelor of Science degree in Business Management from Elmira College in Elmira, New York, and a Master of Science degree in Historic Preservation at University of Vermont. Ms. Daly's coursework in Historic Preservation included the study of American Architecture, Historic Landscapes, and Building Conservation Techniques.

Ms. Daly has experience with federal agencies including U.S. Air Force, U.S. Navy, U.S. Army Reserve, U.S. Army Corps of Engineers, Bureau of Land Management, the U.S. Forest Service, the National Park Service, and U.S. Fish & Wildlife. She is accepted as a principal investigator for both Architectural History and History by the California State Office of Historic Preservation, and holds the qualifications to work throughout the United States. Ms. Daly belongs to the National Trust for Historic Preservation, Vernacular Architecture Forum, Society of Industrial Archaeology, and Association of Preservation Technology.

Ms. Daly has expertise not only in assessing and evaluating classic residential architectural styles of the United States dating from the eighteenth to the twenty-first century, but she has a wide range of experience in the survey and evaluation of military sites and structures in both the western and eastern United States. She has performed studies on airplane hangars, military housing, helicopter hangers, ammunition bunkers, flight simulators, and Cold War radar arrays. Industrial archaeological sites include automobile and railroad bridges, irrigation canals and ditches, gravity-fed water supply systems, sewer treatments systems, gold mines, water-pumping systems, privately-owned reservoirs, electric transmission line towers, roads, historic signage, airplane hangars, steam-powered belt and pulley systems, and a historic zanja.

Studies of built-environment resources include archival research, field investigation, significance criteria and determinations, assessment of impacts/effects, management plans, and mitigation implementation. Mitigation measures include preparation of Historic American Building Survey (HABS) documentation, Historic American Engineering Record (HAER) documentation, Historic American Landscape (HALS) documentation, interpretive signage, layout and production of brochures, websites, and video displays. Ms. Daly has also worked with clients with historically significant buildings to restore or rehabilitate them in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

APPENDIX B: APE Map with location of resources

APPENDIX C: DPR Series 523 Site Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186860 Update
HRI #
Trinomial
NRHP Status Code: 6Z

Other Listings
Review Code | Reviewer | Date

*Resource Name: Segment of "SCE Verdugo Circuit, Forest Service site #05-01-51-138"

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: Los Angeles

and

*b. USGS 7.5' Quad: Condor Peak Date: 1995 T 2N;R 13W; Section 1, and T2N; R12W; Section 6; S.B.B.M.

c. Address: near entrance to Big Tujunga Dam, 809 Big Tujunga Canyon Road City: Sunland Zip:

d. UTM: Segment from Zone:11; 390332mE/3794975mN, to Zone 11; 0391397mE/3794036mN (G.P.S.)

e. Other Locational Data: The segment runs from inside the private property of the Big Tujunga Dam complex, to the south and east, along the north slope of the south canyon wall in Maple Canyon towards the Angeles Highway. Elevation: 2,248 feet a.s.l. to 3,061 a.s.l.

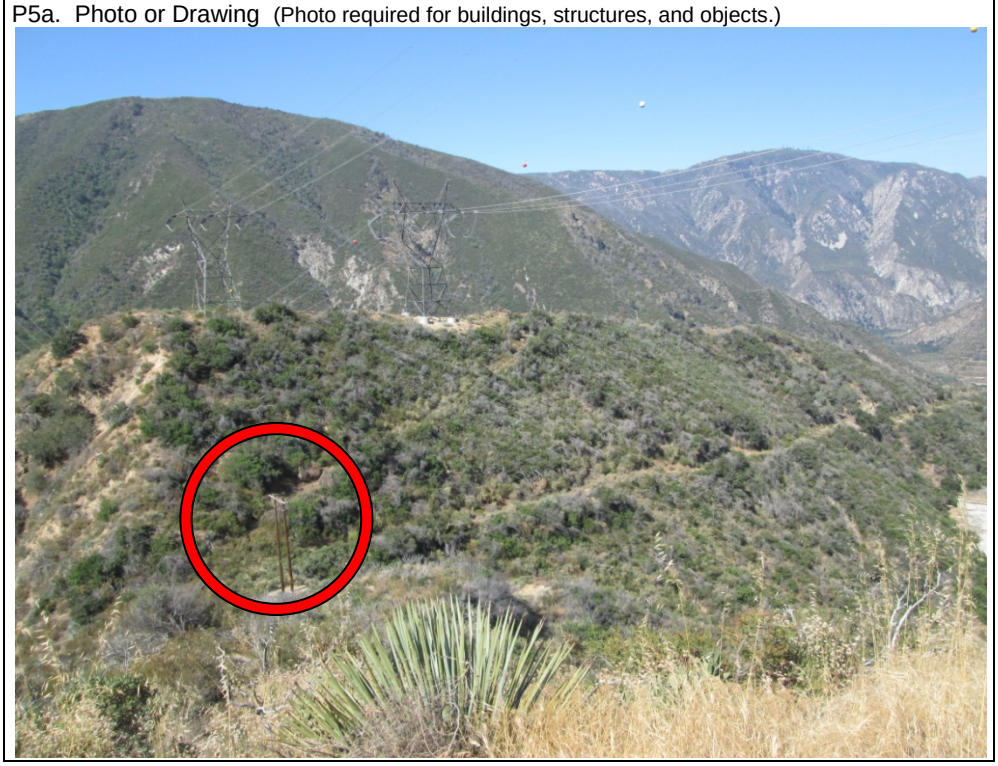
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The SCE Verdugo Circuit (P19-186860) is directly associated with the SCE transmission line/maintenance road in the current project area-of-potential effects (APE). Our inspection revealed that the SCE Verdugo Circuit power lines no longer run from the base of Maple Canyon (near Big Tujunga Road), to the west towards Angeles Forest Highway, to where the maintenance road goes under the Vincent Circuit lines. The poles are still in place (without power lines) on the maintenance road between where the transmission road runs along the south wall of Maple Canyon.

*P3b. Resource Attributes: HP39 (Other: Power line).

*P4. Resources Present: ☐Building ☒Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: View looking southwest from a pullout on the Angeles Forest Highway towards the south canyon wall of Maple Canyon. Utilty pole does not carry lines that run from the west where the Verdugo Circuit terminates near Big Tujunga Creek. July 18, 2017.

*P6. Date Constructed/Age and Sources: ☒Historic ☐Prehistoric ☐Both

The Verdugo Circuit dates from circa 1925, but the poles and lines have been replaced. *P7. Owner and Address:

Southern California Edison on Angeles National Forest land.

*P8. Recorded by:

Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

*P9. Date Recorded: August 3, 2017

*P10. Survey Type: Intensive pedestrian.

*P11. Report Citation: Daly, Pamela. "Historic Resources Evaluation Report of Big Tujunga Reservoir Sediment Removal Project, Los Angeles County, CA.", Daly & Associates, August 2017.

*Attachments: ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

 ***NRHP Status Code**: 6Z

***Resource Name:** Segment of "SCE Verdugo Circuit, Forest Service #05-01-51-138"

B1. Historic Name: Verdugo Circuit line.
B2. Common Name:
B3. Original Use: Electric transmission line and utility poles. B4. Present Use: Same.
***B5. Architectural Style:** N/A.
***B6. Construction History:** The installation of utility poles to run the electric system along Big Tujunga Creek, and into the Big Tujunga Canyon, circa 1925, would have been constructed contemporaneously with the SCE construction/maintenance service road.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**
Southern California Edison's Transmission Line Road, P19-186877.

B9a. Architect: Unknown b. Builder: Southern California Electric
***B10. Significance:** None **Theme:** Electric supply circuits **Area:** Los Angeles County
Period of Significance: None **Property Type:** utility poles and power lines **Applicable Criteria:** None

Unlike the electric transmission lines and supporting structures of systems such as the San Bernardino Line that provided electric to the Boulder Dam/Hoover Dam project, local circuits and associated utility poles, and construction/maintenance roads, are found in rural/forested areas throughout California. While the survey for the current project did not allow for the evaluation of the SCE road and Verdugo circuit outside of the APE, it appears that the utility poles and power lines should not be considered more than ordinary and ubiquitous structures.

The few utility poles and power lines of the Verdugo Circuit in the APE have not been found to be associated with important historic events or persons, nor do they possess important engineering values, or add to the history of the use of electricity in Southern California. The short segment of the Verdugo Circuit in the APE does not appear to have the capacity to provide information important to the history of the local area.

As the Verdugo Circuit transmission line no longer forms a continuing circuit through the APE, even though some utility poles are still evident along the construction/maintenance road at the west end of Maple Canyon, the Verdugo Circuit has lost the aspects of design, setting, materials, workmanship, and feeling, from regular maintenance to the line and the decision not to restore part of the line after the Station Fire.

B11. Additional Resource Attributes:

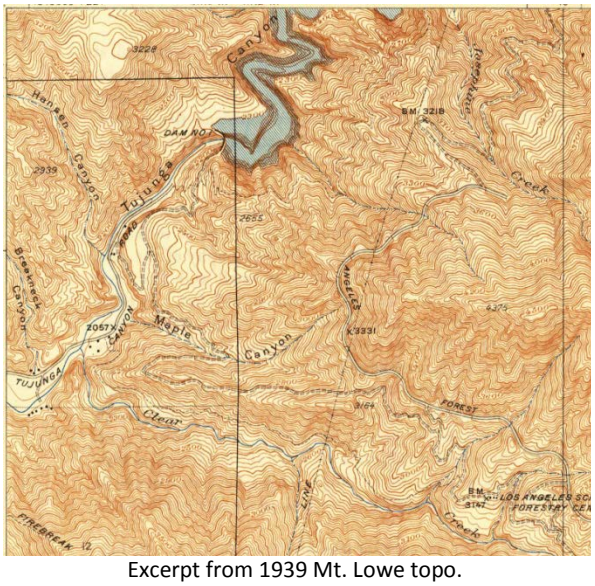
***B12. References:**

B13. Remarks:

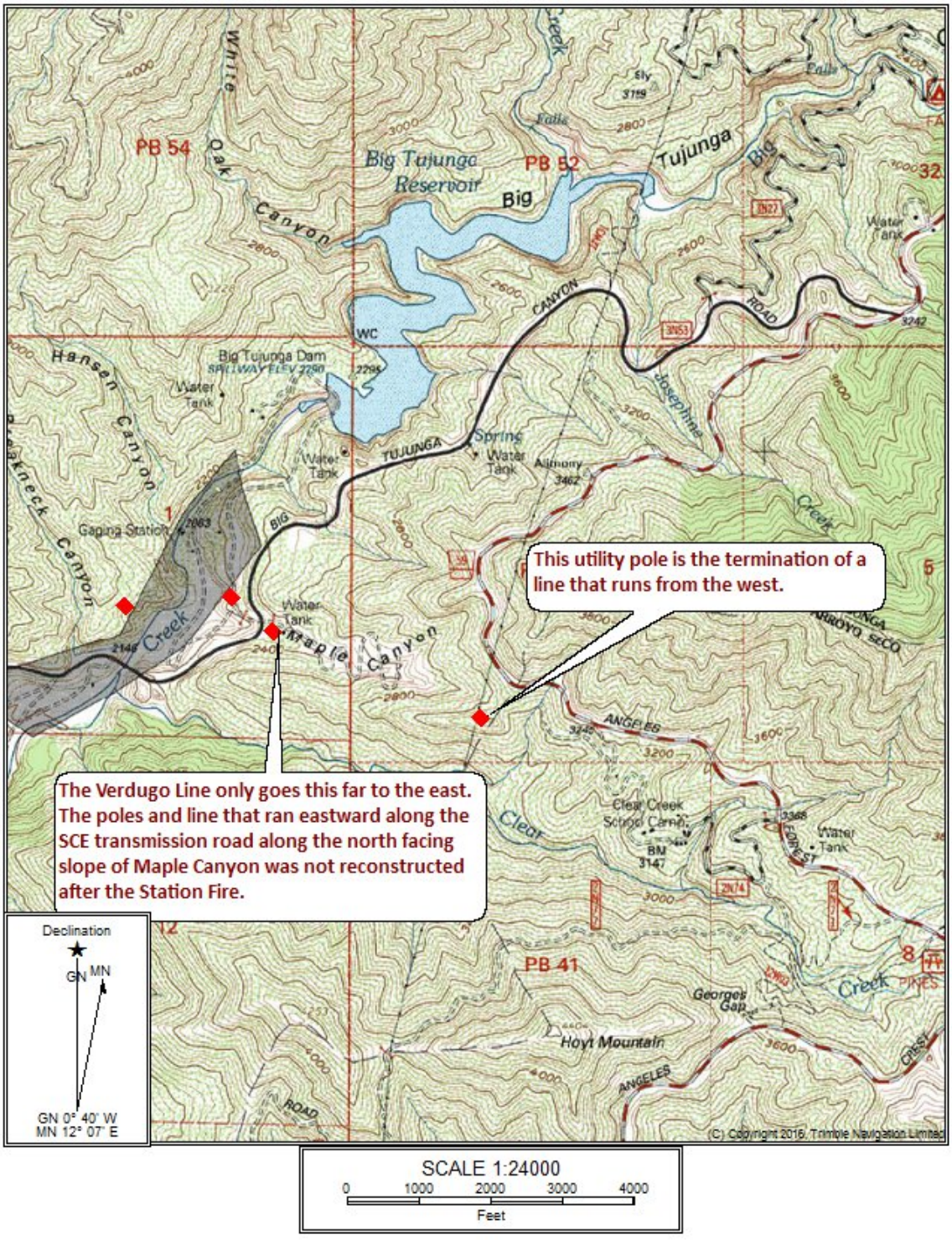
***B14. Evaluator:** Pamela Daly, M.S.H.P.

***Date of Evaluation:** August 3, 2017

(This space reserved for official comments.)



Excerpt from 1939 Mt. Lowe topo.


This utility pole is the termination of a line that runs from the west.
The Verdugo Line only goes this far to the east. The poles and line that ran eastward along the SCE transmission road along the north facing slope of Maple Canyon was not reconstructed after the Station Fire.
Declination
GN MN
GN 0° 40' W
MN 12° 07' E
SCALE 1:24000
0 1000 2000 3000 4000
Feet
(C) Copyright 2016 Trimble Navigation Limited
PB 54
PB 52
PB 41
Big Tujunga Reservoir
Big Tujunga Dam
Hansen Canyon
Oak Canyon
Maple Canyon
Hoyt Mountain
Georges Gap
Clear Creek
Water Tank
Spring
Gaging Station
WC
TUJUNGA
ANGELES
ROAD

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186877 Update
HRI #
Trinomial
NRHP Status Code: 6Z

Other Listings Review Code	Reviewer	Date

***Resource Name:** Segment of "SCE Transmission Line Road: SCE ANF Roads P3 #2, Forest Service site #05-01-55-187"

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and

***b. USGS 7.5' Quad:** Condor Peak **Date:** 1995 T 2N;R 13W; Section 1, and T2N; R12W; Section 6**;** S.B.B.M.

c. Address: near entrance to Big Tujunga Dam, 809 Big Tujunga Canyon Road City: Sunland Zip:

d. UTM: Segment from Zone:11; 390332mE/3794975mN, to Zone 11; 0391397mE/3794036mN (G.P.S.)

e. Other Locational Data: The segment runs from inside the private property of the Big Tujunga Dam complex, to the south and east, along the north slope of the south canyon wall in Maple Canyon towards the Angeles Highway. Elevation: 2,248 feet a.s.l. to 3,061 a.s.l.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Within the current project APE is a segment of the SCE transmission line/maintenance road. In 2003, Schmidt and Schmidt recorded that the resource was a 26-mile-long alignment that includes parts of five Forest- and/or SCE-maintained roads (Schmidt and Schmidt 2003). The road is depicted on the 1934 USGS Mt Lowe 1:24,000 quadrangle map, and the 1939 Mt. Lowe 1:24,000 quadrangle map.

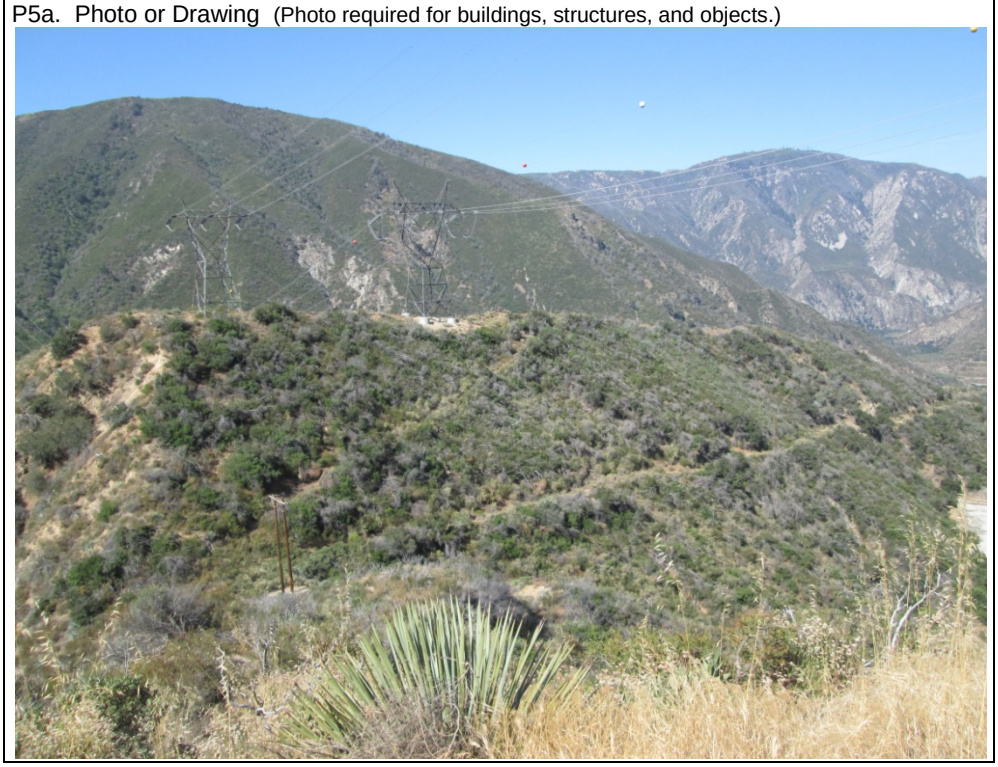
The SCE Verdugo Circuit (P19-186860) is directly associated with the SCE transmission line/maintenance road in the current project area-of-potential effects (APE). The service roads were used to construct the power network through the Angeles National Forest, and have continued to be used to maintain the system.

The utility poles and associated service road are considered ordinary and ubiquitous structures, as these rural power systems are found throughout California.

***P3b. Resource Attributes:** HP39 (Other: Power line maintenance road).

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: View looking southwest from a pullout on the Angeles Forest Highway towards the south canyon wall of Maple Canyon. The old SCE maintenance road is visible as the "Z" path on the face of the hill that continues to the west. The sediment spreading grounds of Maple Canyon is just visible along the bottom half of the right edge of the photograph. July 18, 2017.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both
1930-1931 for the construction of Big Tujunga Dam, and surrounding homesteads.

***P7. Owner and Address:**
Southern California Edison on Angeles National Forest land.

***P8. Recorded by:**
Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

***P9. Date Recorded:** August 3, 2017

***P10. Survey Type:** Intensive pedestrian.

***P11. Report Citation:** Daly, Pamela. "Historic Resources Evaluation Report of Big Tujunga Reservoir Sediment Removal Project, Los Angeles County, CA.", Daly & Associates, August 2017.

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

 ***NRHP Status Code**: 6Z

***Resource Name:** Segment of "SC Edison Transmission Line Road: SCE ANF Roads P3 #2, Forest Service #05-01-55-187"

B1. Historic Name: Maintenance road for the Verdugo Circuit line.
B2. Common Name:
B3. Original Use: Construction road for installing utility poles. B4. Present Use: For maintenance of lines and utility poles.
***B5. Architectural Style:** N/A.
***B6. Construction History:** The road would have been constructed contemporaneously with the installation of utility poles to run the electric system along Big Tujunga Creek, and into the Big Tujunga Canyon, circa 1925.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**
Southern California Edison's Verdugo Circuit, P19-186860.

B9a. Architect: Unknown b. Builder: Southern California Electric
***B10. Significance:** None **Theme:** Electric supply circuits **Area:** Los Angeles County
Period of Significance: None **Property Type:** unpaved dirt path **Applicable Criteria:** None

Unlike the electric transmission lines and supporting structures of systems such as the San Bernardino Line that provided electric to the Boulder Dam/Hoover Dam project, local circuits and associated utility poles, and construction/maintenance roads, such as the road under the Verdugo Circuit are found in rural/forested areas throughout California. While the survey for the current project did not allow for the evaluation of the SCE road and Verdugo circuit outside of the APE, it appears that the utility poles and power lines should not be considered more than ordinary and ubiquitous structures. The construction/maintenance road does not appear to have the potential to be considered a historic resource.

The construction/maintenance road in the APE has not been found to be associated with important historic events or persons, nor does it possess important engineering values, or add to the history of the use of electricity in Southern California. The segment of the construction/maintenance road does not appear to have the capacity to provide information important to the history of the local area.

As the transmission lines no longer form a continuing circuit through the APE, even though some utility poles are still evident along the construction/maintenance road, the construction/maintenance road appears to have kept some aspects of integrity where the road has not been removed by alterations to the landscape.

B11. Additional Resource Attributes:

***B12. References:**

B13. Remarks:

See Continuation Sheet for view of road in APE.

***B14. Evaluator:** Pamela Daly, M.S.H.P.

***Date of Evaluation:** August 3, 2017

(This space reserved for official comments.)

***Resource Name:** Segment of "SCE Edison Transmission Line Road: SCE ANF Roads P3 #2, Forest Service #05-01-55-187"

***Recorded by:** Pamela Daly, M.S.H.P. ***Date:** August 3, 2017 ☒Continuation ☒Update

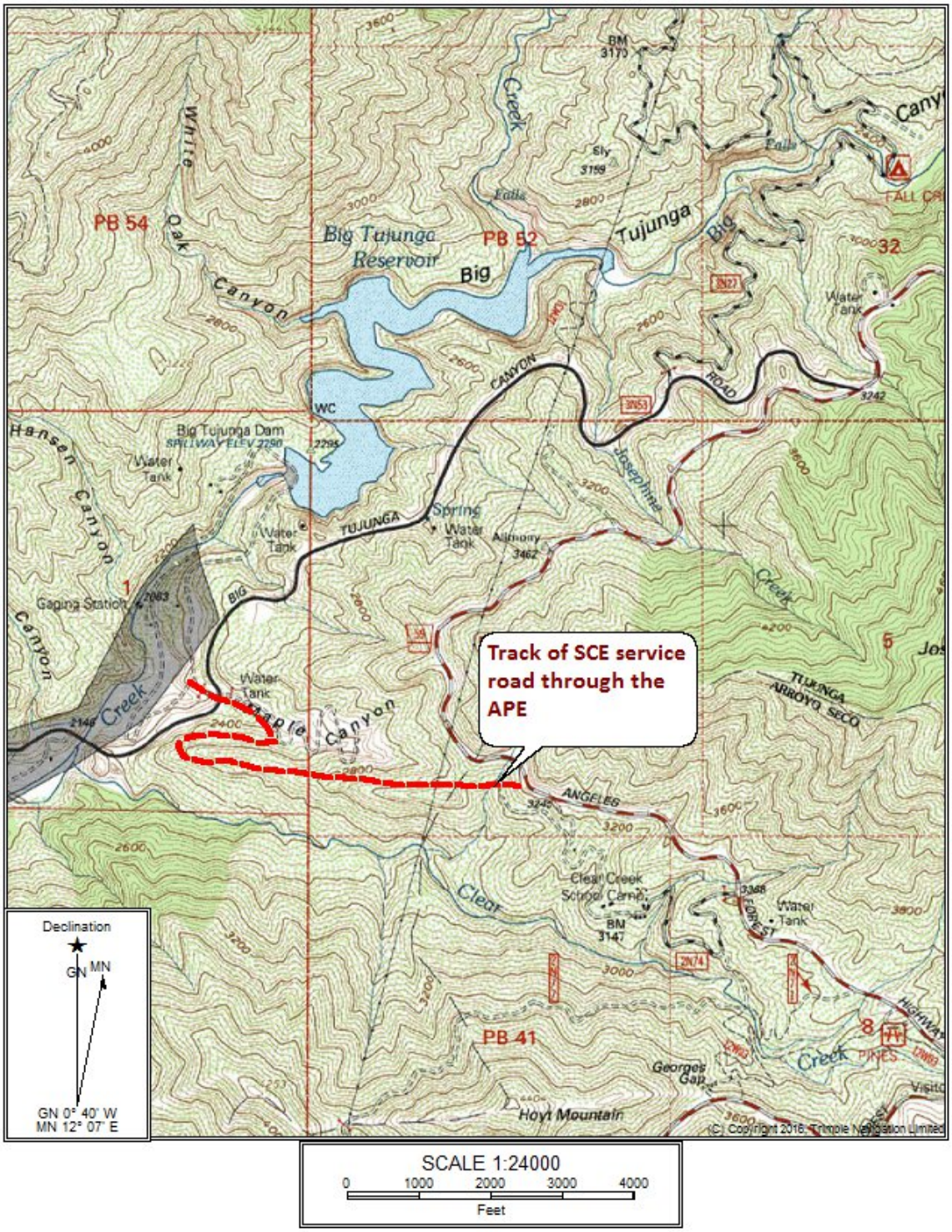


Using an aerial image from Google Earth, (imagery date April 2017) we have laid over the current roads and paths the paths as shown on the Mt. Lowe 1939 topo map for the SCE power line, utility poles, and associated maintenance road. (View looking north.)

The path shown in the DPR for P19-186877, written by Compass Rose Archaeological, Inc., dated November 28, 2003, mistakenly plotted the SCE lines and maintenance road (in this specific segment) on the modern roads, and not off of the original Tujunga Canyon Road that was located almost along the bank of Tujunga Creek.

***Resource Name:** Segment of "SCE Edison Transmission Line Road: SCE ANF Roads P3 #2, Forest Service #05-01-55-187"

***Map Name:** Condor Peak ***Scale:** 1:24,000 ***Date of Map:** 1995



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code: 6Z

Other Listings
Review Code | Reviewer | Date

*Resource Name: Hansen's Lodge site

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Condor Peak Date: 1995 T2N; R13W; 93.76 acres of Section 1; S.B.B.M.

c. Address: 809 Big Tujunga Canyon Road City: Sunland Zip:

d. UTM: see coordinates on Location Map page

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

The homestead parcel of Homer A. Hansen was given the APN of 5869-001-902 when it was purchased by Los Angeles County Flood Control District. Los Angeles County Department of Public Works now owns the site.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This area was pointed out by the Big Tujunga Dam keeper as the site where Hansen's Lodge had been located. There is a pile of stone that are supposed to have been from the chimney that remained after the Lodge building had been demolished from when the dam was crested in March of 1938 from excessive rains. The area measures approximately 298 feet long by 107 feet wide, approximately .732 acre, and there are large, mature oak trees in this location.

There are no standing structures, or foundations in this site. The area surrounding the site has been heavily disturbed over the years by grading activities. Topographic maps and aerial photographs also provide information that the discharge from Big Tujunga Dam has changed the path of Big Tujunga Creek through the canyon, and the site where the Lodge was situated.

The old "Road to Sunland" appears to have run to the immediate east of this lot, along the base of the hillside.

*P3b. Resource Attributes: AH7 (road segment).

*P4. Resources Present: ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo:
View looking north at site where Hansen Lodge was located. Big Tujunga Creek runs along the west side of the site.

*P6. Date Constructed/Age and Sources: ☒Historic
☐Prehistoric ☐Both
Lodge was built in 1926, destroyed by flood in 1938.

*P7. Owner and Address:
Los Angeles County Department of Public Works
900 South Fremont Avenue
Alhambra, CA 91803

*P8. Recorded by:
Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

*P9. Date Recorded: August 5, 2017

*P10. Survey Type: Section 106

*P11. Report Citation: Daly, Pamela. "Historic Resources Evaluation Report of Big Tujunga Reservoir Sediment Removal Project, Los Angeles County, CA", Daly & Associates, August 2017.

*Attachments: ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**: 6Z

***Resource Name: Hansen's Lodge site**

B1. Historic Name: Hansen Lodge site
B2. Common Name:
B3. Original Use: site of Hansen's Lodge
B4. Present Use: None

***B5. Architectural Style:** N/A

***B6. Construction History:** (Construction date, alterations, and date of alterations)

The lodge was built in 1926 after flood waters had demolished Hansen's prior mountain cabin resort. Hansen's Lodge was bought by the Los Angeles Flood Control District in 1930 as part of the Big Tujunga Dam project. The dam was crested in 1938 and flood waters demolished the abandoned lodge building. According to local sources, only the stone chimney and fireplace remained after the flood waters. The stone chimney was destroyed by the LADPW in the early 2000s because it was attracting hikers into the private property.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:** **Original Location:**

***B8. Related Features:**

Remain of the old Big Tujunga Creek Road that ran alongside Hansen's cabin and lodge site.

B9a. Architect: N/A
b. Builder: N/A

***B10. Significance:** None **Theme:** early 20th century mountain lodge **Area:** Los Angeles County
Period of Significance: None **Property Type:** None **Applicable Criteria:** None

The site was investigated for any physical remains of the Hansen Lodge building. Other than three piles of river rocks that are supposed to have been from the stone chimney of the lodge, there are no physical attributes of a building that was located here. The site does not possess any physical aspects of integrity such as design, setting, materials, workmanship, feeling, and association, which could convey the history of Hansen's Lodge along Big Tujunga Creek and his patent homestead. The property does not appear eligible for listing in the National Register, California Register, or as a County of Los Angeles historical resource under criterion for association with important events or persons. There are no remaining physical aspects of the Lodge that can be evaluated as a type, period, or method of construction.

Our investigation of the site did not find any evidence that the site has the potential to yield information about the history of the local area. We found at least evidence of at least 12 instances when the average rainfall was exceeded by almost double the annual average, which would have led to substantial and sustained flooding over and around the site.

B11. Additional Resource Attributes: None.

***B12. References:**

B13. Remarks:

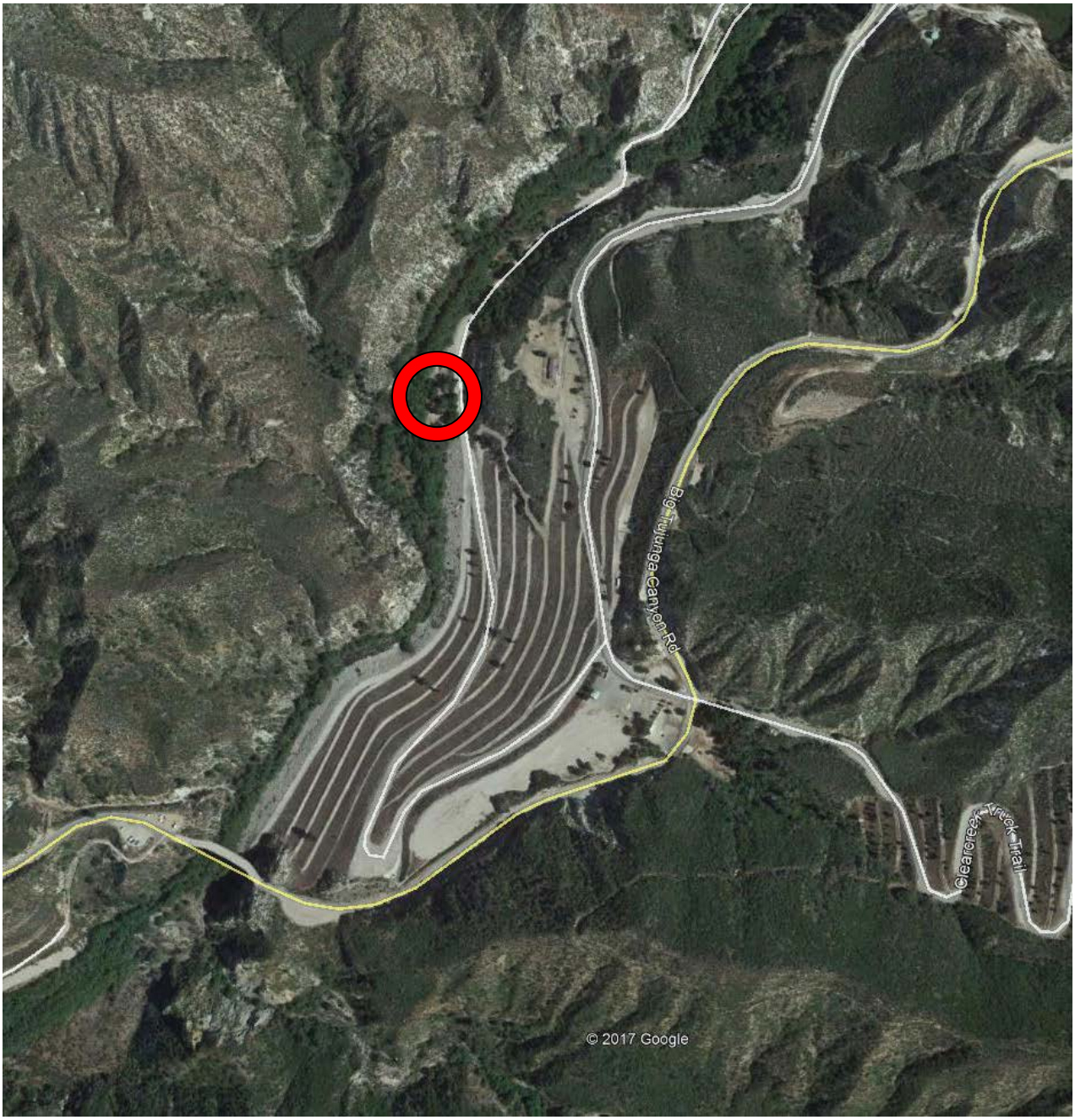
See aerial map on Continuation Sheet.

***B14. Evaluator:** Pamela Daly, M.S.H.P.

***Date of Evaluation:** August 5, 2017

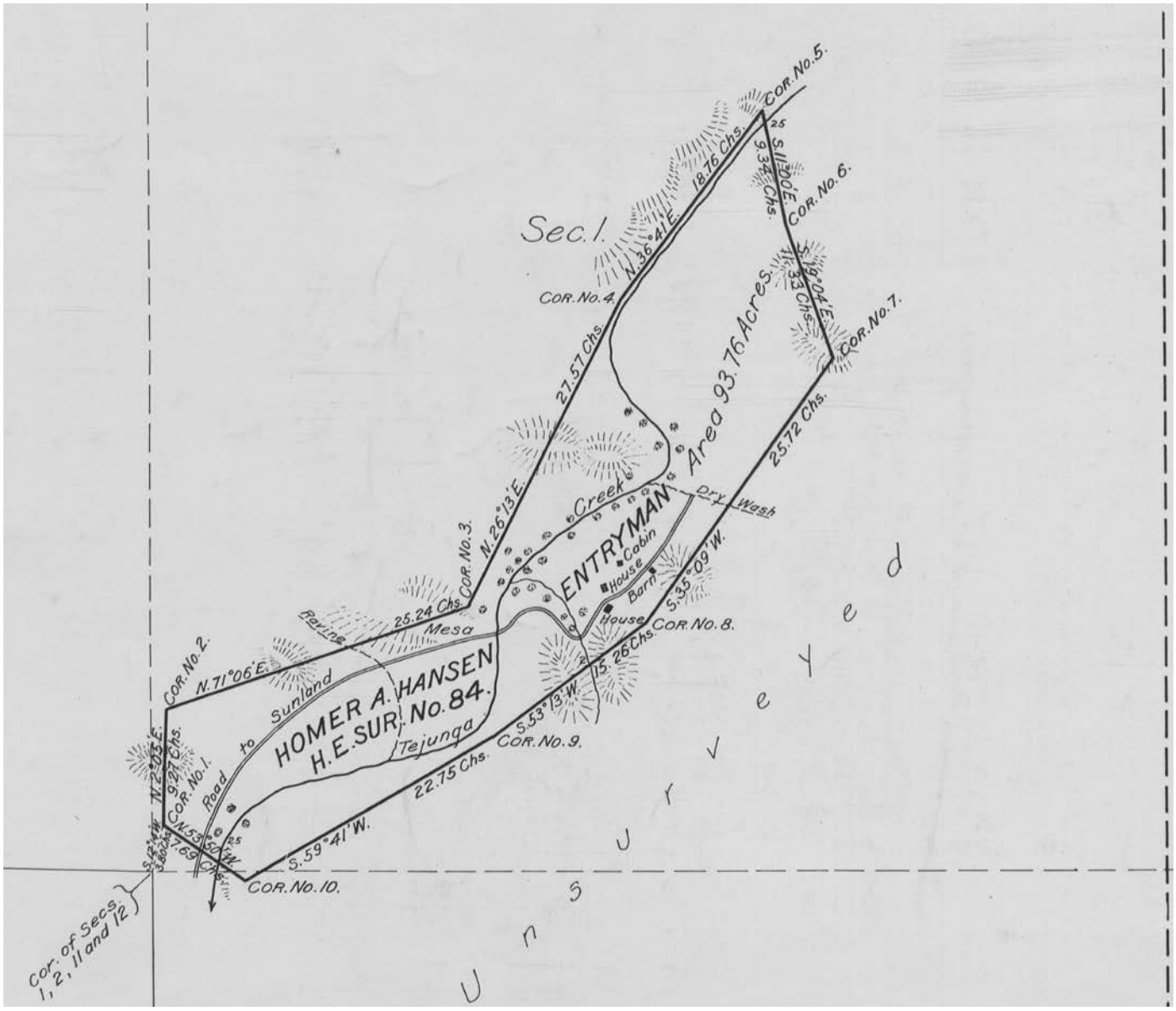
(This space reserved for official comments.)

***Recorded by:** Pamela Daly, M.S.H.P. ***Date:** August 5, 2017 ☒Continuation ☐ Update



The location of the site where Hansen's Lodge (1926-1938) was located. The site is within the private property of LA County Department of Public Works.

***Recorded by:** Pamela Daly, M.S.H.P. ***Date:** August 5, 2017 ☒Continuation ☐ Update



Close-up of excerpt from the Plat of Homestead Entry Survey No. 84 in the Angeles National Forest in Section 1, T2N, R13 W and Section 12 T2N; R13W, S.B.B.M., August 30, 1910.

The buildings and structures noted on the map may have been constructed by prior settlers on the land, or by Homer A. Hansen when he filed for the patent in 1910. All the buildings and structures of the homestead parcel were destroyed by the flood waters of 1926. When Hansen rebuilt, he constructed a lodge just a bit farther north up Tujunga Creek, approximately where the final "n" of the word "Entryman" is on the map. The "Road to Sunland" is the original Big Tujunga Creek Road. It only went as far as the base of Big Tujunga Dam when it was constructed in 1930-1931. According to Mt. Lowe Quad Map of 1939, the present day road, Big Tujunga Canyon Road, was built after 1939



Pile of the riverrock chimney stones along the creek side of the site. View looking west.



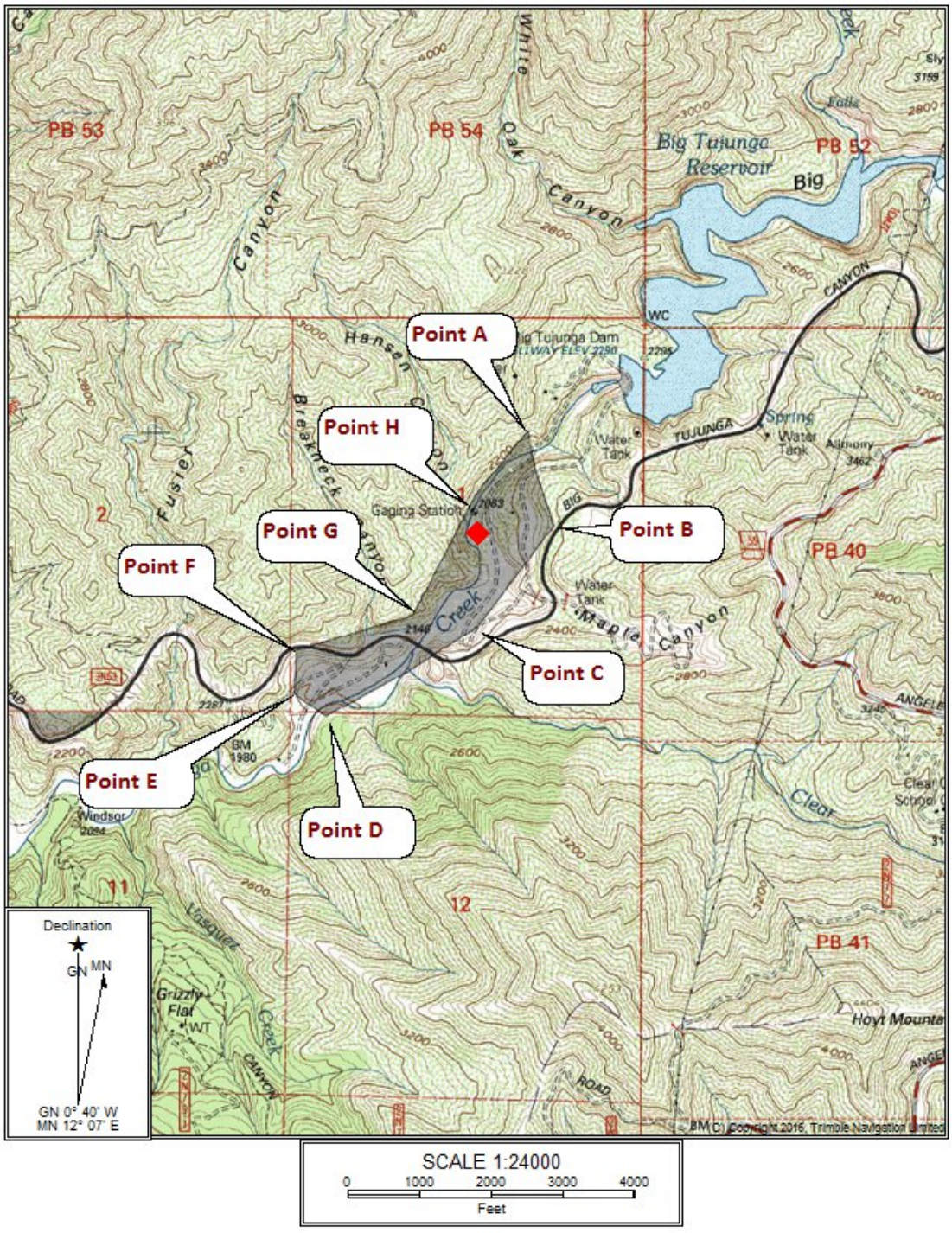
Segments of poured concrete and stone-and-concrete walls that supported the original canyon road. View looking north.

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial

***Resource Name:** Hansen's Lodge

***Map Name:** Condor Peak

***Scale:** 1:24,000 ***Date of Map:** 1995



Point A: Zone 11; 0386821m/E; 3797027m/N
Point B: Zone 11; 0390427m/E; 3794727m/N
Point C: Zone 11; 0390091m/E; 3794302m/N
Point D: Zone 11; 0389451m/E; 3793933m/N
Point E: Zone 11; 0389305m/E; 3794034m/N
Point F: Zone 11; 0389313m/E; 3794217m/N
Point G: Zone 11; 0389819m/E; 3794373m/N
Point H: Zone 11; 0390076m/E; 3794825m/N

APPENDIX F

PERSONNEL QUALIFICATIONS

PATRICK MAXON, M.A., RPA

Director | Cultural Resources

VCS Environmental
EXPERT SOLUTIONS | CEQA-NEPA . Biology . Regulatory



EDUCATION

1994/MA/Anthropology/California State University, Fullerton
1987/BA/Psychology/Sociology/Towson State University, Towson, MD

VCS TEAM MEMBER SINCE 2017

CERTIFICATIONS/TRAINING

Riverside County Transportation and Land Management Agency Certified Archaeologist/Riverside County

California Energy Commission Cultural Resources Specialist/

Registered Professional Archaeologist (National)/No. 11468/Register of Professional Archaeologists

Orange County Certified Archaeologist/Orange County

National Historic Preservation Act Section 106 Compliance Advanced Certification, 2002/

Principal Investigator, Southern California/Bureau of Land Management

Qualified Archaeologist-Secretary of Interior Standards and Guidelines of Professional Qualification & Standards for Archeology, as per Title 36, Code of Federal Regulations, Part 61/

ABOUT

Patrick Maxon M.A., RPA is a Registered Professional Archaeologist who meets the Secretary of Interior's standards for historic preservation programs for archaeology and who has a permit to perform work on Bureau of Land Management land. Patrick has 23 years of experience in all aspects of cultural resources management, including prehistoric and historic archaeology, paleontology, ethnography, and tribal consultation. He has expertise in compliance with NEPA, CEQA, the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act, and the Clean Water Act, among others. Patrick has completed hundreds of cultural resources projects that have involved (1) agency, client, Native American, and subcontractor coordination; (2) treatment plans and research design development; (3) archival research; (4) field reconnaissance; (5) site testing; (6) data recovery excavation; (7) construction monitoring; (8) site recordation; (9) site protection/preservation; (10) mapping/cartography; (11) laboratory analysis; and (12) report production. He has managed a number of projects within the jurisdiction of the USACE, the Bureau of Land Management, the Bureau of Reclamation, and other federal agencies that require compliance with Section 106 of the NHPA. He has also completed projects throughout Southern California under CEQA for State and local governments and municipalities, including Caltrans, the Department of General Services (DGS), the California Energy Commission, the California Department of Water Resources, the Los Angeles County Department of Public Works (LACDPW), the Los Angeles Department of Water and Power, the Los Angeles Unified School District, and others.

SELECT EXPERIENCE/PROJECTS

Tujunga Spreading Grounds Enhancement Project Cultural Resources Study, Los Angeles, CA: Cultural Resources Manager for the proposed project which consists, in part, of an alteration to the current intake facility; creation of a low-flow treatment area; installation of two new intake facilities; and reactivation, deepening, and/or combining of existing water basins to alleviate the migration of methane gas from the landfill to local residences (due to the presence of the Sheldon-Arleta landfill). Pat conducted a cultural resources study, which consisted of (1) a records search undertaken at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton; (2) consultation with the Native American Heritage Commission (NAHC); (3) a paleontological records search at the Natural History Museum of Los Angeles County; and (4) an assessment of the project's potential to adversely impact cultural resources, including recommendations for mitigating any adverse impacts to a less than significant level. The existing facility buildings and structures on the site will not be removed, and they do not appear to be of sufficient age to be considered historic; therefore, there would be no significant impacts to historic resources. Monitoring was recommended during excavations for new intake facilities and during expansion and deepening of the basins due to the potential to impact cultural resources.

Santa Anita Stormwater Flood Management and Seismic Strengthening Project Initial Study/Mitigated Negative Declaration, Los Angeles County, CA: Cultural Resources Manager for the preparation of an IS/MND pursuant to CEQA for the modification of three existing flood management and water conservation facilities along the Santa Anita Canyon Watershed, including the Santa Anita Dam (Dam), the Santa Anita Headworks (Headworks) and culvert crossing, and the Santa Anita Debris Dam (Debris Dam). The project improves these County of Los Angeles Flood Control District (LACFCD) facilities

PROFESSIONAL AFFILIATIONS

Pacific Coast Archaeological Society

30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675
949.489.2700 | vcsenvironmental.com

to better manage storm water runoff and to improve public safety by addressing seismic safety and other structural issues, as well as to increase water conservation and prevent flood damage to downstream communities. The Dam would be structurally altered to accommodate a new spillway with sufficient capacity to pass the probable maximum flood in order to reduce the risk of Dam failure from uncontrolled overtopping during major storm events. The Headworks would reconstruct the levee to ensure it can withstand flows and replace the existing tainter gate with a new diversion structure. The existing culvert bridge providing access to the City of Arcadia's Wilderness Park would be removed and replaced with a single-span bridge. Lastly, the remediation of the seismic deficiencies at the Debris Dam would involve a reconfiguring of the intake tower and reinforcing the embankment with structural buttressing. Key environmental issues include biological resources (e.g. bats, woodland plant communities), tree removal, construction noise adjacent to residential, and the temporary closure of park facilities. Patrick managed a Phase I study, which included records searches, a pedestrian survey, Native American scoping, and a technical report. Consultation with the U.S. Forest Service's (USFS') Cultural Resources Manager and research in the Forest Service archives was also undertaken. A historic evaluation of the Dam and associated built environment resulted in a finding of no historic properties affected.

Ortega Highway Reservoir Project Cultural Resources Monitoring, Orange County, CA: Project Manager for the Santa Margarita Water District's excavation of test pits and auger borings for its Planning Area 4 Reservoir on Ortega Highway. Archaeologists and Paleontologists monitored all substantial excavations into the subsurface at this location. The Cretaceous Period (circa 140 to 65 million years ago) geologic formation known as the Williams Formation is present throughout the subsurface of the project area. Monitors recovered several fossils during the study including plant and leaf impressions, a small crab, and several fragments of bone that could be dinosaur. Further study is necessary to identify and evaluate the discoveries and curate them in an appropriate museum facility.

Orange County Water District On-Call Environmental Analyses Services, Orange County, CA: Cultural Resources Manager for the On-Call Contract. Mr. Maxon has provided environmental analyses services on an as-needed basis as part of on-call contracts with the Orange County Water District since 2010. Representative cultural resources task orders completed as part of the on-call contracts, include the following:

- La Palma Recharge Basin, Anaheim, CA
- Prado Basin Mitigation Sites, Orange County, CA
- Fletcher Basin Improvement Project Cultural and Paleontological Resources Mitigation Monitoring Plan, City of Orange, CA
- Centennial Park Injection Well Project, Santa Ana, CA
- EW-1 Groundwater Containment and Treatment Project, City of Fullerton, CA.
- Santiago Recharge Basin Project, Orange, CA

Edinger Avenue Bridge Replacement Environmental Documents and Regulatory Services, Huntington Beach and Seal Beach, CA: Cultural Resources Manager for this project. The County of Orange, in cooperation with Caltrans and the FHWA, proposed to demolish the existing 15-span timber bridge over the Bolsa Chica Channel that provides access to Sunset Aquatic Regional Park. A 4-span precise concrete bridge would be constructed in its place. An IS/MND and supporting documentation were prepared in accordance with Caltrans standards. Pat conducted a Phase I cultural resources study to

Caltrans standards and completed a Historic Property Survey Report (HPSR) documenting the findings of the study. The Phase I study included development of a project Area of Potential Effects (APE); Native American scoping with local Gabrielino and Juaneño tribes and individuals; a pedestrian survey of the bridge and approaches on either side; and preparation of the HPSR. No archaeological resources were recorded within the APE and none were discovered as a result of this study. The bridge itself is listed as Category 5 (Not Eligible for NRHP) in the Caltrans Historic Highway Bridge Inventory.

Whittier Narrows Dam Basin Recreation Area Master Development Plan Input Program, El Monte, CA: Cultural Resources Manager for the preparation of a Program EIR for the Master Development Plan Input (MDPI) document to the 1996 Whittier Narrows Dam Recreation Area (WNRA) Master Plan. The project provides the USACE (which owns the WNRA) with a vision for the future of the WNRA that has evolved from the coordination and collaboration of interested stakeholders. The MDPI conceptually organizes the approximate 1,400-acre WNRA into 6 Planning Zones and one Conservation/Restoration Zone to define the types and intensity of recreational activities that are compatible with each other and with the underlying natural resource values of the site. Key environmental issues include impacts to biological resources, traffic/circulation, hydrology/drainage, and recreation. Pat reviewed existing literature and completed the Cultural Resources Section for the project's EIR.

Joshua Basin Water District Groundwater Recharge Basin and Pipeline Project, Joshua Tree, CA: Cultural Resources Manager for the Joshua Basin Water District Groundwater Recharge Basin and Pipeline Project. This project included the construction of approximately 24,000 linear feet of 16-inch diameter pipe, as an extension to the existing Mojave Water Agency pipeline, and the construction of an approximate 32.5-acre water recharge facility. Patrick prepared an educational awareness program on the historic and prehistoric cultural resources in the area; the potential of construction activities to disturb known or unknown cultural resources and human remains; and the actions to be taken in the event of accidental discovery. A qualified Archaeologist monitored ground-disturbing activities related to the pipeline construction; completed a pedestrian survey of the planned recharge basin; and monitored grading for construction of the basin itself.

East Garden Grove-Wintersburg Channel Widening Project Phase I Cultural Resources Study, Huntington Beach, CA: Cultural Resources Manager for this project, which will widen and stabilize approximately 1.8 miles of channel by installing sheet piling on both sides of the channel and subsequently removing rock and soil on the channel side of the piling. Residential uses are immediately adjacent to both sides of the eastern reach of the channel; the western reach traverses the Bolsa Chica wetlands. Pat conducted a Phase I cultural resources study to determine if the proposed channel widening would have the potential to impact cultural resources. The study included a literature review at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton; a paleontological literature review at the Natural History Museum of Los Angeles County; a pedestrian survey of the Area of Potential Effects (APE); and completion of the CEQA IS/MND section describing the study results. Pat also consulted with USACE regulators, Native American tribes and individuals, and a local Archaeologist who has extensive experience working in and around Bolsa Chica. Elements of the defunct Bolsa Chica Gun Club were identified in the wetlands, but it was determined that the channel work would have no impact on them. Channel recordation and construction monitoring were recommended.

Serrano Water District Walter E. Howiler, Jr. Water Filtration Plant and Wells No. 3 and No. 5 Modifications Project Initial Study/Mitigated Negative Declaration, Orange and Villa Park, CA: Cultural Resources Manager for this project involving water quality improvements at both the Howiler Water Filtration Plant located in the City of Orange and at the Serrano Water District's groundwater Well Nos. 3 and 5 located in the City of Villa Park. The project was to convert the primary disinfectant used at the Howiler Water Filtration Plant from free chlorine to ozone, and the residual (secondary) disinfectant at both the Howiler Water Filtration Plant and at Well Nos. 3 and 5 from free chlorine to chloramines. Pat completed a cultural resources literature review of the project site at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton, and contacted the California Native American Heritage Commission (NAHC) for a review of its Sacred Lands File and to obtain a list of Native American contacts for the project area. Additionally, he prepared and sent informational letters to all the NAHC-listed contacts in order to ensure a good-faith effort of participation and contacted the Natural History Museum of Los Angeles County to conduct a paleontological resources literature review for the project.

La Rivera Drainage Project Cultural Resources Services, Riverside, CA: Cultural Resources Manager for this project which proposed to improve existing drainage conditions within the La Rivera residential development. Psomas prepared an IS/MND for its implementation. The Phase I cultural resources study included (1) a cultural resources literature review of the project site at the Eastern Information Center (EIC) at the University of California, Riverside; (2) contact with the Native American Heritage Commission (NAHC) for a review of its Sacred Lands File and to obtain a list of Native American contacts for the project area; (3) preparation of informational letters to all the NAHC listed contacts in order to ensure a good-faith effort of participation and (4) conducted a paleontological resources literature review for the project at the Natural History Museum of Los Angeles County (NHMLA). No cultural resources were discovered and no impacts are anticipated.

Sunset Upper Debris Basin Dam Modification Project Cultural Resources Services, Los Angeles County, CA: Cultural Resources Manager for this project which proposes construction of a five-foot-high parapet wall on top of the existing dam to increase the storage capacity of the Sunset Upper Debris Basin. The project includes raising the dam abutments, modifying the dam access road, and installing a Geobrugg net debris barrier. Pat completed a cultural resources literature review of the project site at the South Central Coastal Information Center (SCCIC) at the California State University, Fullerton, and contacted the Native American Heritage Commission (NAHC) for a review of its Scared Lands File and to obtain a list of Native American contacts for the project area. Additionally, he prepared and sent informational letters to all the NAHC-listed contacts in order to ensure a good-faith effort of participation. An examination was also made of the Historic Resource Inventory (HRI) maintained by the California Register of Historic Preservation. Psomas prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed project, which proposed the construction of a 3.2-foot extension to the existing parapet wall on top of the existing dam structure in order to increase the capacity of the debris basin from 15,900 cubic yards to 23,900 cubic yards. This project also involved reconstruction of the existing concrete dam's spillway elevation by 5 feet. The parapet wall and spillway improvements would increase the height of the dam structure, thereby increasing the "footprint" of the basin's 100 percent contour by approximately 1.3 acres.

30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675
949.489.2700 | vcsenvironmental.com