

**APPENDIX C**

**PHASE 1 CULTURAL RESOURCES ASSESSMENT**



## PHASE I CULTURAL RESOURCES ASSESSMENT

### BIG TUJUNGA RESERVOIR SEDIMENT REMOVAL PROJECT

Big Tujunga Reservoir Sediment Removal Project: USGS **Condor Peak** 7.5 Minute Quadrangle in Township 2 and 3 North; Range 12 and 13 West, Section 1; (*S.B.B.M.*).

Prepared for

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**PHASE I CULTURAL RESOURCES ASSESSMENT:  
BIG TUJUNGA RESERVOIR SEDIMENT REMOVAL PROJECT**

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**July 2012**

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

**BonTerra Consulting**  
Project Number: CoLADPW J167

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

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## EXECUTIVE/MANAGEMENT SUMMARY

### PURPOSE AND SCOPE

BonTerra Consulting undertook this project to assess the potential impacts to Cultural Resources that would result from the implementation of the Big Tujunga Reservoir Sediment Removal Project. This document has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA). 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 BonTerra Consulting Archaeologist Albert Knight conducted a literature review at the United States Department of Agriculture Forest Service (Forest Service) 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 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 #LAR904CRI in Appendix D). A historic photograph, a site photograph, and an aerial photograph are located in Appendix E. Mr. Maxon and Christopher Drover, Ph.D. prepared and completed this technical report in July 2012. Resumes of BonTerra Consulting staff are located in Appendix F.

### FINDINGS OF THE INVESTIGATION

No significant cultural resources were discovered on the project site during the survey.

### INVESTIGATION CONSTRAINTS

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

### RECOMMENDATIONS

Prior to ground-disturbing activities on the project site, Mitigation Measure (MM) 1 requires that a qualified Archaeologist be retained in the event that cultural resources are discovered during grading activities. No further disturbance shall occur in the vicinity of the discovery until the Archaeologist examines and evaluates the discovery. It is not anticipated that regrading access roads for truck traffic will impact any native sediments, and therefore will not impact any possible remnants of Hansen's Lodge (Confidential Appendix G) or other cultural resources; however, some grading is anticipated in order to build a ramp into the reservoir to facilitate access by sediment removal equipment. Implementation of MM 1 would ensure that impacts are reduced to a less than significant level.

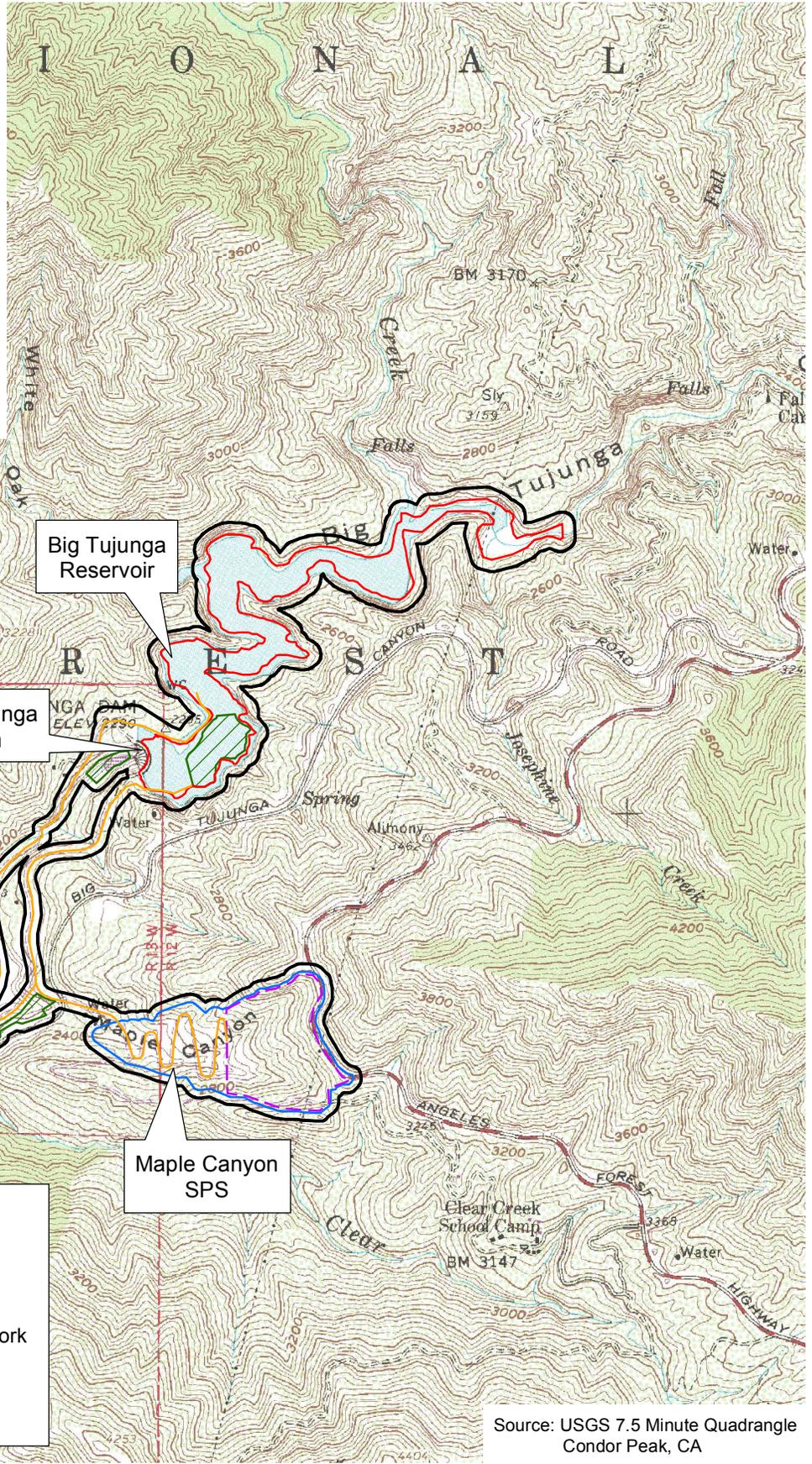
There is no indication as a result of this study that human remains are present within the project site. The records search and field survey indicate no evidence of human remains on or near the site. Project-related earth disturbance, however, has the potential to unearth previously

undiscovered remains, resulting in a potentially significant impact. However, implementation of MM 2 would ensure that impacts are reduced to a less than significant level.

During the literature review conducted for the Project, it was noted that a short segment of the SCE Transmission Line Road (19-186877), was incorrectly recorded in the DPR forms. The road is recorded as being a series of switchbacks extending up Maple Canyon; however, the SCE Transmission Line Road actually extends up the canyon along its southern slope. Therefore, SCE Transmission Line Road would not be subject to the proposed sediment deposits. The proposed fill area at Maple Canyon would not come near nor include the access road and thus, the Project would not affect the road's historic significance, either directly or indirectly. If the County desires to correct the record and remove the incorrect designation from the Maple Canyon SPS access road, the County has the option of preparing a supplement to the existing site record on a DPR 523L Continuation sheet and depicted on an updated DPR 523J Location Map the correct location of the segment of the SCE Transmission Line Road.

### **DISPOSITION OF DATA**

This report will be filed with the County of Los Angeles Department of Public Works; with BonTerra Consulting; with the United States Forest Service; and at the SCCIC. All field notes and other documentation related to the study are on file at BonTerra Consulting.



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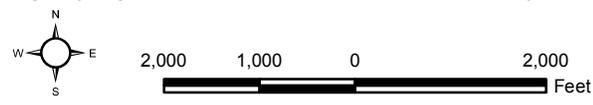
- Survey Area
- Potential Haul Routes
- Approximate SPS Boundary
- Approximate SPS Limits of Work
- Excavation Limits
- Staging Area

Source: USGS 7.5 Minute Quadrangle Condor Peak, CA

### Project Site

*Big Tujunga Reservoir Sediment Removal Project*

### Exhibit 1





## **1.0 UNDERTAKING INFORMATION/INTRODUCTION**

### **1.1 CONTRACTING DATA**

The County of Los Angeles Department of Public Works (LACDPW) retained BonTerra Consulting 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 #LAR904CRI.

### **1.2 UNDERTAKING**

The Big Tujunga Reservoir (BTR) is located in the San Gabriel Mountains within the Angeles National Forest, which is located within the unincorporated County of Los Angeles on land owned by the U.S. Forest Service. 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 LACDPW proposes to conduct the Project, which involves the excavation of sediment within BTR and the deposition of the sediment in the Maple Canyon SPS. The Project consists of various activities, 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 revegetated in compliance with the Maple Canyon Debris Disposal Site Revegetation 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 reservoir as sediment is removed.

### **1.3 EXHIBIT**

Exhibit 1 depicts the specific location of the project site on a portion of the U.S. Geological Survey (USGS) Condor Peak 7.5-minute quadrangle. It also identifies Maple Canyon SPS and potential sediment haul routes.

### **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, and Mr. Maxon and Christopher Drover, Ph.D., 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 of the California Environmental Quality Act (CEQA) regulations (14 *California Code of Regulations* [CCR] §15064.5 and *California Public Resources Code* [PRC] §21083.2), as well as 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 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, and mitigation measures are proposed to reduce the impacts to an acceptable level. 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.

### **2.2 CEQA**

CEQA requires a lead agency to determine whether a project would have a significant effect on one or more historical resources. According to Section 15064.5(a) of the State CEQA Guidelines, a “historical resource” is defined as a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (PRC §21084.1); a resource

included in a local register of historical resources (14 *California Code of Regulations* [CCR], Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a][3]).

Section 5024.1 of the PRC, Section 15064.5 of the State CEQA Guidelines (14 CCR), and Sections 21083.2 and 21084.1 of the CEQA Statutes were used as the basic guidelines for the cultural resources study. PRC 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purposes of the CRHR are to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR, which were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP (per the criteria listed at 36 CFR 60.4) are stated below.

The quality of significance in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California is present in any object, building, structure, site, area, place, record, or manuscript that possesses integrity of location, design, setting, materials, workmanship, feeling and association and that:

- (a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; or
- (b) Is associated with the lives of persons important in our past; or
- (c) 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
- (d) Has yielded, or may be likely to yield, information important in prehistory or history.

According to Section 15064.5(a)(3)(A–D) of the State CEQA Guidelines (14 CCR), a resource is considered historically significant if it meets the criteria for listing in the NRHP (per the criteria listed at 36 CFR 60.4). Impacts that affect those characteristics of the resource that qualify it for the NRHP or that would adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered to have a significant effect on the environment. Impacts to cultural resources from the proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

The purpose of a cultural resources investigation is to evaluate whether any cultural resources remain exposed on the surface of the project site or whether any cultural resources can reasonably be expected to exist in the subsurface. If resources are discovered, management recommendations would be required for evaluation of the resources for NRHP or CRHR eligibility.

Broad mitigation guidelines for treating historical resources are codified in Section 15126.4(b) of the CEQA Guidelines. To the extent feasible, public agencies should seek to avoid significant effects to historical resources, with preservation in place being the preferred alternative. If not feasible, a data recovery plan shall be prepared to guide subsequent excavation. Mitigation for historical resources such as buildings, bridges, and other structures that are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Weeks and Grimmer 1995) will generally be considered mitigated below a level of significance.

### **2.3 SENATE BILL 18**

Senate Bill (SB) 18 (*California Government Code §65352.3*) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. There is no general or specific plan amendment or adoption required for this project; therefore, formal consultation under SB 18 is not necessary; however, informal scoping was undertaken with local tribes through notification via informational letter.

### **2.4 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 PRC 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. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human 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 reservoir 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).<sup>1</sup> 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

<sup>1</sup> "Before Present" assumes that 1950 is "present".

the atlatl or 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**

Time BP	Newport Coast	Los Angeles	San Diego		Deserts		North America		
	Peterson et al. 1991	Wallace 1955	Warren 1968	Moriarity 1966	M. Rogers 1966	Wallace 1962	Wiley + Phillips 1955	Climate	
	LP 2	Historic	Yuman-Shoshonean	Diegueno II	Diegueno-Luiseno	Prehistoric Yuman-Shoshonean	<b>Post Classic</b>	Medithermal	
1,000	LP 1	Horizon IV-Late Prehistoric		Diegueno I	Prehistoric Yuman-Shoshonean		Amargosa		<b>Classic-Urban</b>
2,000	Intermediate Period	Horizon III-Intermediate	La Jolla III			La Jolla- Amargosa II		Pinto	<b>Formative-food production</b>
3,000									MS 3
4,000	MS 2	Horizon I-Early Man	Encinitas	La Jolla	Lake Mojave	<b>Lithic-hunting, collecting-emphasis on hunting(?)</b>			
5,000							MS 1	San Dieguito	San Dieguito
6,000	Paleo-Coastal	San Dieguito	San Dieguito	<b>Haitus</b>	San Dieguito III	Anathermal			
7,000							MS 1	Horizon I-Early Man	Encinitas
8,000	MS 1	Horizon I-Early Man	Encinitas	La Jolla	Lake Mojave	<b>Lithic-hunting, collecting-emphasis on hunting(?)</b>			
9,000							MS 1	Horizon I-Early Man	Encinitas
10,000	Paleo-Coastal	San Dieguito	San Dieguito	<b>Haitus</b>	San Dieguito III	Anathermal			

LP: Late Prehistoric; MS: Millingstone

Source: Christopher Drover 2012

**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 project site. The Spanish named the Gabrielino after the Mission San Gabriel Archangel. The Gabrielino spoke Tatic (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 rancherías. These rancherías 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.). *Glycymeris* 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 project area is within the region historically occupied by Gabrielino Indians, likely the group known as Fernandeno (Bean and Smith 1978) or the Tongva. The unpublished notes of J.P. Harrington indicate the name Maqunga 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 baptised between 1783 and 1811 (Merriam 1968:102, 120; Singer 1985).

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

## **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 U.S. Forest Service offices in Arcadia on October 13, 2011 (Appendix A). The review consisted of an examination of the U.S. Geological Survey's (USGS) Condor Peak, California 7.5-minute quadrangle to evaluate the project area 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 project site. 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).

### **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 SCOPING**

An inquiry was made of the NAHC located in Sacramento to request a review of the 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. 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 project site. Information regarding the results of the Native American coordination/consultation is provided in Appendix C.

### **4.4 ARCHAEOLOGICAL FIELD SURVEY**

A systematic archaeological survey of the project site was conducted by BonTerra Consulting Archaeologist Albert Knight under the supervision of Patrick Maxon, RPA on October 13, 2011. The entirety of the project site was surveyed via parallel transects spaced approximately five meters apart where possible and included focused surveys in areas of concentrated cultural material. Dense, low-growing grasses and disturbed soils debilitated ground survey efforts.

**5.0 RESULTS**

**5.1 CULTURAL RESOURCES RECORDS SEARCH**

Sixteen archaeological surveys have been conducted within a one-mile radius of the project site. Five of the surveys included at least a portion of the project site. Ten previously recorded resources are located within one mile of the project site. Two recorded resources are located on the project site (19-186860 and 19-186877), and a third (Hansen’s Lodge) is believed to be located there.

Table 2 identifies the previous cultural resources studies that include at least a portion of the project site.

**TABLE 2  
CULTURAL RESOURCES STUDIES WITHIN ONE MILE OF THE PROJECT SITE**

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	Cultural Resources Report for the Tehachapi Transmission Project. 22 different USGS quadrangles.
USGS: U.S. Geological Survey		

Table 3 describes the known cultural resources within one mile of the project site. Three cultural resources noted in Table 3 are within the area of potential effects (APE) of the proposed sediment removal project: 19-186860, 19-186877, and the former location of the Hansen Lodge.

**TABLE 3  
CULTURAL RESOURCES ON OR WITHIN ONE MILE OF THE PROJECT SITE**

Site Number	Recorder/(Year)	Comment	Resource Within APE
19-003104	Cotterman, Peterson and Sander/ (2003)	4 structural foundations	No
19-003471	Panlagua/ (2003)	6 structural features (possibly early Clear Creek School Camp facilities)	No
19-003386	Brasket and Wallace/ (2004)	Concrete structural foundation	No
19-003986	Lichtenstein/ (2009)	Various cement slab features; former scenic overlook	No
19-100796	Norton/ (2009)	Plumb Bolo knife	No
19-186535	Arbuckle/ (1979)	The Angeles National Forest	No
19-186860	Schmidt (2003)	Wooden power poles/insulators	Yes
19-186877	Schmidt and Schmidt (2003)	26 miles of USFS road alignment; shown on USGS 1926 and 1931 maps	Yes
19-186923	Vance/ (2001)	Mt. Lukens Road (2N76)	No
19-187713	Sander (2003)	Angeles Forest Highway; 25 mile alignment; Mill Creek Bridge built between 1939 and 1941; tunnel 1941	No
	Knight and Maxon (2011)	Extrapolated location of Hansen’s Lodge (USFS)	Yes
USFS: U.S. Forest Service			

### **5.1.1 Resources Within the Area of Potential Effect**

#### **19-186860**

This site is Southern California Edison's (SCE's) Verdugo Circuit. It is a linear arrangement of poles, the extreme eastern end of which extends over the access road west of the reservoir where it splits. The northern fork terminates a short distance to the east, still south of the reservoir; the south fork extends through Maple Canyon, where it terminates near the top. Much of this was destroyed during the 2009 Station Fire, but was rebuilt.

#### **19-186877**

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 Angeles National Forest (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 pole line road was designed to service the high voltage transmission line between the community of Vincent, on the north side of the mountains, and Eagle Rock on the south side (Schmidt and Schmidt 2003). The proposed fill planned for Maple Canyon would not alter this site's significance because the alignment in the Canyon has already been altered. The existing recordation of the site, the linear nature of the resource, and its continued function do not damage the resource or require determination of eligibility.

#### **Hansen's Lodge**

While the structures no longer visibly exist, a private residence and Hansen's Lodge was built within the project site boundaries by Dr. Homer Hansen. Dr. Hansen originally visited Big Tujunga as a teenager in 1892 and returned as a young physician a few years later, enjoying camping spots amongst the trees in the local canyon terrain. In the early 1900s, Hansen was forced to retire to the canyon upon a diagnosis of acute inflammatory rheumatism (Vargo 2011).

Dr. Hansen found the sunshine and mountain environment therapeutic, and recovered by 1909. He filed claim for 93 acres at just below the present Big Tujunga Dam. Within a year he built a small cabin, and then built Hansen's Lodge, which grew to be a popular spot with politicians and celebrities from Southern California (Vargo 2011). The lodge had guest accommodations, stables, and a swimming pool. 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 so the structure was not rebuilt (Vargo 2011). The Forest Service believes that the site of Hansen's Lodge (FS# 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) in the vicinity of UTM 11:3794522N; 390151E. Remnants of the lodge are said to have been knocked down years ago to deter weekend partygoers. Confidential Appendix G depicts the approximate location of the Lodge.

## **5.2 PALEONTOLOGICAL RESOURCES**

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 project site, as well as shallow excavations in Quaternary sedimentary deposits (gravel) in the southwestern portion of the project site, near the access roads, probably would not uncover

significant vertebrate fossils. He further mentioned that only deep excavation in the southwestern portion of the project site may encounter significant fossil remains. Only excavations of substantial depth might require paleontological monitoring.

**5.3 NATIVE AMERICAN SACRED LANDS FILE REVIEW**

The NAHC Search of the Sacred Lands File on September 26, 2011, did not identify the presence of Native American cultural resources on the project site. 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 project site. 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 project site. 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.

**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 project site 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 ARCHAEOLOGICAL FIELD SURVEY

On October 13, 2011, BonTerra Consulting Archaeologist Albert Knight conducted a pedestrian survey of the project site. 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

This area could not be directly accessed, but a large part of it (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 reservoir is currently almost empty 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 reservoir 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

The downstream side of the dam could not be directly accessed, but all but the northernmost end 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 Forest Service believes that the site of Hansen’s Lodge (FS# 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 once). The Hansen family is considered to be locally historically important. 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 Big Tujunga Dam 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”. No professional researchers have ever examined the site (which has never been recorded) where the lodge was located (see Confidential Appendix G); however, the current project is not anticipated to impact this resource should it still exist in this location.

#### 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**

#### **5.4.4 Summary**

As a result of the analysis of the SCCIC records search and evidence gathered in the field, it became evident that a short segment of resource P-19-186877 (the SCE Edison Transmission Line Road) was incorrectly recorded. As it extends through Maple Canyon, the road is recorded as a series of switchbacks extending up the slope of the canyon on top of the previously placed sediment from earlier clean-outs of the reservoir. In reality, the transmission line road extends up the canyon along its southern slope and not up the existing fill. It is recommended that this error be corrected in a supplement to the existing site record on a DPR 523L Continuation sheet, and depicted on an updated DPR 523J Location Map, and submitted to the EIC.

## 6.0 CEQA IMPACT ANALYSIS

This impact analysis is provided to assist in the preparation of an environmental document for the proposed project and provides discussion regarding each significance criterion for cultural resources.

### 6.1 SIGNIFICANCE CRITERIA

Appendix G of the State CEQA Guidelines contains the Initial Study Environmental Checklist form, which includes questions relating to cultural resources. The issues presented in the Initial Study Checklist have been used as significance criteria. Accordingly, a project may result in a significant environmental impact if:

- *The Project would cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.*
- *The Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.*
- *The Project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*
- *The Project would disturb any human remains, including those interred outside of formal cemeteries.*

### 6.2 PROJECT IMPACT ANALYSIS

***Would the project cause a substantial adverse change in the significance of a historical resource?***

During the literature review conducted for the Project, it was noted that a short segment of the SCE Transmission Line Road (19-186877), was incorrectly recorded in the DPR forms. The road is recorded as being a series of switchbacks extending up Maple Canyon; however, the SCE Transmission Line Road actually extends up the canyon along its southern slope. Therefore, SCE Transmission Line Road, would not be subject to the proposed sediment deposits. The proposed fill area at Maple Canyon would not come near nor include the access road and thus, the Project would not affect the road's historic significance, either directly or indirectly, and no mitigation is required. If the County desires to correct the record and remove the incorrect designation from the Maple Canyon SPS access road, the County has the option of preparing a supplement to the existing site record on a DPR 523L Continuation sheet and depicted on an updated DPR 523J Location Map the correct location of the segment of the SCE Transmission Line Road.

The extreme eastern end of SCE's Verdugo Circuit (19-186860) extends over the access road west of BTR. This linear arrangement of poles is not expected to be impacted by the proposed Project and no mitigation is required.

The remnants of Hansen's Lodge may be present under or adjacent to the access roads southwest of the Dam; however, 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 impact to this site, if it still exists, is anticipated. No prehistoric archaeological sites are recorded in the vicinity of the Project site and no mitigation is required.

***Would the project cause a substantial adverse change in the significance of an archaeological resource?***

The current Project involves the excavation of sediment accumulated behind the Dam and the grading of a ramp that will extend into the reservoir to facilitate access by grading equipment. Therefore, there is a possibility that historical and/or archaeological materials would be uncovered during necessary excavations for the construction of the vehicle access road behind the Dam structure into BTR. Although the likelihood of encountering historic and/or archaeological resources on the Project site is considered low, this impact would be potentially significant. Mitigation Measure (MM) 1 describes procedures for monitoring and protocols to be followed in the event that cultural resources are discovered during grading. Implementation of this mitigation measure would reduce this potentially significant impact to a less than significant level under both the Low Emission Trucking Option and the Conveyor Belt System Option.

***Would the project disturb or encounter any significant paleontological remains?***

While excavations to significant depths may encounter significant sediments in the southwestern portion of the Project site, such excavations are not planned. The records search conducted by the Natural History Museum of Los Angeles County indicates no evidence of significant paleontological remains within proposed excavation areas. At the southwestern section, access roads that would be paved would not require deep excavations that may disturb underlying fossil remains. The Project would involve occasional localized filling or shallow grading to maintain the access roads at this location. This activity would result in the disturbance of non-native surficial sediments that have been previously disturbed. The Project would not excavate to a depth that could likely encounter paleontological resources. There would be less than significant impacts to paleontological resources.

***Would the project disturb any human remains, including those interred outside of formal cemeteries?***

There is no indication as a result of this study that human remains are present within the project site. The records search and field survey indicates no evidence of human remains on or near BTR or Maple Canyon SPS. The Project would not impact native sediments that were not previously disturbed by the construction of BTR or that flowed down from the upper reaches of Big Tujunga Creek. Recently deposited sediment, debris and vegetation that flowed with storm waters into BTR are not expected to contain any human remains, including those interred outside formal cemeteries.

In the unlikely event of an unanticipated encounter with human remains in BTR, the *California Health and Safety Code* and the *California Public Resources Code* require that any activity in the area of a potential find be halted and the Los Angeles County Coroner be notified, as described in MM 2. There would be less than significant adverse impacts to human remains with compliance with MM 2.

## **7.0 RECOMMENDATIONS AND MITIGATION**

### **MITIGATION MEASURE 1**

Should archaeological resources be found during ground-disturbing activities for the Project, an Archaeologist shall be hired to first determine whether it is a “unique archaeological resource” pursuant to Section 21083.2(g) of the *California Public Resources Code* (PRC) or a “historical resource” pursuant to Section 15064.5(a) of the State CEQA Guidelines. If the archaeological resource is determined to be a “unique archaeological resource” or a “historical resource”, the Archaeologist shall formulate a mitigation plan in consultation with the Los Angeles County Department of Public Works that satisfies the requirements of the above-referenced sections. If the Archaeologist determines that the archaeological resource is not a “unique archaeological resource” or “historical resource”, s/he may record the site and submit the recordation form to the California Historic Resources Information System at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton.

The Archaeologist shall prepare a report of the results of any study prepared as part of a testing or mitigation plan, following accepted professional practice. The report shall follow guidelines of the California Office of Historic Preservation. Copies of the report shall be submitted to the Los Angeles County Department of Public Works and to the California Historic Resources Information System at the South Central Coastal Information Center at California State University, Fullerton.

### **MITIGATION MEASURE 2**

If human remains are encountered during excavation activities, all work shall halt in the immediate vicinity of the discovery and the County Coroner shall be notified (*California Public Resources Code* §5097.98). The Coroner shall determine whether the remains are of forensic interest. If the Coroner, with the aid of the County-approved Archaeologist, determines that the remains are prehistoric, s/he will contact the Native American Heritage Commission (NAHC). The NAHC shall be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the *California Health and Safety Code*. The MLD shall make his/her recommendation within 48 hours of being granted access to the site. The MLD’s recommendation shall be followed if feasible, and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials (*California Health and Safety Code* §7050.5). If the landowner rejects the MLD’s recommendations, the landowner shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (*California Public Resources Code* §5097.98).

**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: June 2012

SIGNED:



Patrick O. Maxon., RPA  
Director, Cultural Resources



Christopher Drover Ph.D., RPA  
Cultural Resources

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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](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 and FS)**



## SCCIC Bibliography: Big Tujunga Reservoir

LA-01477

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*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  
*Affiliation:*  
*Resources:*  
*Quads:* CONDOR PEAK  
*Pages:*  
*Notes:*

LA-01529

---

*Author(s):* McIntyre, Michael J.  
*Year:* 1985  
*Title:* Archaeological Reconnaissance Report: Lower Big Tujunga Vegetation Management Arr  
*Affiliation:* 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  
*Affiliation:* 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  
*Affiliation:* 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  
*Affiliation:* Compass Rose Archaeological, Inc.  
*Resources:*  
*Quads:* MT WILSON  
*Pages:*  
*Notes:*

## SCCIC Bibliography: Big Tujunga Reservoir

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**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  
*Affiliation:* 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  
*Affiliation:* Pacific Legacy, Inc.  
*Resources:*  
*Quads:* CONDOR PEAK  
*Pages:*  
*Notes:* ARR # 05-01-00-868

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**LA-07155**

*Author(s):* Bartoy, Kevin M.  
*Year:* 2003  
*Title:* La County Flood Control Tanks Angeles National Forest, Los Angeles County, California  
*Affiliation:* 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)  
*Affiliation:* 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  
*Affiliation:* Pacific Legacy, Inc.  
*Resources:*  
*Quads:* CONDOR PEAK  
*Pages:*  
*Notes:*

## SCCIC Bibliography: Big Tujunga Reservoir

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### 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:*

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### 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:*

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### 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

*Affiliation:* 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 28 2011

BY: .....

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,

A handwritten signature in cursive script that reads "Samuel A. McLeod". The signature is written in black ink and is positioned above the printed name.

Samuel A. McLeod  
Vertebrate Paleontology

enclosure: draft invoice

**APPENDIX C**  
**NATIVE AMERICAN CONSULTATION (NAHC)**





TRANSMITTAL

DATE: September 22, 2011

TO: Mr. Dave Singleton
Program Analyst
Native American Heritage Comm.
915 Capitol Mall, Rm. 364
Sacramento, CA 95814

FAX NUMBER: (916) 657-5390
TEL NUMBER: (916) 653-6251
PROJECT: Big Tujunga Reservoir Sediment Removal
FROM: Patrick Maxon, RPA

[X] Fax / Pages\_\_ [X] 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

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) 657-5380  
Web Site [www.nahc.ca.gov](http://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.

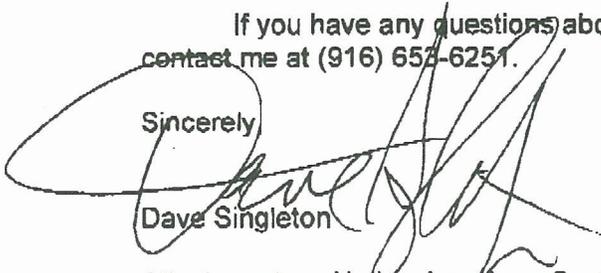
Also, California Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery 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 the 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) 652-6251.

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

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

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

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

Chumash  
Fernandeno  
Tataviam  
Kitanemuk

Chumash  
Tataviam  
Fernandeno

Fernandeno  
Tataviam

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

Fernandeno  
Tataviam  
Serrano  
Vanyume  
Kitanemuk

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

Chumash  
Fernandeno  
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 6097.94 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.

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.



Mr. Ron Andrade  
September 27, 2011  
Page 2

***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](mailto: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

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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Mr. Charles Cooke  
September 27, 2011  
Page 2

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Sincerely,

BONTERRA CONSULTING



Patrick O. Maxon, RPA  
Director – Cultural Resources

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**

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**Project**

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Ms. Delia Dominguez  
September 27, 2011  
Page 2

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Sincerely,

BONTERRA CONSULTING

A handwritten signature in blue ink that reads "Patrick O. Maxon". The signature is fluid and cursive, with the first name being the most prominent.

Patrick O. Maxon, RPA  
Director – Cultural Resources

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.



Mr. Randy Guzman-Folkes  
September 27, 2011  
Page 2

***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](mailto: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

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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Mr. Ronnie Salas  
September 27, 2011  
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BONTERRA CONSULTING

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Patrick O. Maxon, RPA  
Director – Cultural Resources

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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Ms. Beverly Salazar Folkes  
September 27, 2011  
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Sincerely,

BONTERRA CONSULTING



Patrick O. Maxon, RPA  
Director – Cultural Resources

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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Mr. John Valenzuela  
September 27, 2011  
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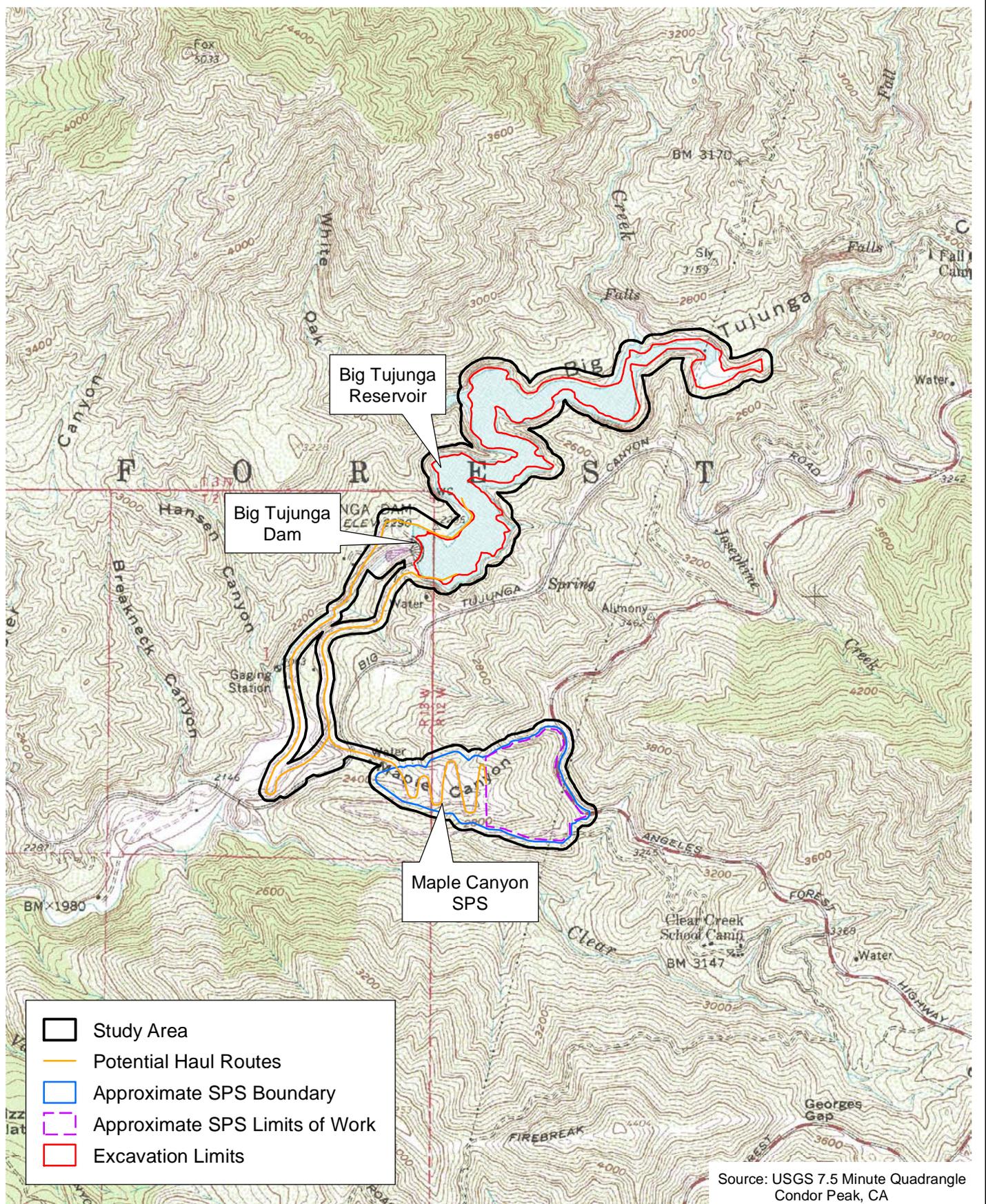
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Sincerely,

BONTERRA CONSULTING



Patrick O. Maxon, RPA  
Director – Cultural Resources



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*

**Exhibit 2**



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**APPENDIX D**  
**FOREST SERVICE PERMIT**



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

SEP 29 2011

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

<b>1. Holder</b>  BON TERRA CONSULTING	<b>2. Date of corresponding application</b>  9/13/2011
<b>3. Address</b>  Attn: Patrick Maxon 151 Kalmus, E-200 Costa Mesa, CA 92626	<b>4. Telephone numbers</b> 714/444/9199(office)
	<b>5. Email addresses</b> pmaxon@bonterraconsulting.com
<b>6. Name of authorized officer</b>  Michael J. McIntyre, District Ranger  Telephone numbers 818/899/1900 x223  Email addresses	<b>7. Name of principal investigators</b> Patrick Maxon  Telephone numbers 714/444/9199(office)  Email addresses pmaxon@bonterraconsulting.com
	<b>8. Name of field directors authorized to carry out field projects</b>  Patrick Maxon and Albert Knight  Telephone numbers 714/444/9199(Maxon)  818/426/4730(Knight) <b>Email addresses</b> pmaxon@bonterraconsulting.com  ahunknight@msn.com
<b>9. Activities authorized</b>  Consulting: Project-specific Non-ground-disturbing activities (such as surveys)	
<b>10. Description of National Forest System lands authorized for use (hereinafter referred to as "the permit area")</b>  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 LIABILITY 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



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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.



Use Code: 411  
Authorization ID: LAW 9040 CAI  
Contact ID: Bon Terra

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

*Appendix A*

**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 attached 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

<p><b>9. Field directors</b></p> <p>Patrick Maxon Albert Knight</p>	<p><b>Field director contact information</b></p> <p><b>Maxon:</b> 714-444-9199 (office) 949-677-2393 (mobile) <a href="mailto:pmaxon@bonterraconsulting.com">pmaxon@bonterraconsulting.com</a></p> <p><b>Knight</b> 818-426-4730 (mobile) ahunknight@msn.com</p>
<p><b>10. Permit holder</b></p> <p>Patrick Maxon, RPA</p> <p>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.</p>	<p><b>Permit holder contact information</b></p> <p>Telephone numbers: 714-444-9199 (office) 949-677-2393 (mobile)</p> <p>Email addresses: <a href="mailto:pmaxon@bonterraconsulting.com">pmaxon@bonterraconsulting.com</a></p>
<p><b>11. The applicant must attach the following to the application form:</b></p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
<p><b>12. Proposed publications for results of work conducted under the permit</b></p> <p>Section 106 compliant Cultural Resources Assessment report using Archaeological Resource Management Reports (ARMR) guidelines.</p>	
<p><b>13. Signature of individual named in block 10</b></p> 	<p><b>14. Date signed</b></p> <p>9/13/11</p>

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

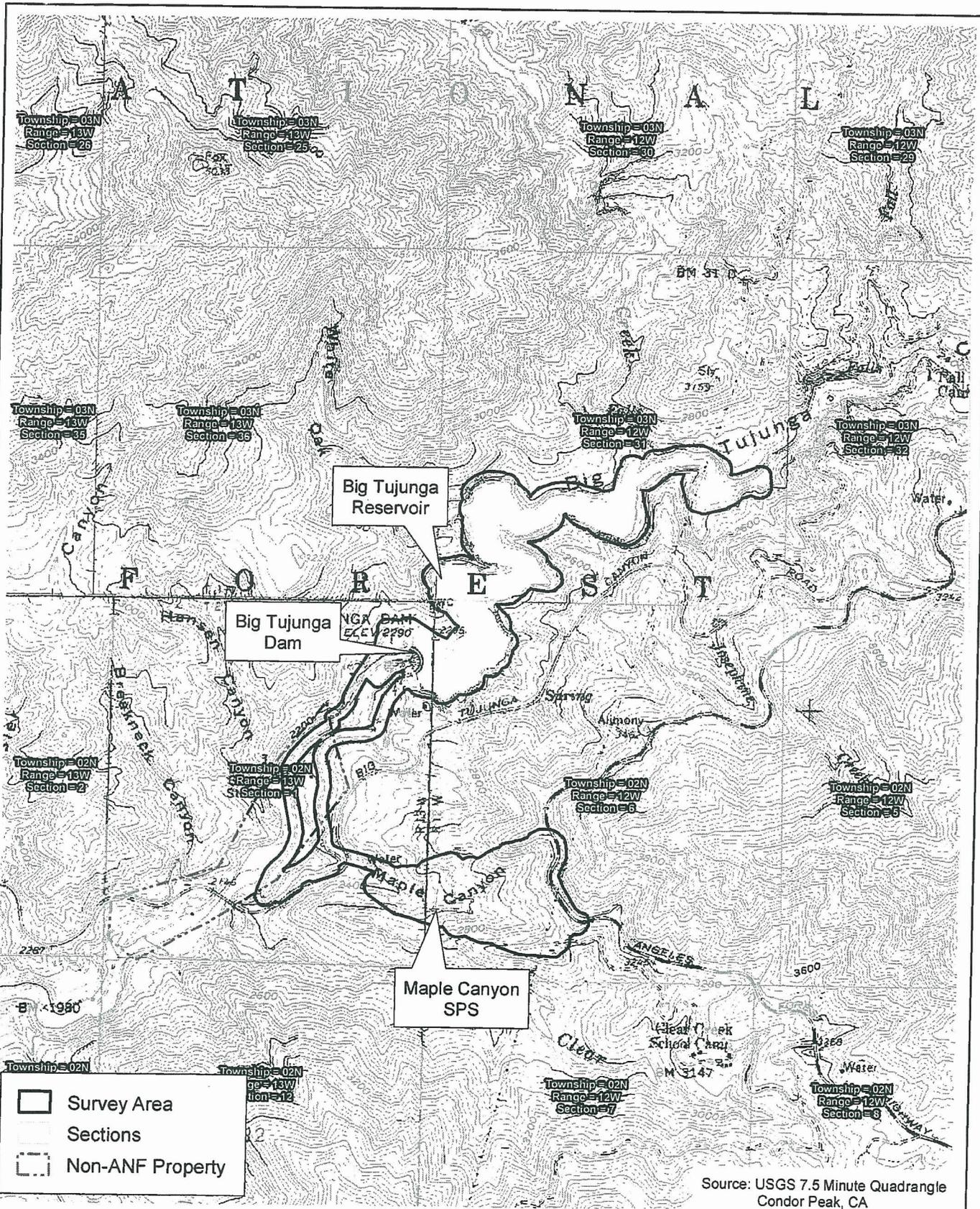
- a. The County of Los Angeles Department of Public Works proposes to conduct the Big Tujunga Dam and Reservoir Sediment Removal Project, which involves the excavation of sediment within the Big Tujunga Reservoir (BTR) and the deposition of the sediment in the Maple Canyon Sediment Placement Site (SPS), 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.



D:\Projects\CA\ADP\AUG\Tujunga.mxd

	Survey Area
	Sections
	Non-ANF Property

Source: USGS 7.5 Minute Quadrangle  
Condor Peak, CA

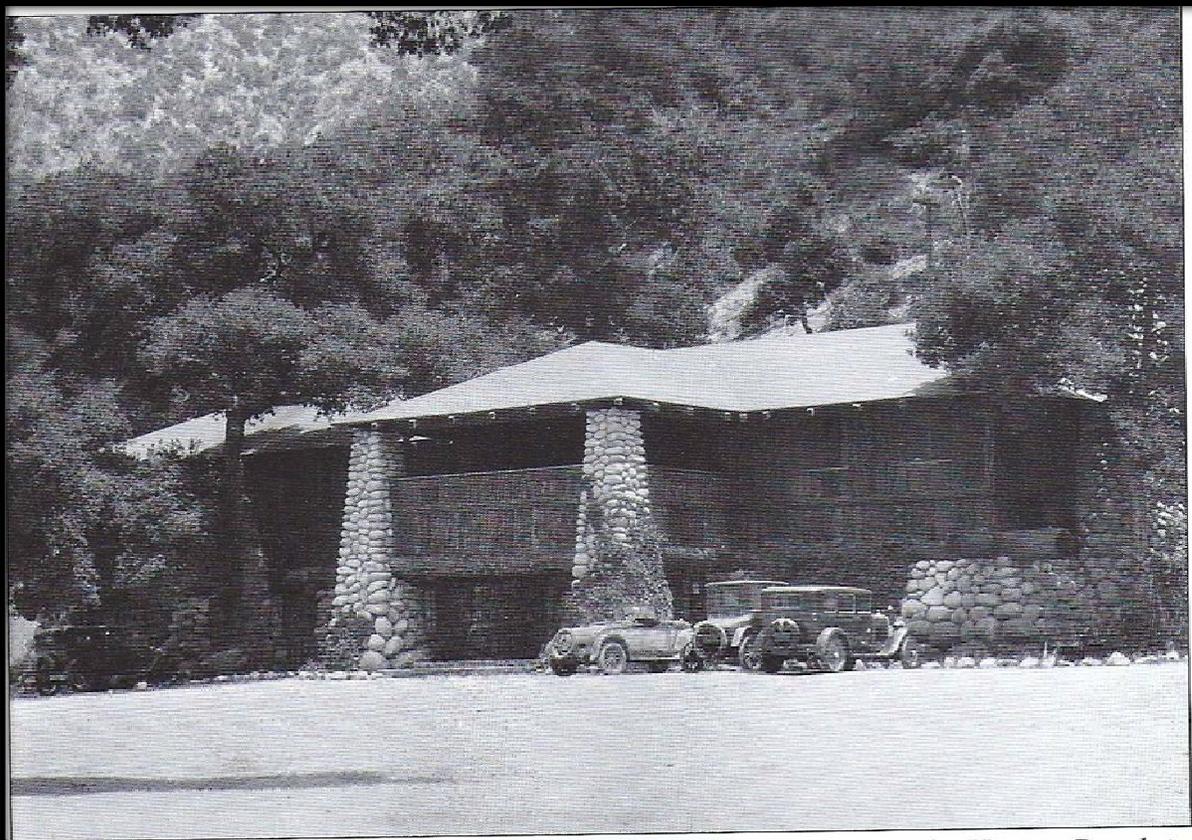
## U.S. Geological Survey 7.5-Minute Quadrangle

*Big Tujunga Dam and Reservoir Post-Fire Sediment Removal Project*



**APPENDIX E**  
**SITE PHOTOGRAPHS**

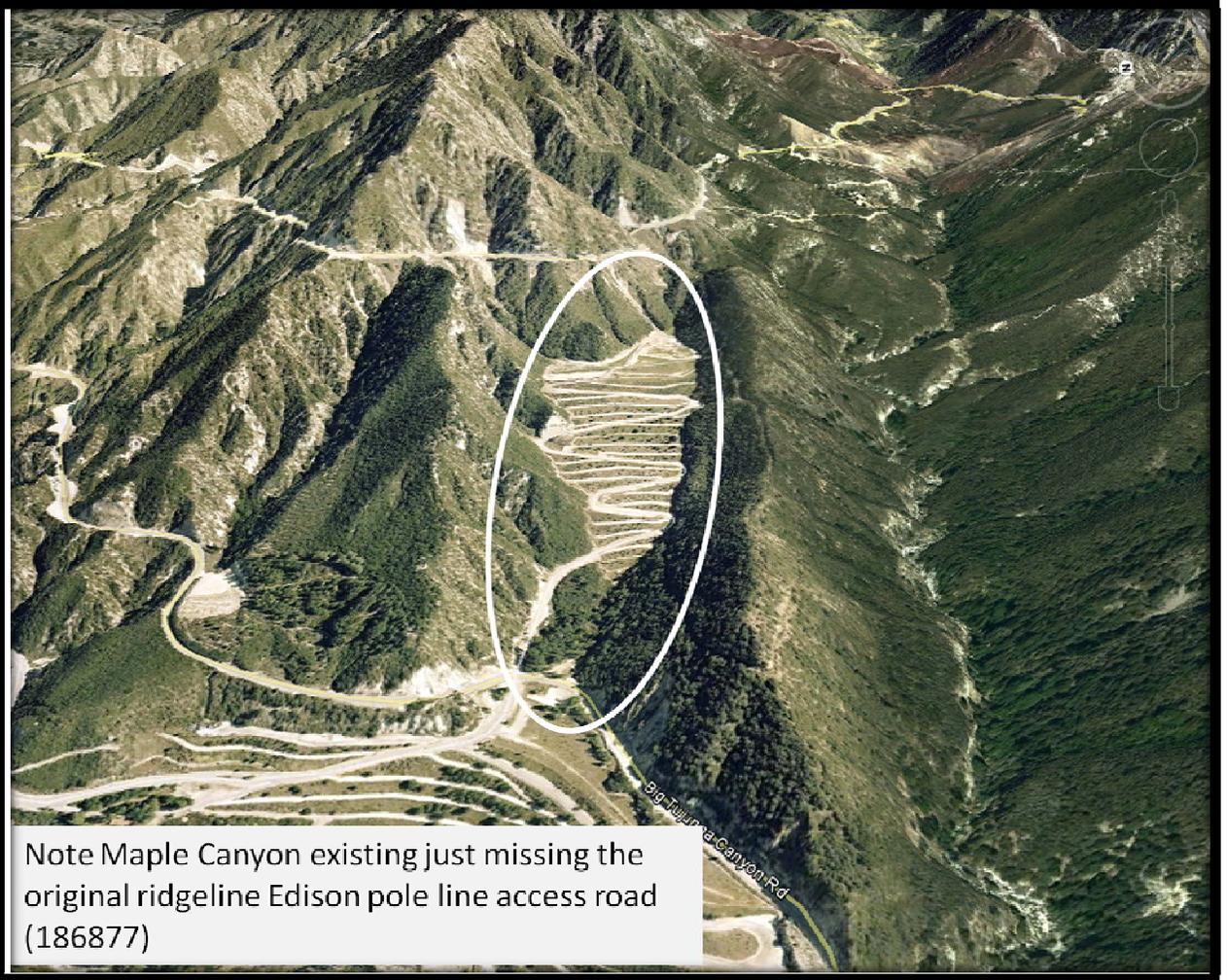




TUJUNGA CANYON, 1931. Pictured in this photograph is the "Lodge" on the Hansen Ranch in Tujunga Canyon. The Hansen Ranch became a Los Angeles County Park and recreation area in July 1931. It had recreational facilities such as two tennis courts, a swimming pool, playground, picnicking tables, and camping spots. The Lodge was turned into a public clubhouse for parties and meetings. It was originally built as the ranch house for the Hansen family, and was constructed as a log cabin with a river-rock design that was common for the area.



Probable location of the original Hansen Lodge



Note Maple Canyon existing just missing the original ridgeline Edison pole line access road (186877)



**APPENDIX F**  
**PERSONNEL QUALIFICATIONS**



## EDUCATION

Master of Arts, Anthropology, California State University, Fullerton, CA, 1994

Bachelor of Arts, Psychology/Sociology, Towson State University, Maryland, Towson, MD, 1987

## PROFESSIONAL CERTIFICATIONS

Registered Professional Archaeologist (National), ID # 11468, 1999–present

Certified Archaeologist, Orange County Environmental Management Agency, 1998–present

Certified Archaeologist, Riverside County Transportation and Land Management Agency, Register #226, 2008–present

Cultural Resources Specialist, California Energy Commission, 2004

## PROFESSIONAL SUMMARY

Patrick Maxon is a Registered Professional Archaeologist who is certified by the County of Orange and the Riverside County Transportation and Land Management Agency. He meets the Secretary of Interior's standards for historic preservation programs for archaeology and he has been previously certified as an Archaeologist by the City of San Diego and the California Energy Commission. Mr. Maxon has 17 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 the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), and the Clean Water Act, among others. Mr. Maxon 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 U.S. Army Corps of Engineers (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 the California Department of Transportation (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 (LADPW), the Los Angeles Department of Water and Power, the Los Angeles Unified School District, and others.

## REPRESENTATIVE PROJECT EXPERIENCE

***Big Tujunga Canyon Road Repair Project Cultural Resources Services, Los Angeles County.*** Mr. Maxon served as the Cultural Resources Manager for the Big Tujunga Canyon Road Project in Los Angeles County, which consisted of stabilizing the road using a concrete gabion system. He 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. The results of this research were used to help guide the subsequent field survey and were summarized in the Cultural Resources Phase 1 Report and an Archaeological Survey Report (ASR)/Historic Property Survey Report (HPSR) in accordance with Caltrans requirements. Mr. Maxon also contacted the California Native American Heritage Commission

(NAHC) for a review of their Sacred Lands File and obtained a list of Native American contacts for the project area then prepared and sent informational letters to all the NAHC-listed contacts in order to ensure a good-faith effort of participation. The project also entails (1) consideration of the historic significance of the road itself and a rock wall built on a portion of the shoulder and (2) preparation of a Historic Resources Evaluation Report (HRER) in accordance with Caltrans guidelines. Engineering problems with the project design have put the project on hold. No reports have been written to date.

***Cobb Reservoir Cultural Resources Services, Altadena.*** Mr. Maxon served as the Cultural Resources Manager for the Cobb Reservoir Project in the Angeles National Forest. Mr. Maxon led the investigation to determine the project's impact on cultural resources and to determine the historic significance of the 1916-era Cobb Reservoir. The investigation included (1) a field visit of the project site; (2) compilation and analysis of existing research material (maps, aerial photographs, engineering documents, and technical journals); (3) review and implementation of relevant regulations that apply to the identification and surveying of historic properties; and (4) evaluation of the reservoir using federal and State significance criteria. A final historical resources assessment report described the study results and provided management recommendations. A set of California Department of Parks and Recreation (DPR) Historic Resources Inventory forms were produced for the subject property. The construction project consisted of improvements to the existing Cobb Reservoir, including roof, concrete footer, and perimeter fence replacement and surface drainage improvements.

***Mullally Debris Basin Enlargement Project Cultural Resources Services, Los Angeles County.*** Mr. Maxon was the Cultural Resources Manager for the Mullally Debris Basin Enlargement Project. He conducted an archaeological/historic records search at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton, which indicated that no prehistoric archaeological sites have been previously recorded and/or evaluated on the property; however, two historic sites have been recorded within one mile of the project area. A Sacred Lands File Search conducted by the Native American Heritage Commission (NAHC) did not indicate the presence of Native American cultural resources within a half-mile of the project area; however, there are resources in close proximity. The Mullally Debris Basin itself is less than 50 years old and therefore does not meet the basic requirements of a historic resource. Because the project area is not sensitive for cultural remains, no additional cultural resources studies are recommended. The proposed project involves the demolition of an existing crib structure dam at the Mullally Debris Basin and reconstruction of a new, larger dam structure. Construction activities would involve the demolition and removal of the existing structure, minor excavation of dam-adjacent hillsides to allow for the new dam, and dam construction.

***Whittier Narrows Dam Basin Recreation Area Master Development Plan Input Program Environmental Impact Report, Los Angeles County.*** Mr. Maxon served as the Cultural Resources Manager for the preparation of a Program Environmental Impact Report (EIR) for the Master Development Plan Input (MDPI) document to the 1996 *Whittier Narrows Recreation Area (WNRA) Master Plan*. Mr. Maxon reviewed existing literature and completed the Cultural Resources Section for the project's EIR. The MDPI is intended to provide the USACE (which owns the 1,400-acre area) with a vision for the future of the Whittier Narrows Dam Basin Recreation Area (WNCBRA) that has evolved from the coordination and collaboration of interested stakeholders. The MDPI conceptually organizes the WNCBRA into six 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. Areas of special consideration include impacts to biological resources, traffic/circulation, hydrology/drainage, and recreation.

***Ortega Highway Reservoir Project Cultural Resources Monitoring, Orange County.*** Mr. Maxon served as the Project Manager for the Santa Margarita Water District's (SMWD's) excavation of test pits and auger borings for its Planning Area 4 Reservoir on Ortega Highway. BonTerra Consulting archaeologists and paleontologists monitored all substantial excavations into the subsurface at this location. The Cretaceous Period (ca. 140 to 65 million years ago) geologic formation known as the Williams Formation is present throughout the subsurface of the project area. BonTerra Consulting 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.

***Tujunga Spreading Grounds Enhancement Project Cultural Resources Study, City of Los Angeles.*** Mr. Maxon was the Cultural Resources Manager for the Tujunga Spreading Grounds Enhancement Project. He 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. The proposed Tujunga Spreading Grounds Project 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).

***East Garden Grove-Wintersburg Channel Widening Project Phase I Cultural Resources Study, Orange County.*** Mr. Maxon was the Cultural Resources Project Manager for the East Garden Grove-Wintersburg Channel Widening Project. He 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. Mr. Maxon 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.

***Highland Reservoir Project Cultural Surveys, Yorba Linda.*** Mr. Maxon was the Project Manager for the cultural resources element of the CEQA documentation for the Highland Reservoir Project in Yorba Linda. The project involved a cultural resources study for the demolition of the existing Highland Reservoir and its replacement with two new reservoirs. The first phase of the cultural resources study consisted of a Phase I cultural resources survey that

resulted in the identification of the Highland Reservoir (constructed in 1911) as eligible for listing in the National Register of Historic Places (NRHP). A recommendation to monitor grading around the reservoir and to formally document the structure and related elements to Historic American Engineering Record (HAER), Level II, standards was made. The second phase included the production of large-format photographs of the structure, collection of existing drawings of the structure held by the Yorba Linda Water District, and production of as-built drawings of the structure's roof trusses. During reservoir demolition, BonTerra Consulting conducted archaeological monitoring. No significant cultural resources were discovered.

***Eagle Canyon Dam Project Cultural Resources Services, Riverside County.*** Mr. Maxon was the Cultural Resources Manager for the Eagle Canyon Dam Project. Mr. Maxon reviewed an existing Phase I assessment of the Eagle Canyon Dam project site, consulted with the Agua Caliente Band of Cahuilla Indians (a portion of the project site lies on the Band's reservation), and completed the cultural resources section of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) being prepared for the project. No significant cultural resources were discovered, and the project was completed in compliance with Section 106 of the NHPA.

***Palos Verdes Reservoir Project Literature Review, Palos Verdes.*** Mr. Maxon was the Cultural Resources Manager for the Palos Verdes Reservoir Project. He conducted a cultural resources literature review for the Palos Verdes Reservoir project to satisfy regulatory requirements related to the renewal of a USACE, Los Angeles District, CWA Section 404 permit, which required that a cultural resources review be conducted under Section 106 of the NHPA. Also, a literature review of known cultural resources sites and studies within a one-mile radius of the Palos Verdes Reservoir project site was conducted at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton. This review revealed that no cultural resources are known to exist in the immediate study area; however, eight sites are recorded within a one-mile radius. Several of these sites are described as potential village sites and exhibit dark and deep middens with numerous artifacts including manos, metates, mortars, pestles, bowls, cogged stones, projectile points, stone tools, shell beads, chipping waste, and other artifacts. Burials were also noted at one site. Most, if not all of the sites have been destroyed by later development.

## AFFILIATIONS AND COMMITTEES

Pacific Coast Archaeological Society (PCAS)

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Association of Environmental Professionals (AEP) (Board of Directors, 2005–present)

American Cultural Resources Association (ACRA)

## PROFESSIONAL EXPERIENCE

BonTerra Consulting, 2008–present

Chambers Group, 2006–2008

SWCA, 2001–2006 (SWCA acquired RMW)

RMW Paleo Associates, 1994–2001

## EDUCATION

Doctor of Philosophy, Anthropology, University of California, Riverside, CA, 1979 (Ph.D. Dissertation: Late Prehistoric Human Ecology of the Northern Mohave Sink, San Bernardino County, CA)

Master of Arts, Anthropology, California State University, Fullerton, CA, 1972

Bachelor of Arts, Anthropology, California State University, Fullerton, CA, 1970

## PROFESSIONAL CERTIFICATIONS

Registered Professional Archaeologist (National), ID # 12617, 1998–present

## REPRESENTATIVE PROJECT EXPERIENCE

***Atlanta Avenue Widening Project Historic Property Survey Report/Extended Phase I Study, Huntington Beach.*** In 2010, Dr. Drover wrote the Extended Phase I (XPI) proposal for California Department of Transportation (Caltrans) approval for this project. After approval, he led the team in the completion of the XPI study that consisted of a subsurface archaeological excavation to evaluate archaeological site CA-ORA-149 within the Area of Potential Effects (APE). Additionally, he wrote the XPI report, which Caltrans submitted to the State Historic Preservation Officer for concurrence. The XPI study revealed that CA-ORA-149 site deposits do not exist within the project area; therefore, no construction monitoring is necessary.

***Santa Paula Recycled Water Project Preliminary Pipeline Sizing Phases 1a and 1b Phase I Cultural Resources Assessment, Santa Paula.*** In 2010, Dr. Drover served as the Principal Investigator for this project. Eleven miles of proposed pipelines were surveyed and evaluated for CEQA Plus (similar to National Historic Preservation Act Section 106 evaluation). Full-time archaeological monitoring will be required when construction activities occur in the immediate vicinity of the Santa Paula Cemetery and at the possible location of the ethnohistoric village of *Mupu*, located within the City. An Integrated Cultural Resources Management Plan (ICRMP) must be completed and approved prior to project construction.

***Susan Street North Off-Ramp Project, Archaeological Survey Report, Costa Mesa.*** In 2007, Dr. Drover was the Principal Investigator responsible for overseeing the survey for and preparation of the Archaeological Survey Report for the Susan Street North Off-Ramp Project. The report was submitted to Caltrans District 12 complete with negative results.

***Newport Banning Ranch Archaeological Resource Assessment, Newport Beach.*** In 2009, Dr. Drover served as the Principal Investigator for the Newport Banning Ranch Project in Newport Beach. The Newport Banning Ranch project would allow for the development of up to 1,375 residential dwelling units; 75,000 square feet of commercial uses; a 75-room resort inn; and approximately 52 acres of public parks on a 401-acre site. Dr. Drover conducted test excavations of 11 sites. Results showed that three of the sites (CA-ORA-839, and CA-ORA-844B, and CA-ORA-906) were deemed eligible for listing on the National Register of Historic Places and California Register of Historical Resources. Site preservation or data recovery excavation is recommended for the sites.

## EDUCATION

Bachelor of Arts in Anthropology – Dean’s Honors List, University of California, Santa Barbara, 1983

Various Archaeology Extension Classes, UCLA 1988-2002

## CURRENT PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

Mr. Knight is a member of the Archaeology Conservancy, the Malki Museum, the Autry National Center, the Santa Susana Mountains Park Association (Lifetime), the Little Landers Historical Society (Lifetime), and the Society for California Archaeology (Lifetime).

## PROFESSIONAL SUMMARY

Albert Knight worked on his first student dig in 1975 and has been performing archaeological and anthropological research since 1986. Mr. Knight has worked as a Field Technician, a Crew Chief, and a Field Director on his own and others’ projects. He has excavated many units, has performed field surveys at numerous locations across much of Southern and Central California, and has performed some lab work. Mr. Knight has conducted records searches and historical research; has performed construction monitoring on many large and small projects; and has written a variety of papers, including short project reports and professional articles, a few of which have been published. Mr. Knight has also conducted paleontological monitoring and is well informed about the geography, geology, and biology of Southern and Central California.

## REPRESENTATIVE PROJECT EXPERIENCE

**Lancaster Solar Farms, TetraTech.** Mr. Knight completed cultural resources surveys for four proposed Solar Farm fields in Lancaster, California: Conditional Use Permits (CUP) 2B, 3, 4, and 5. The effort included completing parallel transits and close examination of vegetation free areas of a total of approximately 300 acres of open land in Lancaster. The survey resulted in the discovery of one historic ranch complex site in CUP 2B, which will subsequently be recorded and evaluated for significance. Aside from other scattered isolated finds, no other resources were noted. The dense vegetation across much of the area probably obscured the presence of others.

**Kenter-Sunset Electrode Upgrade Project Archaeology Assessment, Encino.** Mr. Knight was the Archaeological Field Surveyor for the City of Los Angeles Department of Water and Power’s Sylmar-Kenter Electrode Upgrade Project. Mr. Knight conducted an archaeological assessment in Encino and at the Van Norman Reservoir. Mr. Knight examined the proposed project area and prepared a summary of the field notes, the photographs, and a photographic log. Several archaeological sites were identified and visited in the vicinity of the alignment, but none will suffer impacts as a result of the project as they will be avoided.

**Big Tujunga Canyon Road Archaeological Surveys, Angeles National Forest.** Mr. Knight served as the Archaeological Field Surveyor for this project, which included 450 feet of Big Tujunga Canyon Road in the Angeles National Forest (ANF) for the County of Los Angeles Department of Public Works. He conducted an archaeological assessment, performed a records check at the ANF Headquarters Heritage Resources Office in Arcadia, visited the proposed project location, walked portions of the proposed work area, made notes, photographed the area, and provided a summary of all work completed. No prehistoric resources were discovered as a result of the survey; however, Big Tujunga Canyon Road itself, and a rock wall extending along a portion of the road, were recognized as potentially historic and will be evaluated by an Architectural Historian.

**Broad Beach Waterline Project Archaeological Monitoring, Malibu.** Mr. Knight served as an Archaeological Monitor during the installation of a new water line in Broad Beach Road. Mr. Knight recovered around two dozen prehistoric artifacts related to archaeological site CA-LAN-114, which were cleaned and catalogued. All information was properly recorded using California Department of Parks and Recreation (DPR) 523 forms. After the artifacts were recorded and after consultation with the staff at BonTerra Consulting, Mr. Knight contacted the University of California, Los Angeles (UCLA) Fowler Museum of Cultural History, which curates artifacts from Southern California and which agreed to curate the artifacts recovered from the site. Mr. Knight also personally transferred the artifacts to UCLA.

**Pilot Desalinization Plant Project Archaeological Monitoring, Long Beach.** Mr. Knight served as the Archaeological Monitor for the Pilot Desalinization Plant Project. He coordinated with Native American (Gabrielino) and Paleontological Monitors and with project personnel. The monitors observed all excavation work, and monitoring results were reported to the Client.

**Irwindale Materials Recovery Facility Archaeological Assessment, Valley County Water District, Irwindale.** Mr. Knight served as the Archaeological Field Surveyor for this project and conducted an archaeological survey at the Irwindale Materials Recovery Facility. Mr. Knight examined the proposed project area and prepared a summary of the field notes, the photographs, and a photographic log. No significant cultural resources were discovered; however, monitoring for paleontological resources was recommended during deeper excavations.

**Mullally Canyon Debris Dam Archaeological Assessment, County of Los Angeles Department of Public Works.** Mr. Knight served as the Archaeological Field Surveyor for an archaeological assessment at the Mullally Canyon Debris Dam. Mr. Knight examined the proposed project area and prepared a summary of the field notes, the photographs, and a photographic log. The Mullally Debris Basin was constructed in 1965 and therefore does not meet the minimum age requirements for evaluation as a historic resource. No other cultural resources were observed.

**Thomas Roads Improvement Project Archaeological Assessment, Bakersfield.** Mr. Knight served as one of two Archaeological Field Surveyors for this project, and conducted an archaeological assessment for the proposed Rosedale Highway (State Route 58)/State Route 99 Interchange Study. Over the course of three days, Mr. Knight examined the proposed project area and prepared a summary of the field notes, the photographs, and a photographic log. Because the vast majority of the project area is developed, no archaeological resources were expected or discovered. Monitoring was recommended in many areas, especially along the Kern River, which courses through the project area.

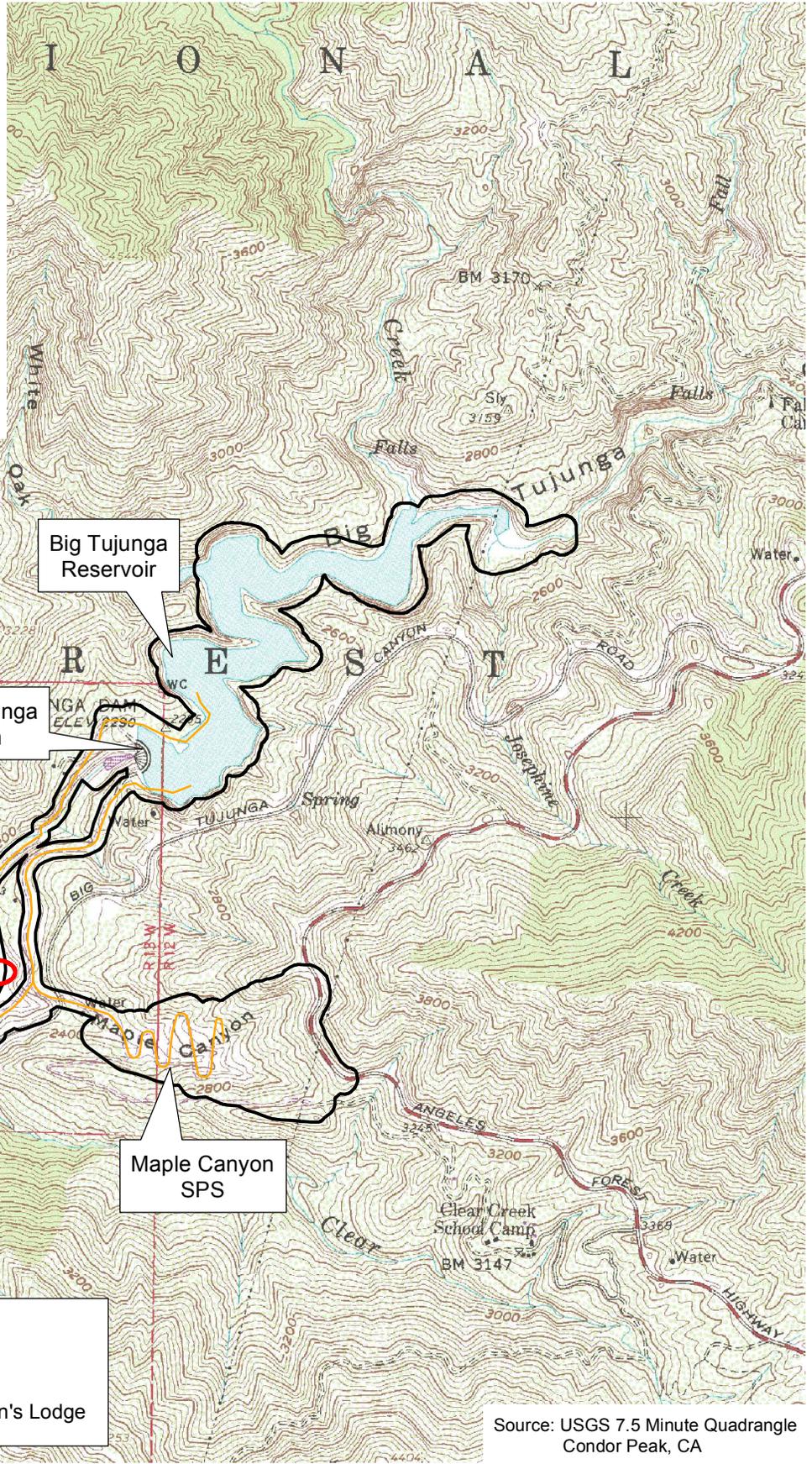
**Baker Ranch Sites CA-ORA-1004 and CA-ORA-1150 Archaeological Excavations, Orange County.** In 2009, Mr. Knight worked as an Archaeologist for two sites on Baker Ranch in Orange County. Mr. Knight directed the excavations of test units and shovel test pits, directed the field crew, recorded notes pertinent to the excavations, photographed the excavations, produced photographic logs, and monitored equipment. All work produced negative results.



**CONFIDENTIAL APPENDIX G  
NOT FOR PUBLIC REVIEW**

**HANSEN'S LODGE APPROXIMATE LOCATION**





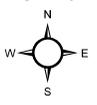
-  Survey Area
-  Potential Haul Routes
-  Suspected Location of Hansen's Lodge

Source: USGS 7.5 Minute Quadrangle Condor Peak, CA

## Hansen's Lodge Approximate Location

## Confidential Appendix G

Big Tujunga Reservoir Sediment Removal Project



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