

**Final Cultural Resources Inventory and Impact
Assessment for the San Diego River Trail El Monte
Segment Project,
San Diego County, California**

Lead Agency:

County of San Diego
Department of Parks and Recreation
Contact: Ms. Jennifer Price
5500 Overland Avenue, Suite 410
San Diego, CA 92123
(858) 966-1375

Preparer:

ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131
(858) 578-8964



Karen Crawford MA, RPA
Principal Investigator

August 2015

ICF International. 2015. *Final Cultural Resources Inventory and Impact Assessment for the San Diego River Trail El Monte Segment Project, San Diego County, California*. August. (ICF 00608.14). San Diego, CA. Prepared for County of San Diego Department of Parks and Recreation, San Diego, California.

NATIONAL ARCHAEOLOGICAL DATABASE INFORMATION

Author(s): Karen Crawford, MA, RPA
Karolina Chmiel, MA
Timothy Yates, PhD

Consulting Firm: ICF International
9775 Businesspark Ave, Suite 200
San Diego, CA 92131
(858) 578-8964

Client: San Diego County Department of Parks and Recreation

Report Date: August 2015

Report Title: Cultural Resources Inventory and Impact Assessment for the San Diego River Trail El Monte Segment Project, San Diego County, California

Type of Study: Phase I Field Survey and Impacts Assessment

New Sites: 1 feature incorporated into CA-SDI-11296H, P-37-034483 / CA-SDI-21509, P-37-034484 / CA-SDI-21510, P-37-034485 / CA-SDI-21511, P-37-034486, and El Monte Pump Station P-37-034482

Updated Sites: CA-SDI-11296H

USGS Quadrangle: El Cajon, California: 7.5' series (1:24,000)

Acreage: Project area 51.86 acres; approximately 38 acres surveyed

Keywords: Phase I Survey and Inventory; CEQA Impact Assessment; San Diego Flume; El Monte Tunnel; El Monte Pump Station, El Monte Pumphouse, bedrock milling feature, Lakeside, San Diego County, Lake Jennings

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
LIST OF ABBREVIATIONS/ACRONYMS	v
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION.....	3
1.1. Project Description.....	3
1.2. Existing Conditions	7
1.2.1. Environmental Setting	7
1.2.2. Records Search Results.....	21
1.2.3. Other Historical Research	25
1.3. Applicable Regulations	26
1.3.1. California Environmental Quality Act (CEQA).....	26
1.3.2. San Diego County Local Register of Historical Resources (Local Register).....	28
1.3.3. Assembly Bill 52.....	29
2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE	30
2.1. County Guidelines.....	30
3.0 RESEARCH DESIGN.....	31
3.1. Prominent Studies in the Vicinity of the Project Area.....	31
3.1.1. Prominent Prehistoric Archaeology Studies.....	31
3.1.2. Prominent Historical Archaeology Studies	31
3.2. Research Context	32
3.2.1. Prehistoric Research Context.....	32
3.2.2. Historical Research Context	32
4.0 ANALYSIS OF PROJECT EFFECTS.....	34
4.1. Methods.....	34
4.1.1. Survey Methods	34
4.1.2. Native American Participation and Consultation	35
4.2. Results.....	37
5.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION.....	46
5.1. Resource Importance.....	46
5.2. Impact Identification	48
5.2.1. Direct Impacts	49
5.2.2. Indirect Impacts	49
5.2.3. Cumulative Impacts.....	51
6.0 MANAGEMENT CONSIDERATIONS—MITIGATION MEASURES AND DESIGN CONSIDERATIONS	52
6.1. Unmitigated Impacts	52
6.2. Mitigated Impacts.....	52
6.3. Effects Found Not to be Significant	54

7.0 REFERENCES.....56

8.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED.....68

9.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS.....69

APPENDICES

- Appendix A Records Search Confirmation
- Appendix B Native American Coordination and AB52 Consultation

CONFIDENTIAL APPENDICES

- Appendix C Confidential Figures C-1 Resource Location Map
- Appendix D Confidential DPR 523 Site Record Forms

LIST OF TABLES

<u>Title</u>	<u>Page</u>
1-1 Cultural Resource Studies within a One-mile Radius of the Project Area.....	22
1-2 Cultural Resources Recorded within a One-mile Radius of the Preserve	24
4-1 Historical Resources Identified During the Field Survey	38
5-1 Potential Significance of Identified Cultural Resources within the Study Area	47

LIST OF FIGURES

<u>Title</u>	<u>Page</u>
1-1 Regional Location Map	4
1-2 Project Locationy Map	5
1-3 Project Area - Aerial View	6
1-4 Workers during San Diego Flume Construction, Date and Location Unknown.....	13
1-5 Project Area as Depicted on the 1903 Cuyamaca Map	4
1-6 Plan Showing San Diego Flume Tunnel Dimensions	15
1-7 Aerial View of El Monte Pump Station Site in 1928 Showing Buildings No Longer Present Today	8
1-8 El Monte Pump Station after 1937 Upgrade in Association with Construction of Pipeline from El Capitan Reservoir, View SW.....	19
4-1 Overview of Project Area, View NE, from El MOnTe Road Looking Toward Pumphouse.....	6
4-2 Overview of Flume Trail, View NE.....	37
4-3 Overview of CA-SDI-21509 with Lake Jennings in the Background, View S	39
4-4 Overview of CA-SDI-21510, View E/SE	40
4-5 Overview of CA-SDI-21511H, View N	41

4-6 Overview of P-37-034486, View E42

4-7 Overview of Pumphouse and Visible Pipes at Historic Period Portion
of El Mont Pump Station, View NE43

4-8 Overview of El Monte Tunnel, Northern Entrance, View S45

LIST OF ABBREVIATIONS/ACRONYMS

BP	before present
CEQA	California Environmental Quality Act
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
County	County of San Diego
CRHR	California Register of Historical Resources
DPR	County of San Diego Department of Parks and Recreation
flume	San Diego Flume
GPS	Global Positioning System
HRI	California Historic Resources Inventory
HWD	Helix Water District
Local Register	San Diego County Local Register of Historical Resources
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
Project	San Diego River El Monte Segment Project
SCIC	South Coastal Information Center
SDRC	San Diego River Conservancy
USGS	United States Geological Survey

EXECUTIVE SUMMARY

The purpose of this report is to analyze the potential effects on cultural resources associated with the proposed San Diego River Trail Segment - El Monte Road to Historic Flume and Lake Jennings Campground Connection Project (Project). This analysis is intended to support the County of San Diego Department of Parks and Recreation (DPR) review process under the California Environmental Quality Act (CEQA) and other applicable local and state regulations. Specifically, this report consists of an inventory and preliminary resource importance recommendations of the historical resources present within the project area. The analysis presented herein follows applicable state and local rules and regulations including CEQA.

The San Diego River Conservancy, County of San Diego Department of Parks and Recreation, and the Helix Water District (HWD) propose to design and construct a multi-use trail (hiking, biking, and equestrian) on HWD owned land in Lakeside, CA. The trail will extend from El Monte Road, through the District's pump station (the historic-period El Monte Pump Station) up to the ridge line to connect with the bench cut for the historic San Diego Flume. The trail will also connect to the existing trail around Lake Jennings. DPR anticipates that a staging/parking area and other trail head facilities would be developed within the HWD historic pump station property. Construction of the proposed trail and trail turnouts will involve minor grading, other ground disturbance, vegetation removal, and trimming.

The objective of this Phase I inventory was to identify and map existing resources and assess impacts to those resources. Significance testing and historical resource evaluations were not conducted as part of this effort. The study provides management recommendations for avoiding significant impacts to cultural resources. The study consisted of archival research and field surveys. Field reconnaissance was conducted on November 25 and December 5, 2014. The project area for this study consisted of 51.86 acres of HWD-owned land. Archaeological survey was completed on 38 acres; the remaining 14 acres was inaccessible due to steep hillside slopes. The built environment survey consisted of recording the historic period El Monte Pump Station.

Six cultural resources were identified within the project area as part of the Phase I Inventory. One of these, El Monte Tunnel and an associated flume bench cut, is part of the previously recorded CA-SDI-11296H, the historic San Diego Flume. The identified resource is included in a site record update as an individual contributing feature to the site. CA-SDI-11296H (San Diego Flume) was previously identified as a significant historical resource eligible for listing on the CRHR under Criteria 1 and 3. Three other historic-period resources were identified: El Monte Pump Station (P-37-034482), a historic concrete pad (CA-SDI-21511), and a historic conduit consisting of multiple pipelines and associated concrete structures (P-37-034486). Prehistoric archaeological resources identified during the survey were limited to two bedrock milling features (CA-SDI-21509 and CA-SDI-21510). California Department of Parks and Recreation Primary and Location Map forms were completed for the resources and are included in Appendix D.

Impacts to cultural resources could occur during trail construction, maintenance and use. However, all significant impacts should be avoidable with the implementation of several mitigation measures. These are primarily avoidance and long term monitoring measures. The mitigation measures include 1) prior to construction, temporary fencing around all identified historical resources in close proximity to project construction locations (elements of the El

Monte Pump Station, elements of P-37-034486 in close proximity to the switchbacks, and the northern entrance to the El Monte Tunnel portion of CA-SDI-11296H); 2) pre-construction cultural resources sensitivity training for all construction personnel, addressing both the types of resources that might be identified, as well as the procedures to be followed in the unlikely event that unrecorded cultural resources are encountered; 3) installation of interpretive signage at the pump station and at trail locations in close proximity to historic-period cultural resources (El Monte Tunnel entrance portion of CA-SDI-11296H, switchback segments in close proximity to P-37-034486) to inform trail users of the presence and significance of historical resources along the trail; and install exclusionary fencing at the two switchback points closest to P-37-034486, and at a location that will deter trail users from approaching the El Monte Tunnel's northern entrance from the trail point nearest to that tunnel entrance. 4) additional surveys if a trail alternative that deviates from the current study area is selected.

In addition to these mitigation measures, several implementation measures related to trail maintenance and long term monitoring are proposed. These include: 1) verification that trail maintenance is confined to the existing trail alignment and conducted in such a manner as to avoid impacting historical resources within the project area, and 2) annual condition monitoring of the historical resources along the trail for signs of vandalism or other alterations, and the implementation of corrective measures to rectify potential impacts. These maintenance and long term monitoring measures will be conducted during implementation of the management directives outlined in the El Monte County Park Resource Management Plan.

Given the location and geology of the project area, there is minimal potential for buried cultural resources. For this reason, and because the project will involve only minimal ground disturbance, archaeological and Native American monitoring is not recommended. For the same reasons, there is very minimal potential for the unanticipated discovery of human remains. However, in the unlikely event that human remains are encountered, specific actions must take place pursuant to CEQA Guidelines Section 15064.5e, Public Resources Code (PRC) Section 5097.98, and Section 87.429 of the County of San Diego Grading, Clearing and Watercourses Ordinance.

1.0 INTRODUCTION

A Phase I cultural resources survey of the proposed San Diego River Trail Segment - El Monte Road to Historic Flume and Lake Jennings Campground Connection Project (Project) was completed by ICF International for the County of San Diego Department of Parks and Recreation (DPR). DPR proposes to design and construct a public use trail on Helix Water District (HWD) owned land in the unincorporated community of Lakeside. The objective of the study was to identify existing resources, analyze potential impacts to cultural resources resulting from the proposed Project, and identify mitigation measures and management recommendations to avoid significant impacts to cultural resources.

This study consisted of archival research and field surveys. Newly identified resources were recorded using State of California DPR 523 Primary Record and Location Map forms. This report summarizes the cultural resources inventory for the project area.

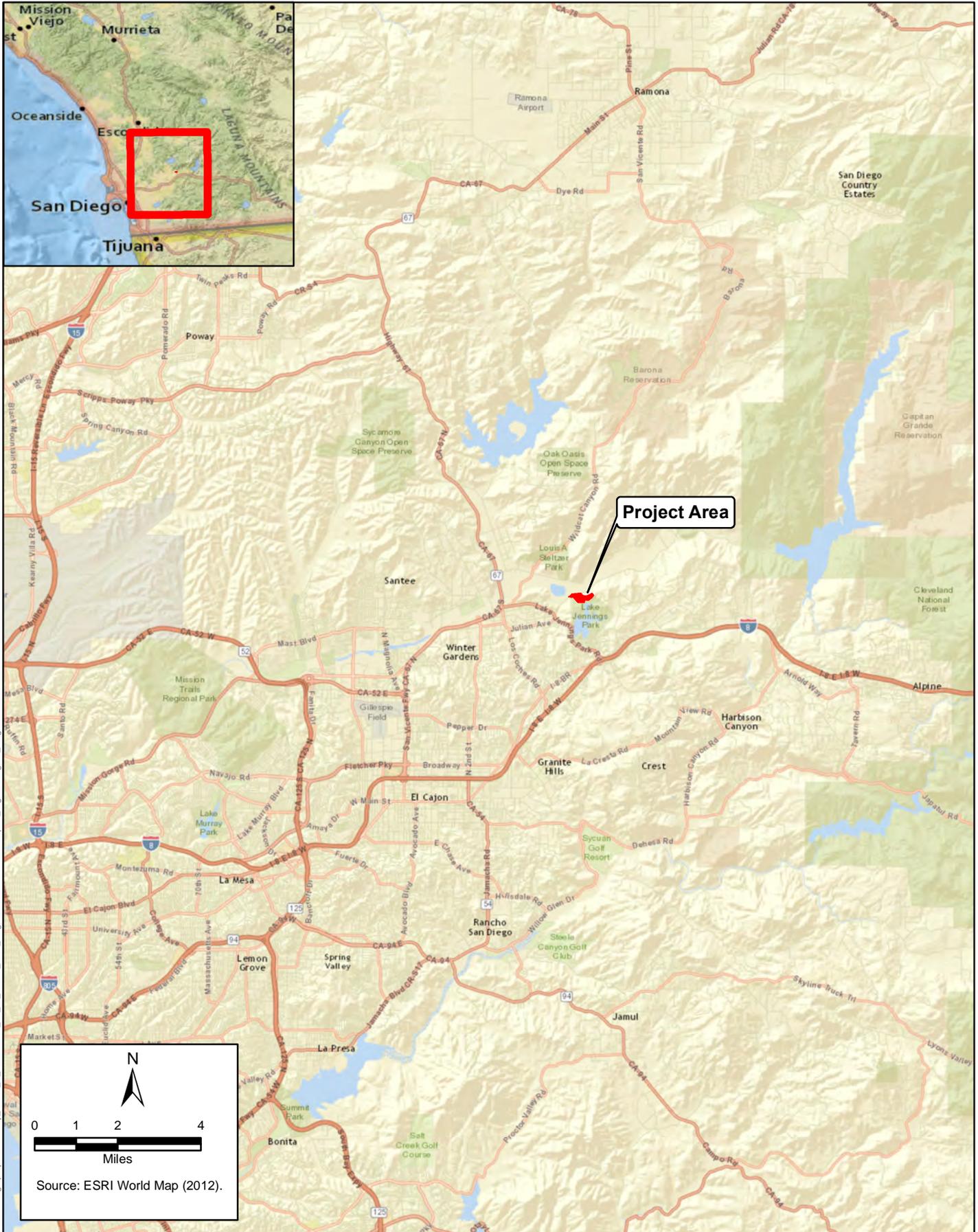
1.1. Project Description

DPR in partnership with the San Diego River Conservancy (SDRC) and HWD propose to design and construct a public use trail on HWD-owned land in the unincorporated community of Lakeside. The proposed trail would extend from El Monte Road, through the HWD pump station facilities, up to the ridgeline to connect to the bench cut for the historic flume and the trail along the ridgeline, which connect to the existing trail around Lake Jennings. It is anticipated that in order to provide for safe trail access, a staging/parking area and other trail head facilities would also be constructed within the HWD pump station property, which contains the historic-period El Monte Pumphouse and associated historic-period resources.

The construction and maintenance of the proposed trail will involve vegetation removal and trimming as well as some minor grading and ground disturbance. Brush management requirements for the proposed project will consist of a 6-foot wide trail on HWD property. In addition, occasional turnouts shall be provided along the trail alignment with gentle slopes to provide an area for passing. The size of the turnouts would be 4 feet wide and 12 feet in length. The impact footprint for the proposed project is 10-feet wide along the trail alignment (6-feet for the trail alignment and a 2-foot buffer on each side) and 14-feet wide at turnouts (the trail alignment and turnout plus a 2-foot buffer on each side).

The project area consists of HWD owned land, specifically the southwest portion of APN 391-061-01 extending from the proposed parking area up the ridgeline to the bench cut for the historic flume; portions of APNs 396-140-33 and 396-220-32; and the northern portion of APN 395-140-01 extending from the northern portion of Lake Jennings north to APN 391-061-01. In addition, the parking area will be located in APN 395-022-10 and potentially APN 395-022-09.

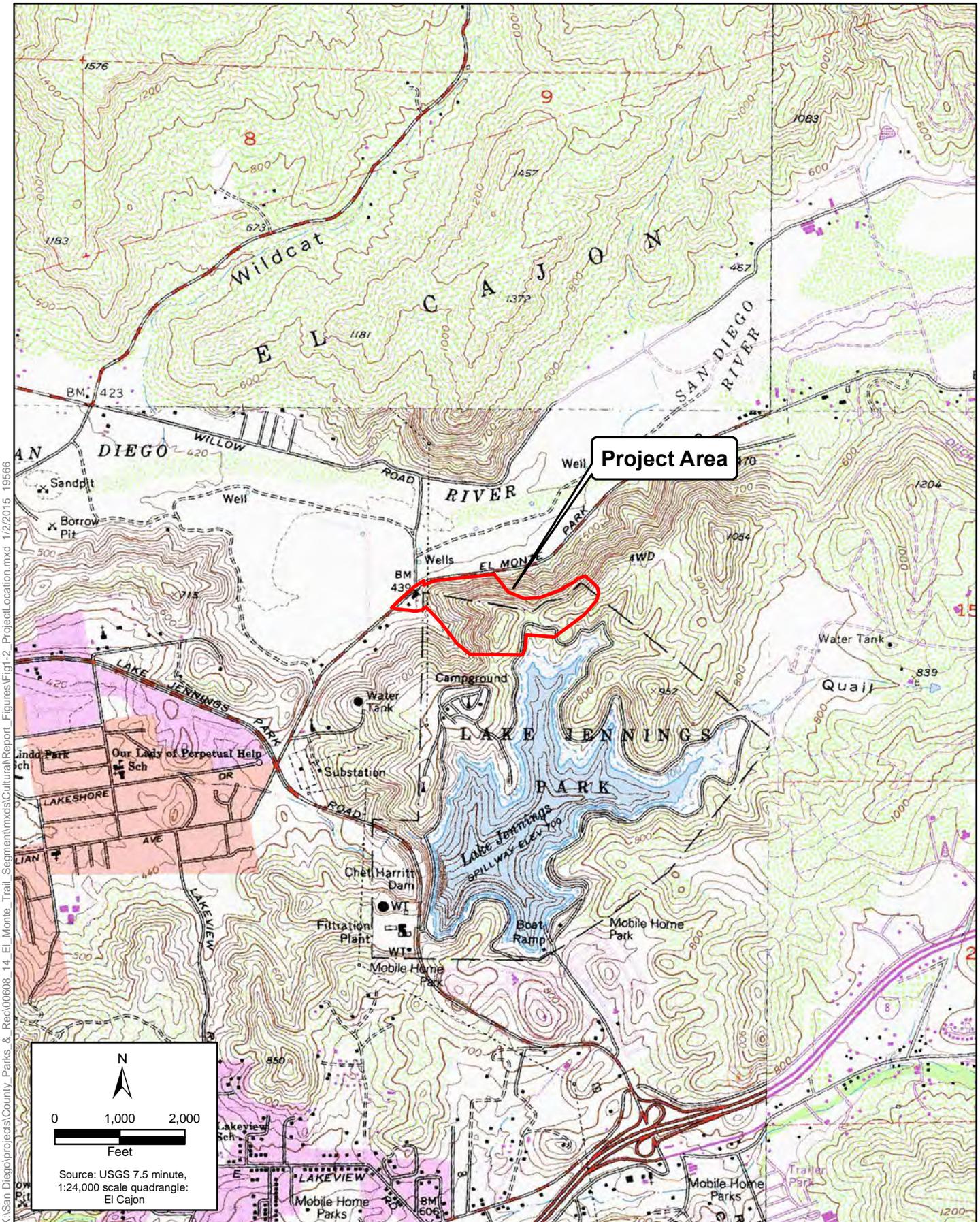
The proposed project is located in an unsectioned portion of Township 15 South Range 1 East within the historic El Cajón Mexican Land Grant, and appears on the El Cajon, California USGS 7.5-minute series topographic maps (USGS 1975). Nearby communities and significant features include: the community of Lakeside, California, approximately 1 mile to the west; Lake Jennings immediately south of the project area; Lake Jennings Campground located 1,200 feet south; and El Monte Regional Park located 3 miles northeast. Figures 1-1 and 1-2 illustrate the project location, and Figure 1-3 provides aerial imagery of the project area.



K:\San Diego\projects\County_Parks_ & Rec\00608_14_El Monte_Trail_Segment\mxd\CulturalReport_Figures\Fig1-1_RegionalLocation.mxd 1/2/2015 19:566

Figure 1-1
Regional Location
San Diego River Trail—El Monte Segment





K:\San Diego\projects\County Parks & Rec\00608.14.El Monte_Trail_Segment\mxd\Cultural\Report_Figures\Fig1-2.ProjectLocation.mxd 1/2/2015 19:56:6

Figure 1-2
Project Location
San Diego River Trail—El Monte Segment



K:\San Diego\projects\County_Parks & Rec\00608_14_El_Monte_Trail_Segment\mxd\CulturalReport_Figures\Fig1-3_Aerial.mxd 1/2/2015 19566

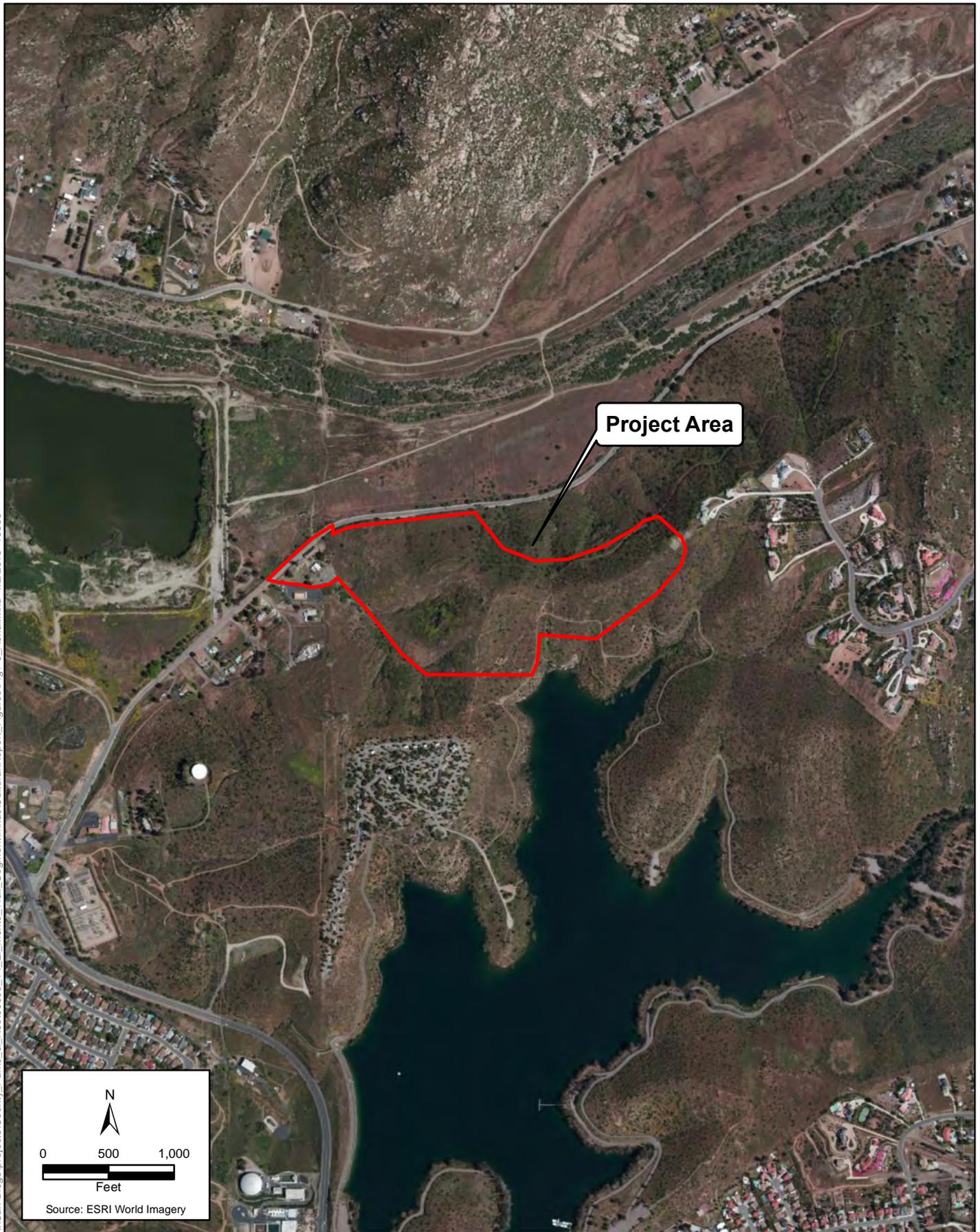


Figure 1-3
Project Area-Aerial View
San Diego River Trail—El Monte Segment



1.2. Existing Conditions

1.2.1. Environmental Setting

Natural Setting

The project area is characterized by steep hills, ridges and small drainages, above the San Diego River floodplain. Specifically, the project area is located within the HWD historic-period pump house facilities and the ridgeline leading to existing trails around Lake Jennings. Elevations range from approximately 460 feet to 840 feet above mean sea level. Approximately 1.5 miles northeast of the project area is Wildcat Canyon and the 3,675-foot El Capitan Mountain is located 5 miles northeast. Figures 1-1, 1-2, and 1-3 illustrate the project area location.

The project area lies within the Peninsular Ranges geomorphic province of California. Northwest-trending faults and structural blocks, with intervening valleys, characterize this physiographic region. Regional geologic maps for the area indicate that materials underlying the project area are primarily Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite. Just north of the project area, the San Diego River basin/floodplain consists of Quaternary alluvium (California Geological Survey 2010). Soils within the project area consist primarily of Friant rocky fine sandy loams. The Friant series consists of shallow and very shallow, well-drained fine sandy loams that formed in material weathered from fine-grained metasedimentary rock. These soils are on mountainous uplands, have a depth of three to twelve inches over hard rock and slopes of 30 to 70 percent (Bownman, 1973).

The vegetation communities of the survey area consist of Diegan coastal sage scrub, non-native grasslands, and non-native woodlands. Principal species of the Diegan coastal sage scrub onsite include California sagebrush (*Artemisia californica*), San Diego sunflower (*Bahioopsis laciniata*), California buckwheat (*Eriogonum fasciculatum*), and laurel sumac (*Malosma laurina*). Non-native grasslands are dominated by annual species with a dominance of annual grasses (Oberbauer et al. 2008). The onsite non-native grassland is dominated by red brome (*Bromus madritensis* ssp. *rubens*) and field mustard (*Hirschfeldia incana*). Non-native woodland is comprised exclusively of Peruvian pepper tree (*Schinus molle*).

Prehistorically, animal life around the project area undoubtedly included large to medium size mammal species such as grizzly bear (*Ursus horribilis*) and black bear (*Ursus americanus*), mountain lion (*Felis concolor*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), badger (*Taxidea taxus*), ringtail (*Bassariscus asutus*), raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Numerous species of smaller size mammals were also present including jackrabbit (*Lepus californicus*), brush rabbit (*Sylvilagus bachmani*), cottontail rabbit (*Sylvilagus audubonii*), ground squirrel (*Spermophilus beecheyi*), pocket gopher (*Thomomys bottae*), and several species of mice and rats (Burt and Grossenheider 1976). Other animals included numerous predatory bird species such as red-tailed hawks (*Buteo jamaicensis*) and golden eagles (*Aquila chrysaetos*), and various amphibian and reptile species including a large variety of lizards and snakes as well as pond turtles (*Clemmys marmorata*) in the nearby Daney Canyon and San Vicente Creek drainages (Peterson 1961, Stebbins 1966).

Cultural Setting

Prehistoric Period

The following culture history outlines and briefly describes the known prehistoric cultural traditions of the region. The approximately 10,000 years of documented prehistory of the San Diego region has often been divided into three periods: Early Period (San Dieguito tradition/complex), Archaic Period (Milling Stone Horizon, Encinitas tradition, La Jolla and Pauma complexes), and Late Prehistoric Period (Cuyamaca and San Luis Rey complexes).

Early Period Complexes

The Early Period encompasses the earliest documented human habitation in the region. The “San Dieguito complex” is the earliest reliably dated occupation of the area. The assemblage of artifacts associated with the San Dieguito complex has been studied and elaborated upon extensively (Rogers 1939, 1945, 1966; Warren and True (1961), Warren (1967) and Moriarty (1969, 1987). The complex correlates with Wallace’s (1955) “Early Man Horizon,” and Warren subsequently defined a broader San Dieguito tradition (1968). The earliest component of the Harris Site (CA-SDI-149/316/4935B) is located along the San Dieguito River and is characteristic of the San Dieguito complex (Warren 1966, 1967; Warren and True 1961). Artifacts from the lower levels of the site include leaf-shaped knives, ovoid bifaces, flake tools, choppers, core and pebble hammerstones; several types of scrapers, crescents, and short-bladed shouldered points (Warren and True 1961; Warren 1966). Little evidence for the San Dieguito Complex/Early Man Horizon has been discovered north of San Diego County.

Some researchers interpret the San Dieguito complex as having a primarily, but not exclusively, hunting subsistence orientation (Warren 1967, 1968, 1987; Warren et al. 1998). Others see a more diversified San Dieguito subsistence system as possibly ancestral to, or as a developmental stage for, the subsequent, predominantly gathering oriented complex denoted as the “La Jolla/Pauma complex” (cf. Bull 1983; Ezell 1987; Gallegos 1985, 1987, 1991; Koerper et al. 1991).

Archaic Period Complexes

In the southern coastal region of California, the Archaic Period dates from circa 8,600 years before present (BP) to circa 1,300 BP (Warren et al. 1998). During the Archaic Period, the La Jolla/Pauma complexes have been identified from the content of archaeological site assemblages dating to this period. These assemblages occur at a range of coastal and inland sites, and appear to indicate that a relatively stable and sedentary hunting and gathering complex, possibly associated with one people, was present in the coastal and immediately inland areas of San Diego County for more than 7,000 years. La Jolla/Pauma complex sites are considered to be part of Warren’s (1968) “Encinitas tradition” and Wallace’s (1955) “Milling Stone Horizon.” The inland or “Pauma complex” aspect of this culture lacks shellfish remains, but is otherwise similar to the La Jolla complex and may, therefore, simply represent a non-coastal expression of the La Jolla complex (True 1958, 1980; True and Beemer 1982). The content of these site assemblages is characterized by manos and metates, shell middens, terrestrial and marine mammal remains, burials, rock features, cobble-based tools at coastal sites and increased hunting equipment and quarry-based tools at inland sites. Artifact assemblages can also include bone tools, doughnut

stones, discoidals, stone balls, plummets, biface points/knives, Elko-eared dart points, and beads made of stone, bone, and shell. Beginning approximately 5,500 BP, and continuing during the latter half of the Archaic Period, evidence of hunting and the gathering and processing of acorns gradually increases through time. The evidence in the archaeological record consists of artifacts such as dart points and the mortar and pestle, which are essentially absent during the early Archaic Period. The initial and subsequent increasing use of these technologies during the middle and late Archaic constitutes a major transition in how the prehistoric populations interacted with their environment in the southern coastal region. The period of this shift, from ca. 4,000 to 1300 BP has been designated as the Final Archaic Period (Warren et al. 1998).

Late Prehistoric Period Complexes

In the San Diego area, the Late Prehistoric Period has been described as a time characterized by an increased number of sites, and “many technological innovations, and new patterns in material culture and belief systems” (McDonald and Eighmey 1998:III-1). This description, in fact, aptly describes the period for the entire San Diego County area. Changes in tool and ornament types, burial practices, and site location choices, from those documented for the earlier periods, are well documented in the archaeological record and are described below.

As with the earlier periods, archaeologists have defined distinctive complexes for the Late Prehistoric Period prehistoric cultures of the area. Two complexes have been defined for the protohistoric occupants of the area. One, designated as “San Luis Rey,” is identified in the southern Orange, western Riverside, and northern San Diego Counties area; the other, “Cuyamaca,” is identified in southern San Diego County (Meighan 1954; True 1966, 1970; True et al. 1974). The San Luis Rey complex is believed to be the progenitor of the Shoshonean-speaking peoples (Luiseño/Juaneño culture) living in the area at the time of historic contact in northern San Diego County (referred to as San Luis Rey of Shoshonean origin) (cf. Koerper 1979). Those of southern San Diego County (Cuyamaca, Yuman), are believed to be the ancestors of the Hokan-speaking Diegueño or Kumeyaay (Ipai/Tipai) occupying southern San Diego County at contact. The demarcation line between the San Luis Rey complex and the Cuyamaca complex is believed to be near the historic separation of the tribal territories of the Luiseño/Juaneño and Diegueño. It is highly unlikely, however, that the boundary remained static over time. During Late Prehistoric times, the Preserve would have been within the area commonly associated with the archaeologically-defined San Luis Rey complex.

The San Luis Rey complex has been separated into two time periods, designated as San Luis Rey I and San Luis Rey II (Meighan 1954). San Luis Rey I sites date from circa A.D. 500 to A.D. 1200 and San Luis Rey II, from circa A.D. 1200 to historic contact, about A.D. 1769. Archaeologically, San Luis Rey II site assemblages are similar to those of San Luis Rey I sites, but with the distinctive addition of ceramics.

Hearths documented for southern San Diego County sites are often clay-lined, yet this type of hearth is not found in the northern County sites. The Luiseño/Juaneño of southern Orange and northern San Diego Counties appear to have primarily practiced cremation (Kroeber 1925), but may also have occasionally buried the dead by inhumation. The use of special burial urns for cremations, however, was apparently not commonly practiced.

Historic Period

By common convention, prehistory ended and historic cultural activities began within what is now San Diego County between the late 1500s and mid-1770s. These cultural activities provide a record of Spanish, Mexican, and American rule, occupation and land use. An abbreviated history of this area is presented to provide a background on the presence, chronological significance, and historical relationship of cultural resources within the study area.

Spanish Period

The historic period in California began with the early explorations of Juan Cabrillo in 1542. Cabrillo came ashore on what is now Point Loma to claim the land for Spain and gave it the name San Miguel. Sixty years passed before another European, Sebastián Vizcaíno, entered the bay on November 10, 1602, and gave it the name San Diego (Pourade 1960:49, 66). Although both expeditions encountered native inhabitants, there appears to have been little or no interaction. None of the coastal sites occupied during this protohistoric period have yielded European trade items or evidence of depopulation due to epidemic diseases, nor does Kumeyaay oral tradition offer a native perspective on these encounters.

The original Spanish settlement in San Diego began in 1769 on Presidio Hill and consisted of a presidio (fort) and a chapel that also served as Alta California's first mission. In that same year, an expedition headed by Gaspar de Portolá traveled north from the Presidio de San Diego to extend the Spanish Empire from Baja California into Alta California by seeking out locations for a chain of presidios and missions in the area. The Spanish period extended to 1821 and encompassed early exploration and subsequent establishment of the San Diego presidio, as well as the San Diego, San Luis Rey, and San Juan Capistrano missions between 1769 and 1821. From its original outpost on what is now Presidio Hill, Mission San Diego de Alcalá was moved to roughly its current site in Mission Valley in 1774. In November 1774, the mission was attacked by Tipay warriors from south of the San Diego River who razed the mission and killed Father Luis Jayme and two others. The San Diego mission was rebuilt in 1775, and while one of the least successful missions in the chain of California missions, it firmly established Spain's presence in the region. During this period, Spanish colonists introduced horses, cattle, sheep, pigs, corn, wheat, olives and other agricultural goods and implements, as well as new architecture and methods of building construction. (Englehardt 1920:60-64).

Despite such expansion, and amid the growing wealth accumulated by the missions, Spanish colonists maintained an ultimately tenuous grip on the region. While missions such as San Luis Rey flourished economically, threats from within and without increasingly undermined political stability. Indigenous populations declined dramatically due to disease, overwork, and the missions' campaigns to end native ways of life. Instances of native resistance to Spanish authority multiplied across Alta California. Mariners with allegiances to competing colonial powers and trapper-explorers from the east and north increasingly challenged the authority of officials and priests whose problems were of little interests to officials in Spain, which was embroiled in European conflict and declining as a major power (Pourade 1961:176-177; Rawls and Bean 2003:48-52, 54-56).

Mexican Period

Following Mexico's independence from Spain in 1821, the Mexican period began in San Diego County and lasted until 1848, ending with the conclusion of the Mexican-American War. During this period most Spanish laws and practices continued until shortly before secularization of Mission San Luis Rey, Mission San Juan Capistrano, and Mission San Diego de Alcalá. During the Mexican Period, former Presidio soldiers became civilian residents, the Pueblo of San Diego was established, and transportation routes were expanded. During the 1820s, the region's economic activity centered upon agriculture and livestock-raising for subsistence and localized markets, and hide and tallow production for the international market (Pourade 1961:182-183; Sherman 2001:230).

After years of political instability and several failed efforts to secularize the missions, in 1834 Governor José Figueroa issued a proclamation defining the terms of the secularization process that would be instituted over the following two years. Some large grants of land were made prior to the secularization of mission lands, but those following secularization redistributed the missions' large grazing holdings, making numerous tracts available and ushering in the Rancho Era. Provisions for assuring that Indians would receive mission land proved of little or no practical benefit to the region's Native Americans. Limits on the slaughter of mission cattle were often ignored by priests who sought immediate profit on the hide market. Mission lands were distributed mainly to officials and retired soldiers. Approximately 500 private rancho land grants were made under Mexican rule. Governors Juan Batista Alvarado, Manuel Micheltoarena, and Pío Pico made most of these grants after secularization (Rawls and Bean 2003:58-63).

After the missions were secularized, many of the natives were forced to work on Mexican ranchos, although those living further from them maintained their traditional life styles for a longer period of time. Still, as more and more inland grants of areas occupied by the Kumeyaay were made, the Native American inhabitants were forced to acculturate or move away. Oftentimes, the Kumeyaay would relocate away from the intruders further into the backcountry. In several instances, however, former mission neophytes organized pueblos and attempted to live within Mexican law and society. The most successful of these was the Pueblo of San Pasqual, founded by Kumeyaay who were no longer able to live at the Mission San Diego de Alcalá. This Period, however, saw the continued exploitation of native labor, now on the ranchos whose grazing lands were their former territories and whose products supported the economy of the time.

American Period

Mexico's defeat in the Mexican-American War in 1848 initiated the American period, when Mexico ceded California to the United States under the Treaty of Guadalupe Hidalgo. Subsequently, land ownership by the Mexicans living in California became a matter of considerable legal wrangling. In principle, the Treaty of Guadalupe Hidalgo protected Californios' (residents of California prior to its acquisition by the U.S.A.) property. In practice, however, the legal process for vetting land claims that was set into motion by the Land Commission established in 1851, combined with the mounting debts of many rancho owners, allowed Americans and other newcomers to take possession of nearly all of the rancho lands originally granted to Californios. Much of the land that once constituted rancho holdings became public land, available for settlement by emigrants to California. The discovery of gold in the

state, the conclusion of the Civil War, and the subsequent availability of free land through passage of the Homestead Act all resulted in an influx of people to California and the San Diego region after 1848. California's importance to the country as an agricultural area began in the latter half of the nineteenth century and was subsequently supported by the construction of connecting railways for the transportation of people and goods.

Soon after Mexico ceded California, many of the areas traditionally used for hunting and gathering by local Native American groups were fenced for ranches and farms. Reservations were established in 1875 to offset this encroachment. This arrangement, however, forced many natives to adopt a more sedentary life style based on Anglo economics as an alternative to moving to reservations. As in other parts of the state, local tribes were forced to contend with new laws and policies created by a U.S. government located far away from the local area. Many tribal members endeavored to maintain their associations with the Hispanic community, while attempting to cope with an ever-increasing new Anglo population. During the period from 1850 to 1880, deprivations and tribulations multiplied as adaptation to the new ways of the Anglo settlers proved difficult for the local native population (Carrico 2008).

The completion of a transcontinental railroad connection to San Diego in the mid-1880s inaugurated the first land boom and saw the City of San Diego's population soar to over 35,000 in a few short years. The boom was felt throughout the region in the form of many newly formed towns and communities. Thousands of people came to the County to take advantage of the possibilities of the region. Paramount to the quest to develop the area was water acquisition, and late 19th century San Diego became a major focal point of dam construction in the world (Pryde 1984). The San Diego Flume was one of the major components of these water acquisition activities.

By the end of the 1880s, however, the "boom" had become a "bust" as banks failed, land prices plummeted, and speculation could not be sustained by true and beneficial economic growth. Thousands of people left the region abandoning their significantly devalued properties to the tax assessors. However, not all of them left; many remained to form the foundations of many small pioneering communities across the county. These families practiced dry farming, planted orchards, raised livestock, built schools and post offices, and created a life for themselves in the valleys and mesas of San Diego County (Griffin and Weeks 2004:78; Quastler 2004: 182-183).

Water Development

In the 1880s, the growing demands of the City of San Diego and its environs spurred the quest for a constant source of water. By this time, the early 19th century Mission Dam had fallen into disrepair and was no longer a viable option for water distribution to the City. During the decade of the 1880s, San Diego County's population grew from 8,600 to 34,900 inhabitants, dramatically increasing the need for development of water resources (Pryde 1984: 67).

Beginning in 1881, T. S. Van Dyke and engineer William E. Robinson began exploring the possibility of capturing water in the Cuyamaca Mountains, where annual rainfall far exceeded coastal rainfall, and transporting it west to urbanizing San Diego. In 1886 Van Dyke and Robinson formed the San Diego Flume Company (the Flume Company) as a private enterprise to construct and operate such a water system. The first element of the project was the construction a dam on the headwaters of Boulder Creek, a tributary to the San Diego River. The Flume

Company constructed the earthen Cuyamaca Dam just north of Cuyamaca Peak, approximately 22 miles northeast of Lakeside and approximately 38 miles northeast of Old Town San Diego (Fowler 1952: 93-94; Pourade 1964: 175).

The Flume Company hired Sacramento contractors Carle, Croly & Abernathy to construct the water conveyance course, a wood flume with tunnel sections that began at a diversion dam approximately 12.5 miles downstream from the Cuyamaca Dam and Reservoir. Touted at the time as the world's largest flume ever built, the structure's 315 trestles required approximately 9,000,000 feet of lumber. The largest trestle, Los Cochos, measured 1,774 feet in length and 58 feet in height, and required approximately 250,000 feet of lumber. The system included eight tunnels. The largest of these, Lankersheim Tunnel, extended 1,900 feet in length, and second largest, the Cape Horn Tunnel, extended 705 feet. The third largest, El Monte Tunnel, was 290 feet in length and located approximately two miles east of Lakeside within the project area. Chinese workers from San Francisco supplied the heavy labor of dynamiting, digging tunnels, moving boulders, preparing the landscape for Euro-American carpenters and flume-layers. South and west of the project area, the flume system included additional tunnels and extended to the Eucalyptus and Grossmont Reservoirs, completed 1890. The estimated total cost of the Flume's construction exceeded \$1,000,000. During the 1890s, additional dams, reservoirs, and other features would be added to the system, and the Cuyamaca Dam would be raised 6.5 feet to increase Lake Cuyamaca's capacity to 11,600 acre-feet (Fowler 1952: 95-96; ICF International 2008:29; Pacific Rural Press 1888; Scientific American 1890; Cohn 1988).

Figure 1-4. Workers during San Diego Flume Construction, Date and Location Unknown



(San Diego Flume ca. 1888)

K:\San Diego\projects\County Parks & Rec\00608_14_El_Monte_Trail_Segment\mxd\Cultural\Report_Figures\Fig1-5_1903CuyamacaMap.mxd 1/2/2015 19566

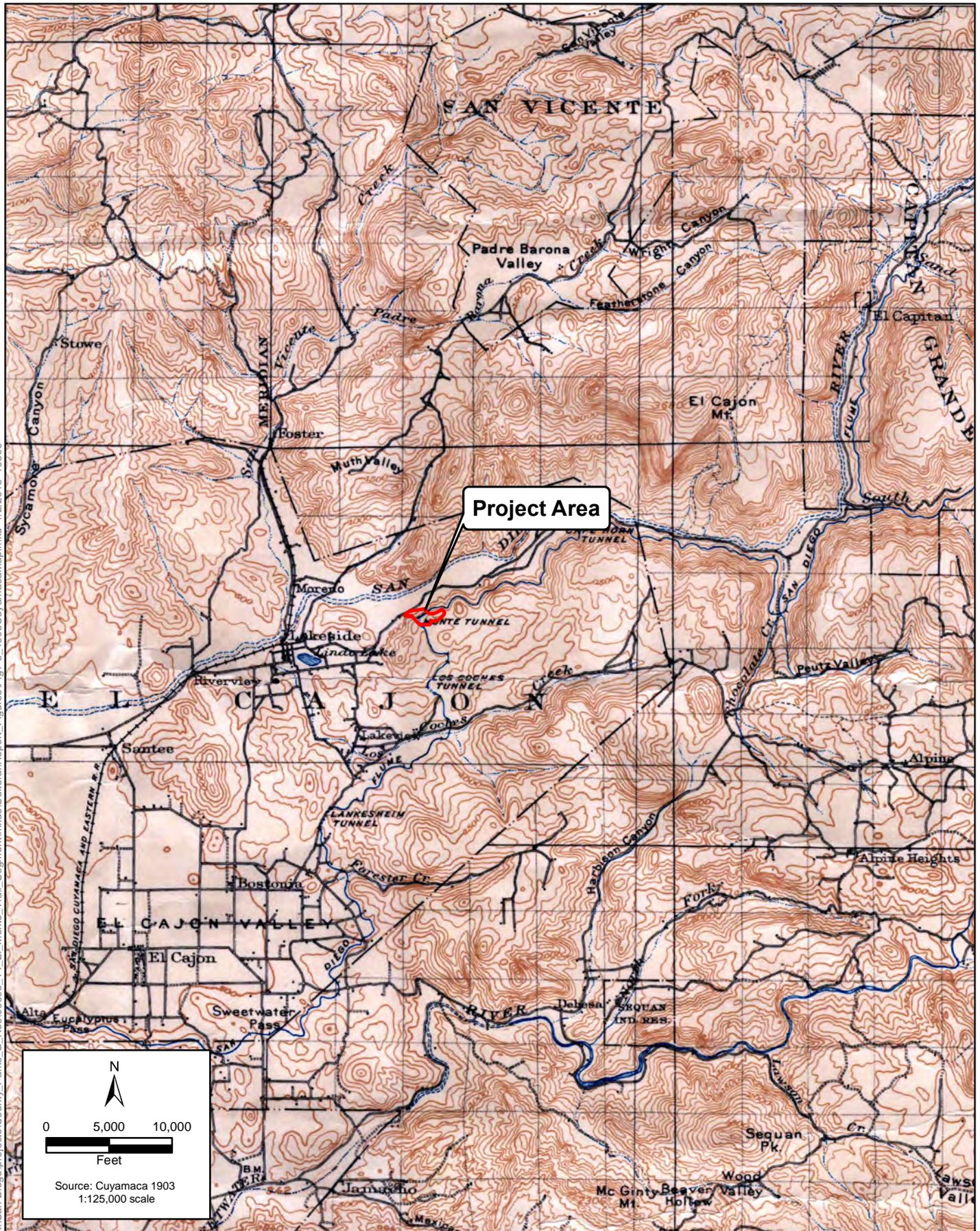
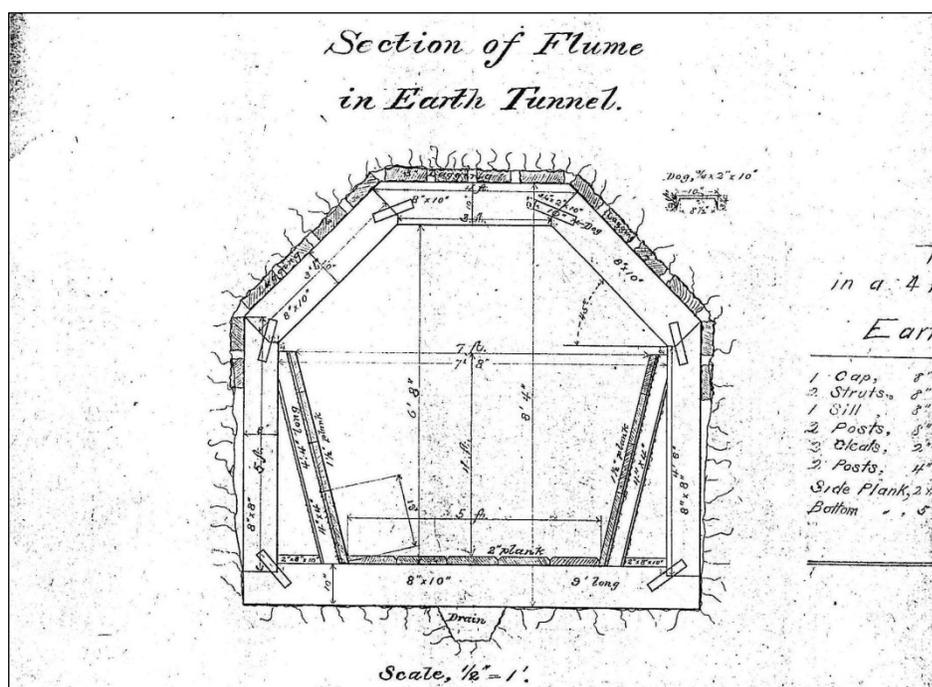


Figure 1-5
Project Area as Depicted on the 1903 Cuyamaca Map
San Diego River Trail—El Monte Segment



Figure 1-6. Plan Showing San Diego Flume Tunnel Dimensions



(Unspecified San Diego Flume Tunnel, 1887)

Despite the supply provided by the San Diego Flume Company and other water capture and transport development in the region, prolonged drought from 1885 to 1905 increasingly took its toll. Lake Cuyamaca dried up during the summers of 1897 and 1898. The system began to be supplemented by wells drilled in the San Diego River gravels north of El Cajon Valley and pumped into the Flume system. This effort gave birth to the El Monte Pump Station within the project area (discussed in more detail below). The poor quality of the water pumped from the San Diego River gravels and supplied to the San Diego Water Company for urban distribution led the latter to seek alternative supply. In 1906 the San Diego Water Company began to purchase water from sugar and newspaper magnate John D. Spreckels' rival Southern California Mountain Water Company, which reduced San Diego Flume Company profits. In 1910 J. A. Murray and Ed Fletcher purchased the San Diego Flume Company at the fire sale price of \$150,000 in 1910 (it had cost over \$1,000,000 to construct), and changed its name to the Cuyamaca Water Company. Over the next five years, Murray and Fletcher set out to improve the system by lining the leaky conduit with asphalt roofing material, adding side planks to increase its depth, and replacing approximately four miles of wooden flume with concrete-lined channels and steel-pipe inverted siphons (Fowler 1952: 99-100; San Diego County Water Authority 2005: 21-25).

Despite such improvements to the system, the Cuyamaca Water Company remained as troubled as the latter-era San Diego Flume Company. Due to the Flume's proximity to the San Diego River, it was susceptible to flooding episodes. With a peak discharge of 70,200 cubic feet per second, the great San Diego River flood of 1915-16 damaged a significant amount of the system, costing the company \$60,000 in repairs (Pryde 1984: 129; Fowler 1952: 100). Fletcher and

Spreckels became longtime rivals, and the Cuyamaca Water Company became embroiled in legal challenges. The City of San Diego filed suit against the company, asserting that the City had exclusive rights to San Diego River water that could be legally traced to its official pueblo status during the Spanish era (San Diego County Water Authority 2005: 22, 25).

Meanwhile the La Mesa, Lemon Grove, and Spring Valley Irrigation District, which came into being in 1913 and evolved out of the Spring Valley Municipal Water District (formed in 1911), began to obtain water from the Cuyamaca Water District. Proposals over the next decade for the City of San Diego or the La Mesa, Lemon Grove, and Spring Valley Irrigation District to purchase the Cuyamaca Water Company came to naught due to the City's lawsuit. In 1925, however, the La Mesa, Lemon Grove, and Spring Valley Irrigation District acquired the Cuyamaca Water Company system. The following year a court held that the City of San Diego had lost paramount right to San Diego River water due to the extent of adverse use by defendants such as the Cuyamaca Water Company and the Cities of La Mesa and El Cajon. At the same time, the court limited the defendants' use to 27 cubic feet per second. The La Mesa, Lemon Grove, and Spring Valley Irrigation District began to reconstruct much of Flume system in 1926. The Irrigation District replaced 21,000 feet of flume with 12,000 feet of 42in-diameter wood stave and riveted steel pipe, created the Mount Helix Reservoir, and increased pump capacity at the El Monte Pump Station (Fowler 1952: 104-05).

The protracted conflict over rights to Diego River water began to be resolved in 1930. That year the California Supreme Court ruled in favor of the City of San Diego. Although the City gained right to San Diego River water, the La Mesa, Lemon Grove, and Spring Valley Irrigation District retained control of the water capture and conveyance infrastructure. The two parties reached a compromise whereby the Irrigation District let the City of San Diego make use of the former Cuyamaca Water Company system and the City let the Irrigation District continue to draw its supply from the river watershed. The ruling opened way for development of El Capitan Dam and Reservoir on lands that had previously been reserved for the El Capitan Indians. The City of San Diego constructed El Capitan Dam and Reservoir in 1933-34. From the original 1880s diversion dam to the El Monte Pump Station, the Flume was abandoned and replaced by a pipeline constructed by the City of San Diego and the La Mesa, Lemon Grove, and Spring Valley Irrigation District. Water transmitted in the new pipeline was lifted via the pump station to the El Monte Tunnel for distribution by the Irrigation District (Fowler 1952:104-06).

In 1944 the San Diego County Water Authority was created to obtain Colorado River water from the Metropolitan Water District's Colorado River Aqueduct, built previously to deliver water to Los Angeles. The La Mesa, Lemon Grove, and Spring Valley Irrigation District signed on as one of nine member agencies. Wartime water shortages in San Diego, a hub of Navy activity, focused federal attention on the project. President Roosevelt directed the Navy to construct the conduit from the Colorado River Aqueduct to San Diego, which began to deliver water in 1947. The La Mesa, Lemon Grove, and Spring Valley Irrigation District received rights to 5.7 percent of the Colorado River water allocated to the County Water Authority, and could purchase additional water. Additional pipelines would be constructed from the Colorado River Aqueduct into San Diego County during the next several decades. In 1956 the La Mesa, Lemon Grove, and Spring Valley Irrigation District changed its name to the Helix Irrigation District, and the name was changed again to the Helix Water District in 1973 (Fowler 1952: 106-07; Helix Water District 2011, 2014; San Diego County Water Authority 2005: 37-39, 42).

Historic Overview of the Project Survey Areas

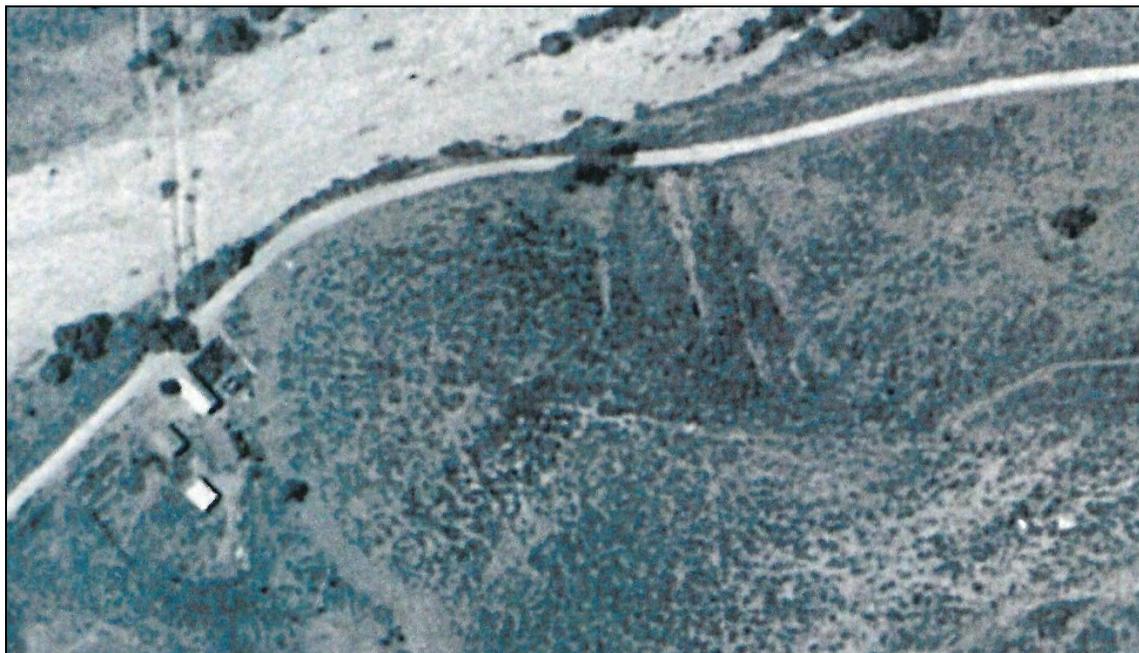
The transition from Mexican to American governance affected all areas of San Diego County. The Rancho El Cajon (also spelled Caxon) encompassed present day El Cajon, Bostonia, Flinn Springs, Lakeside, Santee and the area east of El Monte and Stelzer Regional Parks (Figure 5). Originally part of the old Mission lands primarily used for grazing in these areas, the 48,799 acres was granted to Dona Maria Estudillo Pedrorena, daughter of Don Jose Antonia Estudillo of Old Town, by the then Mexican Governor Pio Pico in 1845. In response to the Land Act of 1851, Pedrorena submitted proof of her Mexican land grant to the government, and finally received the patent in 1876, along with Thomas W. Sutherland and various family members. In 1867, however, the rancho was purchased by Mr. and Mrs. Van Ives, and Suzanna and J. A. Laukeshire (ICF International 2008: 27, 29).

In the boom year of 1886, E. W. Morse, G. H. Mansfield, O. S. Hubbell and I. M. Merrill formed a real estate venture named the El Cajon Valley Company and laid out the town of Lakeside. The following year they built the town's Victorian Lakeside Inn as a new railroad line was constructed through area from San Diego. During the mid-1890s, the El Cajon Valley Company owned the land within the project area (Affinis, Inc. 2001:II-1; San Diego County, 1895, 1896).

In 1898, amid increasingly severe draught, the San Diego Flume Company installed the first El Monte pumping facilities within the project area in order to supplement its dwindling water supplies. As reported by the *San Diego Evening Tribune*, in September of that year a steam-powered compound duplex Dow pump was lifting over a million gallons of water per day into the Flume from 37 wells drilled in the San Diego River gravels. In 1904 the *San Diego Evening Tribune* reported that pumping capacity at the El Monte facility had been increased to three million gallons per day (Helix Water District 2014; *San Diego Evening Tribune* 1898, 1904). The long draught finally ended around this time, and the El Monte pumping facility was not operated for some years thereafter. In 1913, as the City of San Diego considered purchase of the Cuyamaca Water Company, the *San Diego Union* quoted a citizen who had allied with Admiral H. N. Manney in opposition to the deal after inspecting the company's property:

We . . . found that the pumping plant was in a very defective condition, and has not been used for over nine years and was out of date. It is evident that the pumping plant never was in condition, for the reason that there are four 100-horse power boilers there which were used in operating three pumps. Both Admiral Manney and myself pronounced the pumping plant to be of very little value and possibly nothing more than a pile of junk (*San Diego Union* 1913).

The following year El Monte Pump Station's steam pumps were replaced with electrical pumps (Helix Water District 2014; Naiman 1999). In 1919 the California Railroad Commission approved the Cuyamaca Water Company's request to add a surcharge of two cents per 100 cubic feet in order to upgrade the pump station further to meet increasing water demand. By the end of that year the company had again expanded the facility and drilled additional wells. At that time, the Cuyamaca Water Company hired William (Bill) Koppel to manage the pumping plant; Koppel would manage the facilities until his retirement in 1956 (Helix Water District 2014; Lakeside Historical Society 1985: 103; *San Diego Evening Tribune* 1919).

Figure 1-7. Aerial View of El Monte Pump Station Site in 1928 Showing Buildings No Longer Present Today

(1928 San Diego County Aerial Photograph 55-D4)

The La Mesa, Lemon Grove, and Spring Valley Irrigation District purchased the Cuyamaca Water Company in 1925. El Monte Pump Station was significantly upgraded at this time with new water conveyance facilities and a new pumphouse. A residence occupied by Koppel was constructed sometime between 1919 and 1925. In 1928 the San Diego Evening Tribune described the El Monte Pump Station after the upgrade; “capacity of plant 6,000,000 gallons daily and with main pipeline to the flume, consisting of 750 feet of 20-inch, 1,000 feet of 16-inch and 325 feet of 12-inch, 1,000 feet of 16-inch and 325 feet of 12-inch steel pipe; also pumphouse, operator’s house and approximately 300 acres of waterbearing gravels.” The rebuilt pumphouse building was a largely utilitarian, rectangular-plan structure with a gabled roof and board and batten cladding. The operator’s house was a modest bungalow with Craftsman elements located southwest of the pump station (San Diego Evening Tribune 1928; Savage Water Collection 1925). During the 1925 upgrade, a new delivery pipeline was constructed from the edge of a sump reservoir immediately northeast of the pumphouse up the hill to the east. It appears that portions of this pipeline are present today (P-37-034486). A 1928 aerial photograph (see Figure 1-7) shows the layout of the pump facility (Naiman 1999; San Diego County 1928).

With the construction of El Capitan Dam and Reservoir, El Monte Pump Station underwent another phase of substantial modification. In 1934 the Federal Emergency Administration of Public Works (also known as the Public Works Administration) provided the La Mesa, Lemon Grove, and Spring Valley Irrigation District with \$600,000 in funding for 30 percent of the cost to construct its share of new pipeline from El Capitan Reservoir to El Monte Pump Station, upgrade the stations pumping plant, and construct a new pumphouse. The Irrigation District received \$132,000 as a direct grant and the remainder as a loan. In late summer of 1936 the 48-inch pipeline from El Capitan Reservoir was completed to El Monte Pump Station. At that time, the Irrigation District had begun constructing the 36-inch pipeline that would carry water from El

Monte Pump Station to its distribution system. The construction of a new pumping plant and pumphouse took place in June 1937 (San Diego Union 1936, 1937; Lakeside Historical Society 1937). A commemorative plaque adjacent to the building's main entrance lists the project contractors as the American Concrete & Steel Pipe Company, the Consolidated Steel Corporation, and J. R. Lipincott.

Figure 1-8. El Monte Pump Station after 1937 Upgrade in Association with Construction of Pipeline from El Capitan Reservoir, View SW



(1942 Photograph of El Monte Pump Station on File at the Lakeside Historical Society Museum. Note sump reservoir at near center-right (no longer present), 1937 pumphouse with earlier-built projecting element at center-left (projecting element no longer present), and operator's residence at left rear (no longer present). Only the 1937 portion of the pumphouse and the small gabled building fronting the older projection attached to the pumphouse in the photograph remain).

The upgraded pump station consisted of both old and innovative new facilities. The older operator's house remained standing and occupied by Koppel. The new rectangular-plan, stucco-clad pumphouse was oriented southwest-northeast, whereas the previous pumphouse had been oriented northwest-southeast. The northeast end of the new pumphouse incorporated the southeast portion of the older pumphouse as an attached projecting element situated adjacent to the sump reservoir (Figure 1-8). Unfortunately, the historical newspaper database consulted during the research for this report has a gap in 1937 coverage of the *San Diego Union* and *San Diego Evening Tribune*. However, a clipping dated October 15, 1937 from an unspecified newspaper on file at the Lakeside Historical Society Museum indicates that the upgraded pump facilities were innovative for their day. The clipping stated that the upgraded pumping technology represented "a new accomplishment of modern engineering, in overcoming obstacles that a few years ago would have been considered impossible." The centrifugal pumps installed by J. R. Lippincot reportedly solved the problem of "varying demands and varying heads (intake

and pressure) resulting from the fluctuating depth of water in [El] Capitan Lake. To meet a variation in demand of one million to twelve and one-half million daily, at any head from 20 to 50 feet, at first seemed impossible” (Lakeside Historical Society 1937, 1942).

The conduit from El Monte Pump Station extending up the hill to the east (P-37-034486) was reportedly altered again in 1944 with construction of a second, parallel pipeline (Naiman 1999). This second pipeline is likely the northerly, insulated pipeline east of the pump station that parallels what appears to be the original pipeline. These two pipelines extend from a concrete anchorage located 300 feet east of the former sump reservoir site to a rectangular concrete structure located approximately 500 feet east of the concrete anchorage (Figure 4-6).

The conduit from the pump station up the hill to the east remained in service until the 1960s, when the Helix Irrigation District (formerly the La Mesa, Lemon Grove, and Spring Valley Irrigation District, and later the Helix Water District) reorganized the system in the vicinity of El Monte Pump Station. Completed in 1962 approximately three-quarters of a mile south of El Monte Pump Station, the earthen-rock filled Chet Harritt Dam created Lake Jennings. The dam was named for the District manager during the years 1926-48, and the lake was named in honor of water attorney William H. Jennings. In 1962, El Monte Pump Station began to transmit water to Lake Jennings instead of up the hill in the pipelines running east of the pump station. The District and the County created an overnight camping park approximately a quarter-mile south of El Monte Pump Station. The park was dedicated in 1965. That year R. M. Levy Treatment Plant was also completed at the southwest edge of Lake Jennings. In 1999, the historic-period El Monte Pump Station was abandoned with dedication of a new pump facility. The 1999 pumphouse is located approximately 300 feet south of the 1937 pumphouse. The sump reservoir is no longer present adjacent to the northeast side of the 1937 pumphouse. The 1920s-era operator’s house southwest of the 1937 pumphouse has been relocated offsite. Pump technology and pipe features dating to the 1937 upgrade remain present within and around the 1937 pumphouse (Helix Water District 2014; Naiman 1999).

Ethnographic Background

The Project is situated within the traditional territory of the people known to the Spaniards as the Diegueño, a term derived from the San Diego Mission Alcalá, with which these people came to be associated. This term was later adopted by anthropologists (Kroeber 1925) and further divided into the southern and northern Diegueño. Shipek (1982) later initiated use of a Yuman language term “Kumeyaay” for the people formerly designated as the Diegueño. The Kumeyaay are traditionally considered to be a hunter-gatherer society characterized by central-based nomadism.

The linguistic and language boundaries as seen by Shipek (1982) subsume the Yuman speakers into a single nomenclature, the Kumeyaay, a name applied previously to the mountain Tipai or Southern Diegueño by Lee (1937), while Almstedt (1974) noted that ‘Ipai applied to the Northern Diegueño with Tipai and Kumeyaay for the Southern Diegueño. However, Luomala (1978) has suggested that while these groups consisted of over 30 patrilineal clans, no singular tribal name was used and she referred to the Yuman-speaking people as ‘Ipai/Tipai. (Carrico 1998:V-3 - V-7)

As with most hunting-gathering societies (Service 1966), Kumeyaay social organization was formed in terms of kinship. More specifically, the Kumeyaay possessed a patrilocal type of band

organization with band exogamy (marriage outside of one's band) and virilocal marital residence (the married couple integrates into the male's band). The band is often considered synonymous with a village or rancheria, which is a political entity. Following White (1963), Almstedt (1980) has suggested that the term rancheria be applied to both a social and geographical unit, as well as to the particular population and territory held in common by a native group or band. She also stressed that the territory for a rancheria might comprise a 30 square mile area. Many households would constitute a village or rancheria and several villages were part of a much larger social system usually referred to as a consanguineal kin group (*cimuL*). The *cimuL* is typically an exogamous, multilocal, patrilineal, consanguineal descent unit, often widely dispersed in local lineage. The members of the *cimuL* do not intermarry because of their presumed common ancestry, but they maintain close relations and often share territory and resources (Sahlins 1968; Service 1971; Luomala 1963).

Other researchers have designated the San Diego River as a natural feature dividing the Kumeyaay with those people living north of it being the 'Ipai (Northern Diegueño), and those south of the River and into Baja California being the Tipai (Southern Diegueño) (Langdon 1975; Hedges 1975). With a history stretching back at least 2,000 years, the Kumeyaay at the point of contact were, as described above by Carrico, settled in permanent villages or rancherias with strong alliances. Carrico has indicated the possible locations for a number of these villages in the San Diego County area. (Carrico 1998).

While the Kumeyaay exploited a large variety of terrestrial and marine food sources, emphasis was placed on acorn procurement and processing, as well as the capture of rabbit and deer. Shipek (1989) has strongly suggested that the Kumeyaay, or at least some bands of the Kumeyaay, were practicing proto-agriculture at the time of Spanish contact. While the evidence is problematic, the Kumeyaay were certainly adept land and resource managers with a history of intensive plant husbandry.

The Kumeyaay practiced many forms of spiritualism with the assistance of shamans (kuessay) and *cimuL* leaders. Spiritual leaders were neither elected nor inherited their position, but achieved status because they knew all the songs involved in ceremonies (Shipek 1991) and had an inclination toward the supernatural. Important Kumeyaay ceremonies included male and female puberty rites, the fire ceremony, the whirling dance, the eclipse ceremony, the eagle dance and the cremation ceremony, as well as the yearly mourning ceremony (Spier 1923). The primary ceremonial direction among the Kumeyaay is east, with rock art and entrances to ceremonial enclosures usually facing this direction (Kroeber 1925). The Kumeyaay are the only California tribe known to possess a color-direction system where white represents the east, green-blue the south, black the west, and red the north (Kroeber 1925).

1.2.2. Records Search Results

The records search and literature reviews were undertaken to identify previously documented archaeological, historic, and architectural resources within and near the project area. This background information is also useful in developing a context for assessing resource significance.

ICF archaeologist Karolina Chmiel, M.A., requested a records and literature search from the South Coastal Information Center (SCIC) at San Diego State University on December 2, 2014.

The SCIC is the branch of the California Historical Resources Information System (CHRIS) which houses information on historical resources in San Diego and Imperial Counties. CHRIS is a repository of information on recorded historical resources, among other historical information, and is maintained by the California Office of Historic Preservation. The objective of the request was to identify studies and archaeological and built-environment resources in or within one mile of the project area. The SCIC records search involved a review of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Resources Inventory (HRI), California Historical Landmarks (CHL), and local historical maps. The results from the records search can be found in Appendix A.

Previous Studies

Thirty cultural resources studies are on record at the SCIC as having been conducted for areas inside or within one-mile of the project area (Table 1-1). Ten of these studies occurred within a portion of the project area (see shaded studies on Table 1-1). However, these surveys covered only approximately 15% of the project area; the remainder had not been surveyed prior to the current study. The previous studies conducted within the project area consist of two Environmental Impact Reports (Writh Associates, 1974; Multi Systems Associates 1976), two for the Lakeside Community Plan Area (Lorenz and Associates 1988), five inventory reports (Apple and Olmo, 1980; Cupples, 1975; Writh Associates, 1980; Garcia-Herbst et al. 2010; Pignoli et al. 2011), and one management plan for a transmission line (Townsend, 1984).

Table 1-1. Cultural Resource Studies within a One-mile Radius of the Project Area

NADB #	Date	Author	Report Title
1120089	1980	Apple, Stephen A., and Keith R. Olmo	An Investigation of Archaeological Resources Quail Canyon Estates, Lakeside, California.
1120336	1978	Carrico, Richard	Archaeological Investigations at Lake Jennings Ranch Unit 1, Sites SDI-5552 (LJR-6) and SDI-5553 (LJR-7).
1120546	1975	Cupples, Sue Ann	An Archaeological Survey of the San Diego River Valley.
1121764	1976	Multi Systems Associates, Inc.	Environmental Impact Report Quail Canyon Estates, Lakeside, California.
1121986	1974	Writh Associates	Environmental Impact Report Quail Canyon Estates, Lakeside, California
1122106	1988	Lorenz, Craig R., and Associates	Quail Canyon Specific Plan SP77-01 Phase 3, TM 4627, LOG 76-14-155 Lakeside Community Plan Area County of San Diego, California.
1122160	1989	Lorenz, Craig R., and Associates	Quail Canyon Specific Plan SP77-01 Phase 4, TM 4809 RPL, LOG#88-14-144 Lakeside Community Plan Area County of San Diego California.
1122181	1977	Multi Systems Associates, Inc.	Draft Environmental Impact Report Lake Jennings Vista A Large Scale Development, Lakeside, San Diego County
1122263	1990	Berryman, Judy	Cultural Resource Assessment for Lakeside Boukai Joint Venture
1122981	1994	Lorenz, Craig R.	Draft Environmental Impact Report: Lakeside Jehovah Witness Church

NADB #	Date	Author	Report Title
1123566	1998	McDonald, Meg and Drew Palette	Negative Archaeological Survey of the SR-125 Biological Mitigation Parcels Located near Lake Jennings, San Diego County, California
1123836	1984	Townsend, Jan	Southwest Powerlink Cultural Resources Management Plan
1123952	1998	Gallegos, Dennis, Adella Schroth and Larry Tift	Cultural Resource Survey for the San Diego County Water Authority Moreno-Lakeside Pipeline
1124849	1980	Wirth Associates	APS/SDG&E Interconnection Project System. Environmetnal Study Phase II Corridor Studies Native American Cultural Resources.
1125038	1993	Smith, Brian	Archaeological Survey and Cultural Evaluation at the Lakeside Congregation of Jehovah's Witness Project
1125846	2002	McFarland, Sharon and Brian F. Smith	An Archaeological Survey for the Adlai Ranch Estates Project, San Diego County, California.
1128506	1977	Hanna, David	Lake Jennings Vista County of San Diego Archaeological Survey and Report.
1128570	1977	Cook, John R., and Christopher Write	Archaeological Survey and Report Lake Jennings Ranch.
1129976	1973	Loughlin, Barbara A.	Environmental Impact Report (Archaeology) for RAM Construction Company, Fallbrook, California.
1130432	2006	Hector, Susan M.	Cultural Resources Sensitivity Analysis for the Carryover Storage and San Vicente Dam Raise Project (CSP) Alternatives Analysis
1130934	2003	Cheever, Dayle M. and Judy A. Berryman	Results of a Cultural Resource Survey and Expanded Site Boundary Evaluation of CA-SDI-4901 for the Proposed Widening of Wildcat Canyon Road, County of San Diego, California
1131745	2008	Bowden-Renna, Cheryl, and Rebecca McCorkle Apple	Archaeological Literature Review, Site Visit, and Research Design for CA-SDI-13652 and CA-SDI-17300 and for El Monte Valley Nature Park Preserve, San Diego County, California.
1132006	2008	Jordan, Stacey C., William T. Eckhardt, and Andrea M. Craft	Cultural Resources Phase I Survey and Inventory of County of San Diego El Capitan and Oak Oasis Preserves and El Monte and Louis A. Stelzer Regional Parks, San Diego County, California.
1132711	2010	Garcia-Herbst, Arleen, and David Iversen, Don Laylander, and Brian Williams	Final Inventory Report of the Cultural Resources within the Approved San Diego Gas & Electric Sunrise Powerlink Final Environmentally Superior Southern Route, San Diego and Imperial Counties, California.
1133631	2010	Blotner, Nicole	ETS #20587, Cultural Resources Survey for the TL 678 W2S: Distribution Relocation for the TL 678 Wood Steel and Reconductor Project, Los Coches to Alpine Substations, San Diego County, California.
1133651	2010	Clowery, Sara C. and Nicole Blotner	ETS #8789; TL678 Wood to Steel and Reconductor, Los Coches to Alpine Substations, Cultural Resources Inventory Report.
1133691	2011	Morgan, Nicole B.	ETS #20687; Cultural Resources Inventory Report for the Proposed Los Coches Substation Expansion, Lakeside, San Diego County, California.

NADB #	Date	Author	Report Title
1134123	2011	Pigniolo, Andrew, Canace Ehringer and Madeleine Bray	Draft Phase I Cultural Resources Survey and Assessment for the El Monte Valley Mining, Reclamation and Groundwater Recharge Project
1134655	2013	McGinnis, Patrick	Letter Report: ETS 20687- Cultural Resources Testing and Evaluation of Site CA-SDI-20170 for Los Coches Substation Modification, Community of Lakeside, Eastern San Diego County, California- IO 7011102
1134656	2013	McGinnis, Patrick	Letter Report: ETS 20687- Cultural Resources Monitoring for Los Coches Substation Modification, Community of Lakeside, Eastern San Diego County, California- IO 7011102

*Shaded reports encompassed portions of the current project area

Previously Recorded Sites in the Study Area

Thirty one previously recorded cultural resources are present within a one-mile radius of the project area (Table 1-2). No previously identified resources have been recorded in the study area. Previously identified resources outside the study area, but within a one-mile radius consist of eleven bed rock milling features (some with lithic scatters or groundstone present), one large habitation site, three lithic scatters, two shell scatters, one multi-component site consisting of a lithic scatter and a wall, three historic resources, nine prehistoric isolates and one historic isolate.

Table 1-2. Cultural Resources Recorded within a One-mile Radius of the Project Area

Primary (P-37-)	Trinomial (CA-SDI-)	Type/Description	Dimensions	Site Form Reference
	4678	Prehistoric-high density: BMF, flaked stone, ground stone, ceramics	265 x 90m	--
	4900	Prehistoric-medium density: BMF, flaked stone, ground stone, ceramics. Combined with SDI-4913 to be SDI-13652	50 x 50m	--
	4913	Prehistoric-high density: BMF, ground stone, rockshelters. Combined with SDI-4900 to be SDI-13652	500 x 500m	--
	5547	Prehistoric-low density: flaked stone, ground stone	10 x 45m	--
	5548	Prehistoric-low density: BMF, flaked stone, ground stone, ceramics.	10 x 100m	--
	5549	Prehistoric-low density: BMF	10 x 10m	--
	5554	Prehistoric-low density: BMF, flaked stone	10 x 1 5m	--
	8398	Prehistoric-medium density: BMF, flaked stone	30 x 10m	--
	8399	Prehistoric-low density: BMF, flaked stone, ground stone,	75 x 10m	--
	8400	Prehistoric-low density: BMF	No	--

Primary (P-37-)	Trinomial (CA-SDI-)	Type/Description	Dimensions	Site Form Reference
			information	
	8401	Prehistoric-low density: BMF	No information	--
	8402	Prehistoric-low density: BMF, flaked stone	105 x 70m	--
	8403	Prehistoric-low density: flaked stone	100 x 85m	
	13652	Prehistoric-high density: habitation, BMF, ground stone, flaked stone, cermaics, rockshelters. Contains SDI-4900 and SDI-4913.	600 x 325m	Garcia-Herbst et al. 2009*
15483		Prehistoric-(isolate): ceramic	N/A	--
30954	19644	Prehistoric-low density: shell	100 x 16m	Dorrler et al. 2009*
30955	19645	Historic-low density: foundation, refuse deposit	10 x 5m	Dorrler et al. 2009*
31176	19752	Prehistoric-medium density: shell	40 x 55m	Blotner, 2010
31183	19759	Combination- medium density; BMF, flaked stone, ceramic, historic wall	40 x 45m	Blotner, 2010
31753	20170	Historic-medium density: foundations, refuse deposit	50 x 28m	McGinnis, 2013
32954	20797	Prehistoric-low density: flaked stone, ground stone	25 x 34m	Ehringer et al. 2011
32956	20798	Historic-low density: Well, refuse deposit	6 x 9m	Ehringer et al. 2011
32960		Prehistoric-(isolate): groundstone	N/A	Ehringer et al. 2011
32961		Prehistoric-(isolate): flaked stone	N/A	Ehringer et al. 2011
32962		Prehistoric-(isolate): shell	N/A	Ehringer et al. 2011
32963		Historic-(isolate): ceramic	N/A	Ehringer et al. 2011
32965		Prehistoric-(isolate): groundstone	N/A	Ehringer et al. 2011
32967		Prehistoric-(isolate): shell, bone (non-cultural)	N/A	Ehringer et al. 2011
32968		Prehistoric-(isolate): groundstone, cermaic	N/A	Ehringer et al. 2011
32969		Prehistoric-(isolate): flaked stone	N/A	Ehringer et al. 2011
32970		Prehistoric-(isolate): groundstone	N/A	Ehringer et al. 2011

*The following references were not present in the SCIC records search returns:

Garcia-Herbst, Arleen, David Iversen, Brian Williams, and Don Laylander. 2009. *Class III Inventory of the Cultural Resources along the Approved San Diego Gas & Electric Sunrise Powerlink Final Environmentally Superior Southern Route, San Diego and Imperial Counties, California.*

Dorrler, A., S. Rosenberg and J. Whitaker. 2009. *SDG&E Cultural Resource Assessment for the Wood to Steel Conversion of Tie Line 6914, San Diego California.*

1.2.3. Other Historical Research

A large amount of information on the Flume and project-area land ownership was taken from historical research conducted by ICF for three previous cultural resources studies on County

parks and trails (Jordan et al. 2008; Jordan and Eckhardt 2008; Bever and Hoffman 2012). Much of the information from these previous studies was obtained from the Lakeside Historical Society and its Co-President (Brack 2008) and the County of San Diego Department of Parks and Recreation. Two digital historical aerial imagery sources, historicaerials.com and Google Earth, were used to analyze the historical use of the project area and the presence of any structures or other features not be visible during a pedestrian survey. Researchers also reviewed historical maps, including USGS topographic maps, for historic period features.

ICF also undertook research on the relationship between the Flume, El Monte Pump Station, and the La Mesa, Lemon Grove, and Spring Valley Irrigation District. Historic San Diego Evening Tribune and San Diego Union articles on the subject were gathered using the online historical newspaper database accessible at public terminals in Geisel Library at the University of California, San Diego. Unfortunately, there is a gap in the database's coverage of San Diego newspapers for a portion of 1937, the year during which the La Mesa, Lemon Grove, and Spring Valley Irrigation District upgraded El Monte Pump Station. Historic photographs and other relevant sources on San Diego water development were reviewed at the San Diego History Center, including Lloyd Charles Fowler's particularly useful Civil Engineering Master's thesis, "A History of the Dams and Water Supply of Western San Diego County" (1952). ICF historian/architectural historian Timothy Yates visited the Lakeside Historical Society Museum and consulted its archival collection of historic photographs, newspaper clippings, and other sources on water development in the region. Finally, Dr. Yates also contacted the County Parks and Recreation History Office. Its volunteer researcher, Ellen Sweet, forwarded him a copy of the page from the one historical source on file there that mentions El Monte Pump Station.

1.3. Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA and the San Diego County Local Register provide the guidance for making such a determination. The following section(s) details the criteria that a resource must meet in order to be determined important.

1.3.1. California Environmental Quality Act (CEQA)

According to CEQA (§15064.5a), the term "historical resource" includes the following:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR. Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural,

engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14, Section 4852) including the following:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - (B) Is associated with the lives of persons important in our past;
 - (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.
- (4) The fact that a resource is not listed in, or determined eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resource Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

- (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- (2) The significance of an historical resource is materially impaired when a project:
 - (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
 - (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
 - (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and

that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

- (1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- (3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- (4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5 (d) & (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

- (d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American heritage Commission as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American heritage Commission. Action implementing such an agreement is exempt from:
 - (1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
 - (2) The requirement of CEQA and the Coastal Act.

1.3.2. San Diego County Local Register of Historical Resources (Local Register)

The County requires that resource importance be assessed not only at the State level as required by CEQA, but at the local level as well. If a resource meets any one of the following criteria as outlined in the Local Register, it will be considered an important resource.

- (1) Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;

- (2) Is associated with the lives of persons important to the history of San Diego County or its communities;
- (3) Embodies the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

1.3.3. Assembly Bill 52

Assembly Bill 52 (AB 52) amended CEQA by creating a new category of cultural resources and new requirements for consultation with Native American Tribes. Governor Brown signed AB 52 on September 25, 2014, and the bill became effective July 1, 2015. Lead agencies are required to offer Native American Tribes with an interest in Tribal Cultural Resources located within its jurisdiction the opportunity to consult on CEQA documents. The new procedures under AB 52 offer the tribes an opportunity to take an active role in the CEQA process in order to protect Tribal Cultural Resources. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. Guidelines for AB 52 are currently in progress by multiple agencies, including the County, to help implement this requirement.

2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

2.1. County Guidelines

Pursuant to the County of San Diego Guidelines for Determining Significance – Cultural Resources (County of San Diego 2007), any of the following will be considered a significant impact to cultural resources:

- (1) The project, as designed, causes a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.
- (2) The project, as designed, causes a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains the potential to contain information important to history or prehistory.
- (3) The project, as designed, disturbs any human remains, including those interred outside of formal cemeteries.

3.0 RESEARCH DESIGN

3.1. Prominent Studies in the Vicinity of the Project Area

Previous research conducted in the local area, as well as in the San Diego region in general, provides a basis for understanding the cultural resources present within the Project Area. Studies documented with SCIC as occurring been conducted within a one-mile radius of the project area are shown in Table 1-1. Two of these studies were early archaeological surveys of the San Diego River Basin, conducted for the U.S. Army Corps of Engineers through San Diego State University and Dr. Paul H Ezell (Loughlin 1973; Cupples 1975). The document from the earlier survey is not available, but the later report reveals that these surveys identified and recorded a wide number of prehistoric sites in the vicinity of the project area, including bedrock milling features, temporary camps, and seasonal encampments on both sides of the river channel. This study also includes historic contexts for the San Diego Flume and nearby cities (e.g., Lakeside and Santee).

3.1.1. Prominent Prehistoric Archaeology Studies

One important prehistoric study in the project vicinity was a large excavation conducted between 1977 and 1979 at site CA-SDI-5669 in the eastern area of the City of Santee, approximately six miles to the west-southwest of the project area (Berryman 1981). This site, located along the north side of the San Diego River just west of its intersection with Los Coches Creek, is likely to have represented a Late Prehistoric village location based on the volume and variety of artifacts and features encountered in the investigation. Radiocarbon dating indicated two periods of occupation, one from circa A.D. 760 to A.D. 1030 and the other from circa A.D. 1735 to A.D. 1890 (Berryman 1981:19). San Vicente Creek valley, located four miles northwest of the project area, was surveyed and tested in 1942 (McCown 1945). This study took place prior to the completion of construction of San Vicente Dam and the subsequent flooding of the valley circa 1943. The study included the archaeological survey and excavation of a prehistoric village or campsite along the creek bed. Discoveries included incised pottery, a rock shelter, and human burials. Results of the data recovery program conducted at seven of the San Vicente Reservoir prehistoric sites indicated principal, but not exclusive, occupation of the sites during the Late Prehistoric and Ethnohistoric periods (Willey and Dolan 2004).

3.1.2. Prominent Historical Archaeology Studies

The vast majority of historical archaeology studies in San Diego County focus on Old Town San Diego, the missions, or downtown modern San Diego. A wide range of literature exists on the history, including the water infrastructure, of the County and the general project vicinity. However, few archaeological studies have focused on historic-period water resources in the San Diego area or on historic-period resources of the project area. Pham (2011) conducted an archaeological study of San Diego County historical water use, though the study focused on cisterns and wells mostly in the City of San Diego. Indeed, there is a need for further archaeological studies for historic-period resources in the area outside of the City of San Diego proper, and the more prominent historic locales in the County.

3.2. Research Context

3.2.1. Prehistoric Research Context

Patterns of prehistoric subsistence and settlement have been a primary topic area for many researchers in San Diego County (e.g., Christenson 1990; Laylander 2006; Schroth et al. 1996; Gallegos et al. 1998; Carrico and Cooley 2005; Norwood 1980; Glenn 1999). Further, these studies indicate the use of similar research topics throughout the County. Typically, topic realms provide the basis for site interpretation, where broader research realms are translated into specific research questions that can be addressed with archaeological data. Typical examples include those proposed by researchers such as Norwood (1980) and Glenn (1999) that can help archaeologists understand and explain the nature of past life ways. Oftentimes, the foremost questions are ones of chronology. For example, do the sites contain elements that can be used to ascertain their age, either by radiometric dating or by the presence of time sensitive artifacts? Other questions relate to past life ways. For example, how do specific sites fit, or not fit, into the regional prehistoric settlement pattern as it is currently understood? How are they located relative to their environmental setting, and changes in environmental conditions through time? Do any sites represent more substantial habitation locations such as villages or major campsites, rather than specialized, short-term resource procurement locales? Larger habitation sites often contain the greatest variety of associated cultural materials, and so receive greater focus. Can sites with ceremonial or ritual content be identified? Are special-use sites present such as quarries, lithic workshops, milling stations, and seed storage areas? Do any sites contain exotic artifacts or materials that may indicate trade with other areas?

3.2.2. Historical Research Context

Research on the history of San Diego County typically occurs within a framework involving both chronological and thematic elements. Most chronologies follow a periodization scheme, typically including the following elements (in chronological order): 1) Ethnographic Period (before 1769); 2) Spanish Period (1769-1821); 3) Mexican Period (1821-1848); and, 4) American Period (1848-present). The most recent of these, the American Period, is often divided into several sub-periods related to specific trends in economy, politics, industrialization, demography, and other factors. These trends usually provide the contexts within which resources are evaluated for significance. As part of the San Diego Flume, El Monte Tunnel and the flume bench segment within the project area fall within what is often referred to as the Boom-to-Bust period (1880s), a time of rapid population growth and economic expansion followed by economic decline and population loss. The arrival of major railroad lines and increased industrial invention and efficiency were major factors in the growth of the San Diego area during this period. The San Diego Flume is an example of new engineering technologies and design during this period. Although El Monte Pump Station was first developed in the late 1890s, none of the resources present at the site today appear to date to that period. Research indicates that the conduit running up the hill to the east of the pump station was constructed in 1925 and altered with addition of a parallel pipeline in 1942. The pumphouse and related daylighting pipes near the pumphouse were installed in 1937 and funded in part by the federal Public Works Administration (PWA). This period (1920s to World War II), was marked by substantial economic expansion and development owing largely to federal investment in San Diego associated with the Navy during the twenties, stalled economic growth and federal emergency economic intervention associated with the New Deal during the

Great Depression of the 1930s, and rapid return of economic and population growth related to military build-up during World War II.

In addition to chronological categorization, thematic analyses are often used to better understand the area's history. Similar to themes commonly used in regional and national historical research, San Diego area topics often include: 1) Industry; 2) Agriculture; 3) Water Supply and Use; 4) Demographic and Political Trends; 5) Transportation; 6) Recreation and Tourism; and, 7) Architecture and Design. Of course, these themes are all interrelated and cannot be completely isolated for study.

Due to San Diego's arid nature, water supply has been an important subject in San Diego-era history. The challenge of obtaining and transporting water to the City and surrounding areas is a recurring theme in the region's history. The construction of the Flume was vital to the area's economic and population growth. The Flume provided steady sources of fresh water to the area and allowed it to become desirable for industrial, agricultural, and commercial ventures. Flume construction jobs brought newcomers to the region. Although the population in the region declined when the boom of the 1880s turned to bust, after 1900 the Flume remained an important element of San Diego's water infrastructure as the region began to grow again. Several questions can be asked concerning the Flume's role in the history of San Diego. Was the Flume an adequate response to the area's late nineteenth century water needs? How did the Flume immediately contribute to an expansion in the area's population? Did the Flume's construction result in any water supply problems? Did construction or operation of the Flume have a marked impact on the area's ethnic or social demographics? Does the Flume's design noticeably reflect late-nineteenth-century technological advances? Insight into most of these questions can only be obtained from historic and modern non-archaeological sources, though archaeological resources associated with the Flume may provide additional information on its design and overall technological context.

Changes to El Monte Pump Station during the period from the 1920s through World War II involved the physical decline of the Flume and the declining fortunes of the Cuyamaca Water Company (which had purchased the Flume system), the formation of the La Mesa, Lemon Grove, and Spring Valley Irrigation District (today's Helix Water District), the need for increased water supply and the complicated legal conflicts over water rights during this era, the construction of El Capitan Reservoir, and federal interventions in the Depression-era San Diego economy through funding and administration of local public works. A number of questions can be asked of El Monte Pump Station's place in history. What is its relationship to the development of Lakeside and its meaning for Lakeside and other nearby communities today? Exactly how did its role and importance in regional water infrastructure and its relationship to different evolving water system components change over time? What, if any, significance does the pump technology present within the pumphouse today have in the history of engineering generally or the history of hydraulic engineering more specifically? How does the PWA-funded El Capitan pipeline and related reconstruction of El Monte Pump Station fit into the larger history of Depression-era New Deal public works in San Diego?

4.0 ANALYSIS OF PROJECT EFFECTS

4.1. Methods

4.1.1. Survey Methods

The field survey methods for the Project consisted of either systematic intensive pedestrian survey or reconnaissance survey. Intensive pedestrian survey was the preferred method and was utilized in all areas where feasible. Intensive pedestrian survey methods consisted of a team of two people walking in 5-meter transects in any areas where slope, vegetation, and/or terrain would allow transects to be maintained. Team members checked all bedrock outcrops and areas cleared of vegetation or disturbed by rodents along and between the transect lines. The proposed trail alignment may connect with and include along a portion of the San Diego Flume bench cut; the portion of the bench cut in the project area was also surveyed. Other segments of the San Diego Flume have been previously recorded as site CA-SDI-11296H. During the survey, remains of the Flume in the current project area, and the associated El Monte Tunnel, were considered to be features of this same site.

Intensive survey methods utilizing transects were not suitable for some portions of the project area. Instead, reconnaissance survey methods were used in those areas where transect coverage was precluded by the presence of dense vegetation or steep rugged terrain. Consequently, such areas could not be covered consistently using a 5-meter transect methodology. Reconnaissance survey methods consisted of surveying the visible areas where present and/or accessible. Bedrock outcrops within all surveyed areas were examined thoroughly for evidence of prehistoric milling activity or other discernible human modification, and edges of the Flume bench cut were examined in detail for evidence of associated features or artifacts. Within the reconnaissance survey areas, if bedrock outcrops were identified that had a potential to contain bedrock milling features, rock shelters, or rock art, specific attempts were made to reach these outcrops in order to make a determination if such resources were present.

A Trimble Geo XH Global Positioning System (GPS) unit with sub-meter accuracy was used to track the survey transects and coverage, as well as to record cultural resources identified within the project area. Notes on resource details were collected to meet or exceed site recordation guidelines based on the California Office of Historic Preservation's California Archaeological Inventory Handbook for Completing an Archaeological Site Record and SCIC recommendations. Field numbers for identified resources followed the following format: "MDR-[number]".

On December 5, 2014, ICF archaeologist Michael Richards, and Native American monitor Gabe Kitchen conducted the intensive pedestrian survey of all accessible portions of the project area, which constituted approximately 38 acres (27%) of the project area. Approximately 14 acres (27%) of the northwest portion of the project area were too steep to safely survey using intensive pedestrian survey methods; reconnaissance survey methods were used in this area. Ground visibility in the accessible portions of the project area varied widely from 5-100%, averaging 50%. Portions of the project area with dense vegetation (more prominent on north facing slopes) and steep slopes presented poor ground visibility conditions, ranging from 0-40%, averaging 25%. Figures 4-1 and 4-2 provide general photographic overviews of the survey conditions. ICF historian/architectural historian Timothy Yates visited El Monte Pump Station on December 5 to record the pump station property.

Karen Crawford, MA, RPA, of ICF served as principal investigator for the study and reviewed this this report. Michael Richards, MA, RPA served as archaeology field director. Karolina Chmiel, MA, co-authored the report and provided graphics and GIS support. Timothy Yates, PhD, co-authored the report and conducted research on the Cuyamaca Water Company, the La Mesa, Lemon Grove, and Spring Valley Irrigation District (today's Helix Water District), and El Monte Pump Station. Much of the historical information relating to the Flume was derived from three previous ICF cultural resources studies (Bever and Hoffman 2012; Jordan et al. 2008; Jordan and Eckhardt 2008) covering portions of the project area or nearby areas. Mr. Gabe Kitchen, of Red Tail Monitoring & Research, Inc. (Red Tail), served as Native American monitor during the archaeology field investigation.

4.1.2. Native American Participation and Consultation

On December 10, 2014, ICF Archaeologist Karolina Chmiel, MA, sent a letter to the Native American Heritage Commission (NAHC) requesting a review of its Sacred Lands Files. The NAHC consulted the USGS El Cajon 7.5' quadrangle and responded on December 24, 2014, stating that there is a potential for Native American resources to exist that may be impacted. The letter directed ICF to contact all the Ewiiapaayp tribal office and all other Native American tribal representatives on the NAHC-provided list. On December 30, 2014, ICF sent project letters to all 20 individuals identified by the NAHC. ICF received a letter from Viejas Band of Kumeyaay Indians on January 5, 2015. In the letter, Viejas requests additional information on the archaeological data of the project area. Ms. Crawford forwarded the letter to J. Price at County Park on January 7, 2015. On January 8, 2015, Carmen Lucas of Kwaaymii Laguna Band of Mission Indians called ICF front desk and left a message requesting a call back about an inventory project. On January 13, 2015, Ms. Crawford called Ms. Lucas and left a voicemail asking if Ms. Lucas called about this project and inviting her to call Ms. Crawford. On January 15, 2015, Ms. Crawford spoke with Ms. Lucas who recommended the presence of a Native American monitor during all ground disturbing activities and the use of split rail to mask the bedrock milling features should the proposed trail pass by the cultural resources. Correspondence is included in Appendix B of this report.

On June 22, 2015, Julie Hagen of the Viejas Band of Kumeyaay Indians performed a site visit with County staff and concluded no additional Tribal Cultural Resources are located in the area that were not analyzed in this report. On July 1, 2015, County staff sent an email letter to notify the Kumeyaay tribes to formally initiate the AB 52 consultation process. No tribes requested additional coordination for the project. Correspondence is included in Appendix B of this report.

Figure 4-1. Overview of Project Area, View NE, from El Monte Road Looking Toward Pumphouse, Conduit up Hill East of Pumphouse and Possible Trail Location up Ridgeline



Figure 4-2. Overview of Flume Trail, View NE



4.2. Results

Six resources were identified in the project area during the course of the survey (Confidential Figure C-1 in Confidential Appendix C). One of these consists of a segment of the San Diego Flume and associated El Monte Tunnel (CA-SDI-11296H). Segments of the San Diego Flume have been previously recorded in other portions of the County. Other identified resources consist of two prehistoric bedrock milling features, a historic period concrete pad, a historic period pipeline and associated structures dating from 1925, and the El Monte Pump Station. California Department of Parks and Recreation 523 site records can be found in Confidential Appendix D. Newly recorded sites CA-SDI-21509, CA-SDI-21510, CA-SDI-21511, and P-37-034486 were assigned temporary numbers; ICF submitted these site records to the SCIC for issuance of permanent site trinomial numbers.

Table 4-1 summarizes the cultural resources identified during the field survey, and each is discussed below.

Table 4-1. Historical Resources Identified During the Field Survey

Resource #	Description	Max. Dimensions
CA-SDI-21509	Prehistoric Bedrock Milling Feature	0.5 x 1.0 m
CA-SDI-21510	Prehistoric Bedrock Milling Feature	1.0 x 1.0 m
CA-SDI-21511	Historic Concrete Pad	12 x 16 ft.
P-37-034486	Historic Pipeline and associated structures	Approx. 800 ft. long
P-37-034482	Historic-Period El Monte Pumphouse, and associated pipes and control panel house	170 x 75 ft.
CA-SDI-11296H	San Diego Flume and associated El Monte Tunnel	Approximately 390 ft. long

CA-SDI-21509. This resource consists of a prehistoric bedrock milling feature situated on a low-lying granitic boulder, located on a southern facing slope that trends into the northern boundary of Lake Jennings. The slightly concave milling slick measures 22 centimeters north/south by 10 centimeters east/west, and is situated in the center/top of the concave boulder. The boulder measures roughly 50 centimeters north/south by 1.0 meter east/west, approximately 20 centimeters above the ground surface. It is in fair condition and no other cultural materials were observed in association with the feature. Historic disturbances include nearby dirt roads and hiking trails.

Figure 4-3. Overview of CA-SDI-21509 with Lake Jennings in the Background, View S



CA-SDI-21510. This resource consists of a bedrock milling feature situated on a low-lying granitic boulder located on a south facing slope that trends into the northern boundary of Lake Jennings. The flat slick measures 25 centimeters east/west by 14 centimeters north/south, and is situated in the center/top of a concave boulder. The boulder measures roughly 1.0 meter north/south by 1.0 meter east/west and protrudes approximately 10 centimeters above the ground surface. The feature is in fair condition and no other cultural materials were observed in association with the feature.

Figure 4-4. Overview of CA-SDI-21510, View E/SE



CA-SDI-21511. This resource is a single, rectangular, small-aggregate concrete pad measuring approximately 16 feet north/south by 12 feet east/west. The pad sits above a southeast-facing slope that trends down to Lake Jennings. Etched into the southern end of the pad is the inscription [T.N. (space) D.F.]. The concrete pad is approximately 6 inches thick. The interior of the pad has been broken up and many of the concrete fragments that once made up the foundation are missing. The pad appears to have been constructed between 1953 and 1964, as demonstrated by historic aerial imagery; the resource is not present in a 1953 image; however the resource can be seen on a 1964 aerial image (historicaerials.com).

Figure 4-5. Overview of CA-SDI-21511, View N



P-37-034486. This resource is located immediately east of El Monte Pump Station. A single welded-steel pipeline extends from several feet east of the concrete bend anchorage at the north corner of the HWD historic pump station property, where a sump reservoir was originally located. The pipeline appears to have been formerly connected to the anchorage and associated pipeline system that runs along the southeast side of the pumphouse. The pipeline stretches approximately 300 feet east up the slope to a concrete anchorage. From the east side of this anchorage, two pipelines extend east approximately 500 feet and are secured by several smaller concrete anchorages. The southerly of the parallel pipelines is comprised of riveted steel. Aerial views indicate that approximately 20 feet east of the larger concrete anchorage the southerly pipeline has broken apart. The northerly of the parallel pipelines is covered in dark insulating material and appears to be intact. The east ends of the two pipelines are connected to a rectangular structure of board-formed concrete. The structure’s footprint measures approximately 7 x 9 feet. It rises above the sloping ground approximately 5 feet at its northeast side and 8 feet at its southwest side. Steel footholds at the northeast side provide access to the top of the structure, which is secured by a steel-wire cover. Research indicates that MDR-O4H is part of a conduit system constructed in 1925 and altered in 1942.

Figure 4-6. Overview of P-37-034486, View E



El Monte Pump Station (P-37-034482). The station's historic-period elements include a pumphouse, a small building that appears to be a control panel house, and multiple daylighting pipes and associated concrete features. The pump house is a long rectangular-plan building with a gable roof and intersecting gables at each end of the northwest and southeast elevations except the southern end of the southeast elevation. The roof is covered in diamond-patterned asphalt shingles. The building's main entrance is situated near the center of the southeast elevation, adjacent to a Public Works Administration panel dating the facility to 1937. This entry, a larger entry at the southwest elevation, and multiple entries at the northwest elevation are secured by rustic ledged, braced and framed doors that appear to be original. Window openings across all elevation walls, most of which have wood sills and appear to be sized for double-hung sashes, have been boarded. A gabled dormer at the northeast elevation incorporates a rectangular vent with wood louvers, and a shed dormer at the northwest elevation features original fixed wood-frame windows with wood surrounds. Most of the exterior wall surfaces have slightly textured stucco that appears to be fairly recent; the building originally had stucco, but it was likely smoother stucco.

A historic photograph indicates that the window openings at the northeast elevation are not original (Lakeside Historical Society 1942). All but one of the building's gable ends have three terra cotta pipe vents. The pumphouse contains original electric pumps and meters dating to the 1930s that were taken out of service in the late 1990s. Pipes extend from the southeast elevation

to a larger pipe with multiple concrete anchor blocks, including an angled bend anchorage at the north corner of the station property where the conduit turns to the east. The pipeline extending up the slope to the east is no longer connected to the concrete bend anchorage. The exterior surfaces of the pipes at the substation are substantially corroded. A plan displayed inside the pumphouse indicates that the small building near the northeast end of the pumphouse is the control panel house. This deteriorating building has a side-gabled roof with asphalt singles and exposed rafter tails, clapboard cladding, a wood sliding door, several small boarded openings, and a ventilation opening at the apex of the southeast-facing gable. Approximately seventy feet southeast of the pumphouse are two utilitarian buildings of recent construction. Built within the last two decades, the currently functioning pumphouse is located approximately 250 feet south of the historic-period pumphouse.

Figure 4-7. Overview of Pumphouse and Visible Pipes at Historic-Period Portion of El Monte Pump Station, View NE, Control House in Partial View at Far Right Rear



CA-SDI-11296H – San Diego Flume. This resource is a segment of the 1889 San Diego Flume alignment and associated El Monte tunnel. The San Diego Flume originally ran from Cuyamaca Dam on Boulder Creek, down the south side of the San Diego River to the La Mesa Reservoir. Other segments of CA-SDI-11296H have been previously recorded. The segment recorded for the current study includes a 275-meter segment of the flume alignment (Feature 1), which ends at the north entrance of the El Monte Tunnel (Feature 2). The tunnel extends south for

approximately 110 meters to the south entrance of the tunnel. CA-SDI-11296H was originally recorded in 1989 by Roth (Roth 1989). This site record encompassed only 2,300 feet of the San Diego Flume bench cut; no associated features or artifacts were noted in this site record. The portion recorded in 1989 runs from the NE entrance of the Cape Horn Tunnel eastward (Roth 1989). DeGiovine and Craft of ICF International updated the site record in 2008, adding the approximately 705-foot Cape Horn Tunnel and its entrances, located immediately west of the previously recorded segment (DeGiovine and Craft 2008). The 2008 site record update describes the southwest tunnel entrance, and does not include any other features or artifacts associated with the Flume. In 2012 ICF International recorded a 2.53 mile segment of the resource, identifying fifteen newly recorded features associated with the Flume.

Feature 1. Flume Bench cut: This segment of the flume bench cut is a portion of resource CA-SDI-11296H within the current project area and measures 275 meters (902 feet) in length. The bench cut runs along the north slope of a hill and is intersected by several drainages. This segment of the bench cut ranges between 14 and 25 feet in width, the wider portion being adjacent to the north entrance to the El Monte tunnel. This segment of the bench cut is located at elevations from 709 to 721 feet above mean sea level, with a very slight grade ascending as it trends southwest. Other than the actual cut, no remnants of construction materials or activities, or operations activities, are present. Almost the entire length of the bench cut recorded here is clearly visible and in fair to good condition. The northern end of the recorded segment continues northeast outside of the project area. The southern end of the segment terminates at the north entrance to the El Monte Tunnel.

Feature 2. El Monte Tunnel: Constructed between May 1887 and January 1888, the tunnel is identified on the 1893 El Cajon 62,500 series USGS topographic map (USGS 1893) as the “Monte Tunnel”. It is the fifth tunnel from the head of the flume, at Lake Cuyamaca, and the second (downstream from Lake Cuyamaca) of the four named tunnels as shown on the abovementioned topographic map: Cape Horn, Monte, Los Coches, and Lankesheim. The El Monte Tunnel has not been previously recorded. The Tunnel measures approximately 365 feet from the north entrance to the south entrance. The tunnel penetrates granitic bedrock with a grade descending north to south. The Tunnel was partially filled with dry sediment and rock at the time of the survey. Aligned north-south, the Tunnel’s two entrances are identical in construction and dimensions. Each entrance has an exterior decorative facade constructed of mortared cut local granitic boulders. The facades measure 11 feet wide by 7 feet tall and have both been closed with a 1 in rebar grate. Concrete blocks are stacked at the base of each tunnel entrance. One-inch rebar is embedded in the concrete to prevent entrance into the tunnel. The only differences between the tunnel entrances is the presence of a manhole cover at the north tunnel entrance and variations in the placement of concrete blocks in front of each tunnel entrance.

Figure 4-8. Overview of El Monte Tunnel, Northern Entrance, View S



5.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

5.1. Resource Importance

A total of six cultural resources were identified within the project study area during survey; two prehistoric and four historic period resources. For planning purposes the County requests a statement of potential for a resource to have a subsurface component. The existence of a subsurface component to any resource cannot be identified without testing. The recommended potential for a resource to contain a subsurface component, based on the presence of artifacts and features observed at the surface is listed in Table 5-1 below. Evaluation of resources was not conducted as part of this study but preliminary evaluation recommendations are included in the tables below for planning purposes.

Two prehistoric bedrock milling features (CA-SDI-21509 and CA-SDI-21510) were identified within the proposed project area which have not been previously evaluated for resource importance. Resource testing to evaluate these resources was not conducted as part of this survey and inventory effort. The bedrock milling features represent the worksites and tools of Late Prehistoric Diegueño/Kumeyaay peoples who occupied the region prior to the mid-nineteenth century. These sites lie in an area of dense prehistoric use and should be considered significant until subsurface archaeological testing can determine if the sites possess data potential.

The concrete foundation (CA-SDI-21511) appears to be the remains of an isolated structure. It's construction can be determined through historic aerial photographs to have been between 1953 and 1964; however it is not clear what kind of activity the feature is associated with. Further research would be required to obtain more data on this feature, if such data exists. Until then the feature should be considered significant until further research can determine significance.

Resource P-37-034486 appears to have moderate potential for significance. The research conducted for this report yielded minimal evidence of the resource's history: a newspaper article on the dedication of the pumphouse and pumps constructed at the El Monte Pump Station in the late 1990s that provided a historical overview of the station (Naiman 1999). The article indicates that the resource was constructed in 1925 and altered with the addition of a second pipeline in 1944. This suggests that the resource is associated with the La Mesa, Lemon Grove, and Spring Valley Irrigation District's takeover of the Cuyamaca Water Company property and the gradual replacement of the Flume with pipelines. The resource is also associated with El Monte Pump Station. P-37-034486 is a conduit that appears to be comprised of commonplace rather than innovative hydraulic technology for the period. Although P-37-034486 appears unlikely to have individual significance, it does appear to have the potential to be considered a contributor to a post-Flume water-resources historic district, if, that is, such a historic district is identified in the area. For MDR-O4H to be significant, it would likely need to be identified as a contributor to a historic district incorporating El Monte Pump Station.

El Monte Pump Station appears to have moderate to high potential for significance. If a post-Flume water-resources historic district is identified in the area, such a district would likely have significance for embodying the early history of the La Mesa, Lemon Grove, and Spring Valley Irrigation District and/or association with the development of El Capitan Reservoir by the

District and the City of San Diego, and effort funded by a New Deal federal public works program. The 1937 El Monte Pumphouse would appear to have a high likelihood of being identified as a potential contributor to such a historic district. The integrity of the pumphouse and the station property as a whole would need to be assessed in relationship to the significance attributed to such a district, because the pump station property has undergone fairly substantial alterations over time, including removal of both the sump reservoir and the historic-period operator’s residence. The pumphouse itself has also been altered by removal of the 1925 portion of the older pumphouse that was incorporated into the envelope of the building completed in 1937. The 1937 pumphouse could have individual local significance to the community of Lakeside. The 1930s-era pump technology preserved within and around the pumphouse could potentially have significance in the history of water engineering. If it is not particularly significant in the history of water engineering, it could be a well-preserved enough example of such technology to interest citizens concerned with preserving historic water-engineering technology.

Previously recorded segments of the Flume (CA-SDI-11296H) were determined to be eligible for listing on the CRHR under criteria 1 and 3 (ICF International, 2012). The Flume played an important role in the growth of the City and County’s populations and represented a major engineering achievement for its time. Its construction employed thousands of area (and non-area) residents and became the first large-volume steady water source for the City of San Diego and its neighboring communities. The Flume’s decorative tunnel façades illustrate unique artistic embellishments and interesting incorporations of local raw materials. The Flume embodies distinctive characteristics of 19th century water conveyance systems and represents a work of high quality engineering. Though the Flume itself is no longer present, its bench cut and tunnel, are clearly visible, with most of them ranging from fair to excellent condition. The Flume has undoubtedly played an important role in the region’s history.

Table 5-1. Potential Significance of Identified Cultural Resources within the Study Area

Resource	Description	Potential Significance	Reasoning	Preliminary Management Recommendation
CA-SDI-21509	Prehistoric Bedrock Milling Feature	Low	Data likely to be low	Avoidance and Preservation
CA-SDI-21510	Prehistoric Bedrock Milling Feature	Low	Data potential likely to be low	Avoidance and Preservation
CA-SDI-21511	Historic Concrete Pad	Low	Lacks data potential	Avoidance and Preservation
P-37-034486	Historic conduit and Associated Structures	Moderate	Associated with incremental replacement of the Flume over time and with the Pump Station, but the resource has been altered and its features are commonplace	Avoidance and Preservation
P-37-	Historic-Period El Monte Pumphouse,	Modertate-	Potential significance for Lakeside history, New	Avoidance and

034482	Pipe Features, Concrete Anchorages, and Control House	High	Deal public works in San Diego, association with development of El Capitan Reservoir, and engineering history (pump technology), but integrity has been diminished by alterations	Preservation
CA-SDI-11296H	San Diego Flume and associated El Monte Tunnel	High	Other previously recorded segments of the resource have been found eligible for the CRHR under criteria 1, 3, and 4	Avoid and preserve tunnel entrances

5.2. Impact Identification

DPR has identified a proposed trail alignment that will extend from El Monte Road, through the HWD pump station (the historic-period El Monte Pump Station, P-37-034482) up to the ridge line to connect with the bench cut for the historic San Diego Flume. The trail will include turnouts at some locations, and will also connect to the existing trail around Lake Jennings via the connection with the Flume trail. DPR anticipates that a staging/parking area and other trail head facilities would be developed within the HWD historic pump station property.

Parking for access to the trail will be established within the HWD pump station southwest of pump station’s pumphouse, and southeast of the pumphouse, the control panel house, and the pipeline and associated anchorages aligned between the pumphouse and the control panel house. The trail alignment will begin immediately northeast of the HWD storage yard at the southeast portion of the property and extend up of the slope to the east approximately 2,200 feet in a switchback arrangement to the vicinity of the pipeline bench cut near the concrete structure at the east end of P-37-034486 (the concrete structure is referred to as a “mixing structure” in KTU+A’s Opportunities and Constraints Analysis for the Project) (KTU+A 2015). Twelve switchbacks will be created at the slope east of the pump station. Switchback 7 will be aligned at a tight climbing radius and incorporate steps. Along the switchbacks, 4 locations have been identified for passing turnouts. The project footprint is 10-feet wide at trail segments (trail width of 6 feet plus a 2-foot buffer on each side) and 14-feet wide at turnouts (trail and turnout width of 10 feet plus a 2-foot buffer on each side). Switchback 3 will be constructed within 16 feet of the above-ground historic-period pipelines that run up the slope from the pump station to the concrete structure at the top of the slope.

East of both the concrete structure atop the slope and the switchback terminus, the trail will be aligned slightly north of the existing pipeline bench cut. The trail will continue east away from the eroded area where the pipeline bench cut’s southeastern, approximately 100-foot-long segment connects with the Flume trail from the northeast and to trails linked to the Lake Jennings trail to the south. Instead of following the flume bench cut’s northwest-southeast segment toward the northerly El Monte Tunnel entrance, the trail will depart from the pipeline

bench cut, and pass north of the tunnel entrance on an east-west alignment to connect to the Flume trail. Users will be able to access the trails to Lake Jennings via the connection to the Flume trail.

5.2.1. Direct Impacts

Potential direct impacts from the Project would result from construction and trail maintenance activities, such as grading, other ground disturbance, vegetation removal and trimming. For purposes of impact analysis, it is assumed that these activities will involve ground disturbing activities that could impact cultural resources.

The proposed Project will not result in direct impacts to CA-SDI-21509 and MDR-2, which are prehistoric bedrock milling stations, or to CA-SDI-21511, a historic concrete pad. All three of these resources are located well south of the closest location where project construction activities will take place. Those nearest Project construction locations are situated at a distance of 200 feet or more from the three resources. The Project will avoid and thereby preserve those resources in place.

Establishment of trail-access parking areas at the pump station would not result in direct impacts to the pump station's historic-period resources. Those parking areas will be established southwest of the pumphouse and southeast of the pumphouse, the control panel house, and the pipeline and associated anchorages aligned between the pumphouse and the control panel house. The Project will avoid and thereby preserve those resources in place.

The Project will also avoid and preserve P-37-034486, which includes the pipelines running up the slope east of the pump station, and the concrete structure atop the slope at the east end of the pipelines. The closest trail element to P-37-034486 will be switchback 3, which will be constructed at a distance of 16 feet from the P-37-034486 pipeline alignment. The trail Project would not result in a direct impact to the resource.

The Project will have limited direct impacts on CA-SDI-11296H, the historic San Diego Flume remains. One above-ground element of the resource, the El Monte Tunnel entrance, is located within the Project study area and in the vicinity of Project construction activities. However, the trail will be constructed to the north to avoid the tunnel entrance, and no direct impacts to the tunnel entrance will occur as a result of trail construction activities. Construction of the trail segment linking the trail to be constructed at the north side of the pipeline bench cut with the western portion of the Flume trail will likely result in limited direct impacts to the Flume trail. However, impacts from trail construction and maintenance will be of a surficial nature, and will be limited to activities such as grading, vegetation removal, and trimming at the connection point. The alignment of the Flume trail will not be altered or destroyed. The project will not diminish the Flume trail's historical integrity, and the resource's recent use as a trail will be continued. The Project will not result in significant direct impacts to CA-SDI-11296H or to any of the other cultural resources identified within the study area.

5.2.2. Indirect Impacts

Foreseeable indirect impacts associated with the Project would result primarily from trail use. These impacts could include low levels of ground and vegetation disturbance by visitors. Other, potentially more severe impacts could include acts of vandalism, such as graffiti, or unauthorized deviation from existing trails.

Project construction will not involve activities or introduce features that will result in significant indirect impacts by diminishing the historical integrity of any cultural resources within the study area. CA-SDI-21509, CA-SDI-21510, and CA-SDI-21511 have low significance potential, and again, these resources are located at distances of 200 feet or more from trail features to be constructed as part of the project. Other cultural resources within the study area are located in closer proximity to the Project alignments.

All of the identified cultural resources except the Flume trail segment of CA-SDI-11296H will be avoided by Project construction activities. As stated above, Project construction will not result in significant direct impacts to the Flume trail segment that will substantially reduce its historical integrity. Nor will Project construction introduce new built elements that could indirectly reduce the Flume trail's historical integrity. As a consequence of avoidance and preservation in place, neither P-37-034486 nor the El Monte Tunnel elements of CA-SDI-11296H would suffer from diminished integrity of location, design, workmanship, materials, or association as a result of Project construction activities.

It is anticipated that trail use could result in indirect impacts to historic period-resources in close proximity to the trail parking and trail. These impacts would be insignificant with appropriate management. Potential vandalism to P-37-034486, the northern El Monte Tunnel entrance, and historic elements of the pump station would most likely include spray-painting or other forms of marking on exterior surfaces. Superficial alterations to the resources from vandalism would not significantly impact these features. The resources' essential design qualities and construction would not be impacted, and the vandalized areas could most likely be cleaned of the damage. Rebar grates already secure the entrance portals to the inside of the El Monte Tunnel. For these reasons, it is unlikely that indirect impacts from vandalism would result in a substantial adverse change to the significance of any of these resources.

However, the potential for indirect impacts from vandalism or other forms of encroachment by trail users would be reduced further by introduction of appropriate signage and exclusionary fencing in some locations. Mitigation Measure CR-3 below specifies the introduction of interpretive signage to inform trail users of resource importance at the pump station, at the trail segment nearest to the El Monte Tunnel entrance portion of CA-SDI-11296H, and at the switchback segments in close proximity to P-37-034486 (switchback 3, and the switchback terminus near the concrete structure atop the slope at the east end of P-37-034486's pipelines). Signage for P-37-034486 will also warn trail users that the resource may contain lead and asbestos. Exclusionary fencing does not appear feasible at the pump station, and as a public congregating point for trail users located along El Monte Road, the pump station is less likely to be subject to major vandalism than other historic-period resources along the trail. Mitigation Measure CR-3 specifies introduction of exclusionary fencing at the two above described switchback points closest to P-37-034486, and at the trail point nearest to the El Monte Tunnel's northern entrance.

New built features introduced in close proximity to historical resources can result in significant indirect visual impacts to such resources by substantially diminishing integrity of setting and feeling in some instances. However, the introduction of features such as interpretive signs and limited exclusionary fencing signage would not result in significant indirect visual impacts. The fencing and signage will help preserve the subject resources. Fences and signs are objects that will not visually intrude upon the existing environment in a substantial way. The fencing and signage will not significantly reduce the resources' integrity of setting and feeling.

5.2.3. Cumulative Impacts

Although the Project may result in both direct and indirect impacts to historic-period cultural resources, no Project elements or associated mitigation measures will impact those resources in such a way that would impair their significance. Therefore, the proposed project will not result in a cumulative impact to historical resources.

6.0 MANAGEMENT CONSIDERATIONS—MITIGATION MEASURES AND DESIGN CONSIDERATIONS

6.1. Unmitigated Impacts

There are no foreseen unavoidable impacts to cultural resources resulting from the proposed project

6.2. Mitigated Impacts

Impacts could occur during trail construction, maintenance and use. However, several mitigation measures are proposed to minimize the potential for impacts during these activities. These primarily involve avoidance of cultural resources.

Mitigation Measure CR-1. Prior to Project construction, DPR will place temporary construction fencing around all identified cultural resources in close proximity to project construction locations: the historic-period resources at the El Monte Pump Station (P-37-034482), elements of P-37-034486 in close proximity to the switchbacks, and the northern entrance to the El Monte Tunnel portion of CA-SDI-11296H. Temporary fencing during construction will reduce likelihood of unforeseen impacts to historical resources from construction activities.

Mitigation Measure CR-2. Prior to project construction, a professional archaeologist will provide cultural resources sensitivity training to construction personnel. Training will address both the types of resources that might be unearthed or otherwise encountered during construction activities, as well as the procedures to be followed in the event of an unanticipated discovery of cultural resources. Should cultural resources be encountered during construction, work will stop in the immediate vicinity of the find until a qualified archaeologist can assess the find and provide recommendations for avoidance (preferred) or further treatment, as required. Minimally, any newly identified features related to CA-SDI-11296H, the P-37-034486, or the historic El Monte Pump Station (P-37-034482) shall be added to the site record form for the resource. Although the likelihood for encountering unrecorded cultural resources is low, providing training to field personnel will ensure the proper identification and treatment of any materials should they be encountered.

Mitigation Measure CR-3. To help protect historic-period cultural resources in close proximity to Project elements, DPR shall install interpretive signage at the pump station and at trail locations in close proximity to historic-period cultural resources: the trail segment nearest to the El Monte Tunnel entrance portion of CA-SDI-11296H, and at the switchback segments in close proximity to P-37-034486 (switchback 3, and the switchback terminus near the concrete structure atop the slope at the east end of P-37-034486's pipelines). The signage should detail the significance or potential significance of the resources, and inform users of the importance of leaving the resources undisturbed. By increasing trail users' awareness of the presence and significance of the resources, the likelihood of any unforeseen impacts to the resources will be reduced. The signage at the two switchback points nearest to P-37-034486 will also inform trail users of the danger that P-37-034486 may contain asbestos and lead. Additionally, DPR shall install exclusionary fencing at the two above described switchback points closest to P-37-

034486, and at a location that will deter trail users from approaching the El Monte Tunnel's northern entrance from the trail point nearest to that tunnel entrance.

Mitigation Measure CR-4. DPR will survey any portions of the trail, with a suitable buffer, that fall outside the survey area of the proposed trail segment locations. If cultural resources are identified, those resources will be avoided in trail design. Per CR-1, temporary fencing will be placed around the resources during construction. Avoidance of any newly identified resources will ensure there are no impacts to cultural resources.

In addition to the above mitigation measures, the following implementation and management measures are also proposed. These relate to long term maintenance and monitoring of the trail.

DPR will ensure that trail maintenance is confined to the existing trail alignment and is conducted in such a manner as to avoid impacting cultural resources within the project area. Conducting trail maintenance with the intent of avoiding cultural resources will prevent or minimize unforeseen impacts to the resources.

DPR will conduct annual condition monitoring of the cultural resources along the trail for signs of vandalism or other alterations, such as unauthorized deviation from the trail, and take corrective measures to rectify potential impacts. Annual inspections of cultural resources along the trail will ensure that DPR has accurate information on the condition of the resources and will allow for measures to be taken if impacts have occurred or are in danger of occurring.

Given the location and geology of the project area, there is minimal potential for buried cultural resources. For this reason, and because the project will involve only minimal ground disturbance, archaeological and Native American monitoring is not recommended. For the same reasons, there is very minimal potential for the unanticipated discovery of human remains. However, in the unlikely event that human remains are encountered, specific actions must take place pursuant to CEQA Guidelines Section 15064.5e, Public Resources Code (PRC) Section 5097.98, and Section 87.429 of the County of San Diego Grading, Clearing and Watercourses Ordinance.

Should Native American human remains be identified during ground disturbing activities related to the proposed project, whether during construction, maintenance, or use, State and County mandated procedures shall be followed for the treatment and disposition of those remains, as follows:

In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, DPR will ensure that the following procedures are followed:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
 - a. A County (DPR) official is contacted.
 - b. The County Coroner is contacted to determine that no investigation of the cause of death is required.
 - c. If the Coroner determines the remains are Native American, then:

- i. The coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours.
 - ii. The NAHC shall identify the person or persons it believes to be most likely descended from the deceased Native American.
 - iii. The Most Likely Descendant (MLD) may make recommendations to the landowner (DPR), or the person responsible for the excavation work, for the treatment of human remains and any associated grave goods as provided in PRC Section 5097.98.
2. Under the following conditions, the landowner or its authorized representative shall rebury the Native American human remains and associated grave goods on the property in a location not subject to further disturbance:
 - a. The NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 24 hours after being notified by the NAHC.
 - b. The MLD fails to make a recommendation.
 - c. The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.
3. Any time human remains are encountered or suspected and soil conditions are appropriate for the technique, ground penetrating radar (GPR) will be used as part of the survey methodology. In addition, the use of canine forensics will be considered when searching for human remains. The decision to use GPR or canine forensics will be made on a case-by-case basis through consultation among the County Archaeologist, the project archaeologist, and the Native American monitor.
4. Because human remains require special consideration and handling, they must be defined in a broad sense. For the purposes of this document, human remains are defined as:
 - a. Cremations, including the soil surrounding the deposit.
 - b. Interments, including the soils surrounding the deposit.
 - c. Associated grave goods.

In consultation among the County archaeologist, project archaeologist, and Native American monitor, additional measures (e.g., wet-screening of soils adjacent to the deposit or on-site) may be required to determine the extent of the burial.

6.3. Effects Fount Not to be Significant

Trail construction and maintenance activities will result in direct impacts to a small portion the CA-SDI-11296H Flume trail at its western linkage to the proposed trail, but these impacts will not be significant given that only minor modification will be required, consisting of vegetation removal and minor grading. Mitigation Measure CUL-3 will introduce signage in close proximity to historic elements of the El Monte Pump Station (3-37-034482), and to two trail locations in close proximity P-37-034486, and to the trail location nearest the northern entrance to the El Monte Tunnel entrance portion of CA-SDI-11296H. That mitigation will also introduce exclusionary fencing to the two trail locations closest to P-37-034486, and at a location that will deter trail users from approaching the El Monte Tunnel's northern entrance from the trail point nearest to that tunnel entrance. The introduction of signage and exclusionary fencing will not affect the significance of these resources by substantially reducing their historical integrity.

7.0 REFERENCES

Apple, Stephen A. and Keith R. Olmo

- 1980 An Investigation of Archaeological Resources Quail Canyon Estates, Lakeside, California., MSA Inc. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Affinis, Inc.

- 2001 Lakeside Historic Survey Report, Chapter II: History of Lakeside. Available: <<http://www.sandiegocounty.gov/dplu/docs/lakeside-ch2.pdf>>. Accessed December 12, 2014.

Almstedt, Ruth

- 1974 Bibliography of the Diegueño Indians. Ballena Press, Ramona.
- 1980 Ethnohistoric Documentation of Puerta La Cruz, San Diego County, California. California Department of Transportation, San Diego.

Bever, Michael, and Robin Hoffman

- 2012 *Cultural Resources Inventory and Impact Assessment for the County Flume Trail Project, San Diego County, California*. Unpublished report. ICF International. Submitted to the County of San Diego Department of Parks and Recreation. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Berryman, Judy A.

- 1981 Archaeological Mitigation Report for Santee Greens SDI-5669. Unpublished report. Archaeological Consulting & Technology. On file, ICF International, San Diego.

Bownman, R.H.

- 1973 Soil Survey of San Diego Area, California. USDA. Soil Conservancy, Washington DC.

Brack, Elaine

- 2008 Conversation with ICF International Researcher Andrea Craft. Lakeside, California. 07 May.

Bull, Charles

- 1983 *Shaking the Foundations: The Evidence of San Diego Prehistory*. Cultural Resource Management Casual Papers Vol. 1, No. 3: 15-64. Department of Anthropology, San Diego State University.

Burt, William H., and Richard P. Grossenheider

- 1976 A Field Guide to the Mammals of America North of Mexico. Houghton Mifflin Company, Boston.

California Geological Survey

- 2010 Geological Map of California. Available online, <http://www.quake.ca.gov/gmaps/GMC/stategeologicmap.html>. Accessed 15 December 2014.

Carrico, Richard L.

- 1998 Ethnohistoric Period. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. Draft document. ASM Affiliates, Inc. Submitted to Metropolitan Wastewater Public Works, San Diego, California.
- 2008 Strangers in a Stolen Land: Indians of San Diego County from Prehistory to the New Deal. Sun Belt Publications, San Diego.

Carrico, Richard L., and Theodore G. Cooley

- 2005 Cultural Resources Report of the Survey and Testing Programs for the Oak Country Estates Development in Ramona, San Diego County, California. ICF International, San Diego. On file, ICF International, San Diego.

Christenson, Lynne E.

- 1990 The Late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence System. Unpublished Ph.D. dissertation, Department of Anthropology, Arizona State University, Tempe.

Cohn, H. Jerry

- 1988 El Monte Regional Park History. Unpublished manuscript on file, County of San Diego Department of Parks and Recreation.
- 2007 Guidelines for Determining Significance, Cultural Resources: Archaeological and Historic Resources. Department of Planning and Land Use and Department of Public Works.

Cupples, Sue Ann

- 1975 *An Archaeological Survey of the San Diego River Valley*. Unpublished report on file, California Historical Information System, South Coastal Information Center, San Diego State University.

DeGiovine, M., and A. Craft

- 2008 CA-SDI-11296H. State of California Department of Parks and Recreation Primary Record (Update). On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Englehardt, Zephyrin

- 1920 *San Diego Mission*. James H. Barry Company, San Francisco.

Ezell, Paul H.

- 1987 The Harris Site: An Atypical San Dieguito Site or Am I Beating a Dead Horse? In *San Dieguito-La Jolla: Chronology and Controversy*, edited by D.R. Gallegos, pp. 15-22. San Diego County Archaeological Society Research Paper No. 1, San Diego.

Fowler, Lloyd Charles

- 1952 A History of Dams and Water Supply of Western San Diego County. Master's Thesis, Civil Engineering, University of California. On file at the San Diego History Center, San Diego, California.

Gallegos, Dennis R.

- 1985 *Batiquitos Lagoon Revisited*. Cultural Resource Management Casual Papers Vol. 2, No. 1. Department of Anthropology, San Diego State University.
- 1987 A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by D.R. Gallegos, pp. 23-24. San Diego County Archaeological Society Research Paper No. 1, San Diego.
- 1991 Antiquity and Adaptation at Agua Hedionda, Carlsbad, California. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J.M. Erlandson and R.H. Colten. pp. 19-42. Perspectives in California Archaeology, Vol. 1, J.E. Arnold, general editor, Institute of Archaeology, University of California, Los Angeles.

Gallegos, Dennis R., Carolyn Kyle, Adella Schroth, and Patricia Mitchell

- 1998 *Management Plan for Otay Mesa Prehistoric Resources, San Diego, California*. Unpublished report. Gallegos & Associates. Submitted to the City of San Diego and California Department of Transportation. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Garcia-Herbst, Arleen, and David Iversen, Don Laylander, and Brian Williams

- 2010 Final Inventory Report of the Cultural Resources within the Approved San Diego Gas & Electric Sunrise Powerlink Final Environmentally Superior Southern Route, San Diego and Imperial Counties, California. Unpublished report on file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Glenn, Brian K.

- 1999 *Cultural Resources Investigations within the Starwood Project Area (TM5073), Santa Fe Valley, San Diego County, California*. Unpublished report on file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Griffin, Ernst C., and John R. Weeks

- 2004 *Peopling the Region: San Diego's Population Patterns*. In *San Diego: An Introduction to the Region*. 3rd ed. Edited by Philip R. Pryde. Sunbelt Publications, Inc., San Diego.

Hedges, Kenneth

- 1975 Notes on the Kumeyaay: A Problem of Identification. *The Journal of California Anthropology* 2(1):71-83.

Helix Water District

- 2011 Helix Water District 2010 Urban Water Management Plan. Available: < <http://www.hwd.com/pubs/uwmp.pdf>>. Accessed December 12, 2014.
- 2014 History of Helix Water District. Internet Webpage Available: < <http://www.hwd.com/about/history.htm>>. Accessed December 12, 2014.

ICF International

- 2008 *Cultural Resources Phase I Survey and Inventory of County of San Diego El Capitan and Oakoasis Preserves and El Monte and Louis A. Stelzer Regional Parks, San Diego County, California*. October. Prepared for the County of San Diego, Department of Parks and Recreation.
- 2012 *Cultural Resources Inventory and Impact Assessment for the County Flume Trail Project, San Diego County, California*. San Diego County, California. October. Prepared for the County of San Diego, Department of Parks and Recreation.

Jordan, Stacey C., and William T. Eckhardt

- 2008 *Cultural Resources Phase I Survey and Inventory of the Proposed Trail and Equestrian Staging Areas El Monte Regional Park, San Diego County, California*. Unpublished report. ICF Jones & Stokes. Submitted to the County of San Diego Department of Parks and Recreation. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Jordan, Stacey C., William T. Eckhardt, and Andrea M. Craft

- 2008 *Cultural Resources Phase I Survey and Inventory of County of San Diego El Capitan and Oakoasis Preserves and El Monte and Louis A. Stelzer Regional Parks, San Diego County, California*. Unpublished report. ICF Jones & Stokes. Submitted to the County of San Diego Department of Parks and Recreation. On file, California

Historical Resources Information System, South Coastal Information Center, San Diego State University.

Koerper, Henry C.

- 1979 The Question of the Chronological Placement of the Shoshonean Presence in Orange County, California. *Pacific Coast Archaeological Society Quarterly* 15(3):69-84.

Koerper, Henry C., Paul E. Langenwaller II, and Adella Schroth

- 1991 Early Holocene Adaptations and the Transition Phase Problem: Evidence from the Allan O. Kelly Site, Agua Hedionda Lagoon. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J.M. Erlandson and R.H. Colten. pp. 43-62. Perspectives in California Archaeology, Vol. 1, J.E. Arnold, general editor, Institute of Archaeology, University of California, Los Angeles.

Kroeber, Alfred L.

- 1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington, D. C.

Langdon, Margaret

- 1975 Kamia and Kumeyaay: A Linguistic Perspective. *The Journal of California Anthropology* 2(1):64-70.

Lakeside Historical Society

- 1937 El Monte Pumping Plant to Start Operation October 22. October 15. Newspaper Clipping from Unspecified Newspaper [likely from *San Diego Union* or *San Diego Evening Tribune*], Cabinet 5, Water 1875-2000, Binder 5-22. On file at the Lakeside Historical Society Museum Archives, Lakeside, California.
- 1942 Historic Photograph of El Monte Pump Station [labelled "Helix Pumping Plant, El Monte Road]. Cabinet 5, Water 1875-2000, Binder 5-22. On file at the Lakeside Historical Society Museum Archives, Lakeside, California.
- 1985 Legends of Lakeside. History of Lakeside on file at the Lakeside Historical Society Museum Archives, Lakeside, California.

Laylander, Don (editor)

- 2006 Research Issues in San Diego Prehistory. Electronic document. Available online, <http://www.sandiegoarchaeology.org/Laylander/Issues/index.htm>. Accessed 31 May 2012.

Lee, Melicent

- 1937 *Indians of the Oaks*. Ginn and Co., Boston.

Lorenz, Craig R. and Associates

- 1988 Quail Canyon Specific Plan SP77-01 Phase III, TM 4627, Log 76-14-155 Lakeside Community Plan Area, County of San Diego, California. Unpublished report on file, the California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Loughlin, Barbara A.

- 1973 *Environmental Impact Report (Archaeology) for RAM Construction Company, Fallbrook, California*. Unpublished report on file, the California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Luomala, Katherine

- 1963 Flexibility in Sib Affiliation among the Diegueño. *Ethnology* 2(3): 282-301.
- 1978 Tipai-Ipai. In *California*, edited by R.F. Heizer, pp. 592-608. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

McCown, Benjamin E.

- 1945 An Archaeological Survey of the San Vicente Lake Bed, San Diego County, California. *American Antiquity* 10:255-264.

McDonald, Allison Meg, and James D. Eighmey

- 1998 Late Period Prehistory in San Diego. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. Unpublished report. ASM Affiliates, Carlsbad, California.

Meighan, Clement W.

- 1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215-227.

Moriarty, James R., III

- 1969 The San Dieguito Complex: Suggested Environmental and Cultural Relationship. *Anthropological Journal of Canada* 6(3):1-18.
- 1987 A Separate Origins Theory for Two Early Man Cultures in California: Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by D.R. Gallegos, pp. 49-60. San Diego County Archaeological Society Research Paper No. 1, San Diego.

Multi Systems Associates, Inc.

- 1976 Environmental Impact Report Quail Canyon Estates, Lakeside, California. Unpublished report on file, the California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Naiman, Joe

- 1999 El Monte Pump Station Dedicated. *Lakeside Leader*, June 17. Newspaper Clipping, Cabinet 5, Water 1999-2000, Binder 5-26. On file at the Lakeside Historical Society Museum Archives, Lakeside, California.

Norwood, Richard H.

- 1980 *The Archaeological Resources of Fairbanks Ranch, Rancho Santa Fe, California*. Unpublished report. RECON. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge

- 2008 *Draft Vegetation Communities of San Diego County*. Based on Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Unpublished report. Available online, http://www.sdcountry.ca.gov/dplu/docs/Veg_Comm_SDCounty_2008.pdf. Accessed 15 May 2012.

Pacific Rural Press

- 1888 The Largest Flume in the World. 24 November: 441.

Peterson, Roger T.

- 1961 *A Field Guide to Western Birds*. Houghton Mifflin Company, Boston.

Pham, Angela Ngoctien

- 2011 Historical and Archaeological Patterns of Water Use in San Diego County: A Case Study of the Whaley House Cistern/Well. M.A. Thesis, Department of Anthropology, San Diego State University.

Pigniolo, Andrew, Canace Ehringer and Madeleine Bray

- 2011 Draft Phase I Cultural Resources Survey and Assessment for the El Monte Valley Mining, Reclamation and Groundwater Recharge Project. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Pourade, Richard F.

- 1960 *The Explorers: the History of San Diego*. Union-Tribune Publishing, San Diego.
- 1961 *Time of the Bells: the History of San Diego*. Union-Tribune Publishing, San Diego.
- 1964 *The Glory Years*. Union-Tribune Publishing, San Diego.

Pryde, Philip R. (editor)

- 1984 *San Diego: An Introduction to the Region*. 2nd ed. Kendall/Hunt Publishing Company, Dubuque, Iowa.

Quastler, Imre E.

- 2004 San Diegans on the Move: Transportation in the County. In *San Diego: An Introduction to the Region*, 5th ed, edited by Philip R. Pryde. Sunbelt Publications, Inc., San Diego.

Rawls, James J. and Walton Bean

- 2003 *California: An Interpretive History*. 8th ed. McGraw-Hill Publishing, San Francisco.

Rogers, Malcolm J.

- 1939 *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas*. San Diego Museum Papers No. 3.
- 1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167-198.
- 1966 *Ancient Hunters of the Far West*, edited by R.F. Pourade, pp. 21-108. Copley Press, La Jolla, California.

Roth, Linda

- 1989 CA-SDI-11296H. State of California Department of Parks and Recreation Primary Record (Update). On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Sahlins, Marshall

- 1968 *Tribesmen*. Foundations of Modern Anthropology Series, Marshall D. Sahlins. editor, Prentice-Hall, New York.

San Diego County

- 1895 San Diego County Plat Book, Townships 8-19 South, Range West; Townships 9-18 South, Range East. On file at the San Diego History Center, San Diego, California.
- 1896 San Diego County Plat Book, Townships 8-19 South, Range West; Townships 9-18 South, Range East. On file at the San Diego History Center, San Diego, California.
- 1928 Aerial Photograph 55-D4. On file at the County of San Diego Cartography Office, San Diego, California.

San Diego County Water Authority

- 1895 To Quench a Thirst: A Brief History of Water in the San Diego Region. San Diego County Water Authority, San Diego, California. Available online,

<http://www.sdcwa.org/sites/default/files/files/publications/quench-a-thirst.pdf>. Accessed 15 December 2015.

San Diego Evening Tribune

- 1898 Wells Work Well—Plenty of Water Coming from El Monte Plant. August 20: 4.
- 1904 A Matter of Speculation. September 15: 5.
- 1919 Board Decision on Surcharges is Received. August 14: 3.
- 1928 List Shows Property to be Taken by City in Water Compromise. March 8:1-2.

San Diego Flume

ca. 1888. Photograph. On file, San Diego History Museum, San Diego. Available online, <http://www.sandiegohistory.org/collections/viewcards/flume.htm>. Accessed 31 May 2012.

San Diego Union

- 1913 Fletcher Water Scheme Passed Up to Counsel. November 26: 13.
- 1936 Pyle Approves El Capitan Pipe Line 2-Mile Link. September 26: 5.
- 1937 Work Starts Next Week on District Pump Plant. June 10: 3.

Savage [Hiram] Water Collection

1925 Photo 117: Water—Original El Monte Pumphouse. On file at the San Diego History Center, San Diego, California.

Schroth, Adella B., Roxanne Phillips, and Dennis Gallegos

1996 *Cultural Resources Survey of the Santa Margarita River Drainage, Camp Pendleton*. Unpublished report. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

Scientific American

1890 The San Diego Flume System. 15 March: 167.

Service, Elman R.

- 1966 *The Hunters*. Foundations of Modern Anthropology Series, Marshall D. Sahlins, editor, Prentice-Hall, New York.
- 1971 *Primitive Social Organization: An Evolutionary Perspective*. Random House, New York.

Sherman, Lola

- 2001 *A History of North San Diego County: From Mission to Millennium*. Heritage Media Group. Carlsbad, California.

Shipek, Florence C.

- 1982 Kumeyaay Socio-Political Structure. *Journal of California and Great Basin Anthropology* 4(2): 296-303.
- 1989 Mission Indians and Indians of California Land Claims. *American Indian Quarterly* 13(4), Special Issue: The California Indians (Autumn): 409-420.
- 1991 *Delfina Cuero: Her Autobiography, An Account of her Last Years, and Her Ethnobotanic Contributions*. Ballena Press, Menlo Park, California.

Spier, Leslie

- 1923 *Southern Diegueño Customs*. University of California Publications in American Archaeology and Ethnology Vol. 20:294-358.

Stebbins, Robert C.

- 1966 *A Field Guide to Western Reptiles and Amphibians*. Houghton Mifflin Company, Boston.

Townsend, Jan

- 1984 Southwest Powerlink Cultural Resources Management Plan. Wirth Environmental Services. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

True, Delbert L.

- 1958 An Early Complex in San Diego County, California. *American Antiquity* 23(3):255-263.
- 1966 Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California. Ph.D. dissertation, University of California, Los Angeles.
- 1970 *Investigation of a Late Prehistoric Complex in Cuyamaca Rancho State Park, San Diego County, California*. Archaeological Survey Monograph, University of California, Los Angeles.
- 1980 The Pauma Complex in Northern San Diego County: 1978. *Journal of New World Archaeology* 3(4):1-30.

True, Delbert L., and Eleanor Beemer

- 1982 Two Milling Stone Inventories from Northern San Diego County, California. *Journal of California and Great Basin Anthropology* 4(2):233-261.

True, Delbert L., Clement W. Meighan, and Harvey Crew

- 1974 *Archaeological Investigations at Molpa, San Diego County, California*. University of California Publications in Anthropology Vol. 11. University of California Press, Berkeley.

United States Geological Survey (USGS)

- 1893 *El Cajon, California*. 15' series (1:62,500) Topographic Quadrangle Map.
- 1975 *El Cajon, California*. 7.5' series (1:24,000) Topographic Quadrangle Map. Original data 1967, photorevised 1975.

Wallace, William J.

- 1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.

Warren, Claude N.

- 1966 *The San Dieguito Type Site: M. J. Rogers' 1938 Excavation on the San Dieguito River*. San Diego Museum Paper No. 6, San Diego.
- 1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32(2):168-185.
- 1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, pp. 1-14. Eastern New Mexico Contributions in Anthropology 1(3). Portales, New Mexico
- 1987 The San Dieguito and La Jolla: Some Comments. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by D.R. Gallegos, pp. 73-85. San Diego County Archaeological Society Research Paper No. 1, San Diego.

Warren, Claude N., Gretchen Siegler, and Frank Dittmer

- 1998 Paleoindian and Early Archaic Periods. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. Unpublished draft report. ASM Affiliates.

Warren, Claude N., and Delbert L. True

- 1961 *The San Dieguito Complex and Its Place in San Diego County Prehistory*. Archaeological Survey Annual Report, 1960-1961, pp. 246-291. University of California, Los Angeles.

White, Raymond C.

- 1963 *Luiseno Social Organization*. University of California Publications in American Archaeology and Ethnology Vol. 48, No. 2:91-194.

Willey, Loraine M., and Christy Dolan

2004 *Above and Below the Valley: Report on Data Recovery at San Vicente Reservoir, San Diego County, California*. Unpublished report. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University. With Associates

1974 Environmental Impact Report Quail Canyon Estates, Lakeside, California. On file, California Historical Resources Information System, South Coastal Information Center, San Diego State University.

1980 APS/SDG&E Interconnection Project System. Environmental Study Phase II Corridor Studies Native American Cultural Resources.

8.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

Preparers:

Karolina Chmiel, MA
Timothy Yates, PhD

Michael Richards, MA, RPA
Karen Crawford MA, RPA.

ICF International, Project Archaeologist
ICF International, Historian/Architectural
Historian
ICF International, Field Director
ICF International, Principal Investigator

Persons and Organizations Contacted:

Katy Sanchez
Keith Adkins
Kim Bactad
Steve Banegas
Frank Brown

Ron Christman
Leroy J. Elliott
Nick Elliott
Ralph Goff
Julie Hagen
Lisa Haws
Raymond Hunter
Clint Linton
Carmen Lucas
Cody J. Martinez
Will Micklin
Bernice Paipa
Gwendolyn Parada
Virgil Perez
Anthony R. Pico
Robert Pinto Sr.

Lakeside Historical Society
Helix Water District
San Diego County Department of Parks and Recreation
San Diego History Center

Native American Heritage Commission
Manzanita Band of Mission Indians
Kumeyaay Diegueno Land Conservancy
Kumeyaay Cultural Repatriation Committee
Inter-Tribal Cultural Resource Protection
Council
Kumeyaay Cultural Historic Committee
Manzanita Band of Kumeyaay Nation
Manzanita Band of Kumeyaay Nation
Campo Band of Mission Indians
Viejas Band of Kumeyaay Indians
Sycuan Band of the Kumeyaay Nation
Jamul Indian Village
Iipay Nation of Santa Ysabel
Kwaaymii Laguna Band of Mission Indians
Sycuan Band of the Kumeyaay Nation
Ewiiapaayp Tribal Office
Kumeyaay Cultural Repatriation Committee
La Posta Band of Mission Indians
Iipay Nation of Santa Ysabel
Viejas Band of Kumeyaay Indians
Ewiiapaayp Tribal Office

9.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS

Mitigation Measure	Design Consideration
<p>CR-1. Prior to Project construction, DPR will place temporary construction fencing around all identified cultural resources in close proximity to project construction locations: the historic-period resources at the El Monte Pump Station, elements of P-37-034486 in close proximity to the switchbacks, and the northern entrance to the El Monte Tunnel portion of CA-SDI-11296H.</p>	<p>Temporary fencing during construction will reduce likelihood of unforeseen impacts to historical resources from construction activities.</p>
<p>CR-2. Prior to project construction, a professional archaeologist will provide cultural resources sensitivity training to construction personnel. Training will address both the types of resources that might be unearthed or otherwise encountered during construction activities, as well as the procedures to be followed in the event of an unanticipated discovery of cultural resources. Should cultural resources be encountered during construction, work will stop in the immediate vicinity of the find until a qualified archaeologist can assess the find and provide recommendations for avoidance (preferred) or further treatment, as required. Minimally, any newly identified features related to CA-SDI-11296H, the P-37-034486, or the historic El Monte Pump Station shall be added to the site record form for the resource.</p>	<p>Although the likelihood for encountering unrecorded cultural resources is low, providing training to field personnel will ensure the proper identification and treatment of any materials should they be encountered.</p>
<p>CR-3. To help protect historic-period cultural resources in close proximity to Project elements, DPR shall install interpretive signage at the pump station and at trail locations in close proximity to historic-period cultural resources: the trail segment nearest to the El Monte Tunnel entrance portion of CA-SDI-11296H, and at the switchback segments in close proximity to P-37-034486 (switchback 3, and the switchback terminus near the concrete structure atop the slope at the east end of P-37-034486's pipelines). The signage should detail the significance or potential significance of the resources, and inform users of the importance of leaving the resources undisturbed. The signage at the two switchback points nearest to P-37-034486 will also inform trail users of the danger that P-37-034486 may contain asbestos and lead. Additionally, DPR shall install exclusionary fencing at the two above described switchback points closest to P-37-034486, and at a location that will deter trail users from approaching the El Monte Tunnel's northern entrance from the trail point nearest to that tunnel entrance.</p>	<p>By increasing trail users' awareness of the presence and significance of the resources, and installing exclusionary fencing, the likelihood of any unforeseen impacts to the resources will be reduced.</p>
<p>CR-4. DPR will survey any portions of the trail, with a suitable buffer, that fall outside the survey area of the proposed trail segment locations. If cultural resources are identified, those resources will be avoided in trail design. Per CR-1, temporary fencing will be placed around the resources during construction.</p>	<p>Avoidance of any newly identified resources will ensure there are no impacts to cultural resources.</p>

APPENDIX A
Records Search Confirmation



South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
nick@scic.org

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: ICF International
Company Representative: Karolina Chmiel
Date Processed: 12/16/2014
Project Identification: El Monte Segment of SD Trail #P0529.14

Search Radius: 1 mile

Historical Resources: YES

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: YES

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: YES

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements	
RSID:	932
RUSH:	yes
Hours:	1
Spatial Features:	67
Address-Mapped Shapes:	no
Digital Database Records:	0
Quads:	4
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	113

APPENDIX B
Native American Coordination and AB 52 Consultation



December 10, 2014

Ms. Katy Sanchez
Native American Heritage Commission
1550 Harbor Blvd.
West Sacramento CA 95691

Re: Cultural Resources Inventory for the El Monte Segment of the San Diego Trail, San Diego County, California

Dear Ms. Sanchez:

This letter is a request for review of the Sacred Lands File for the El Monte Segment of the San Diego Trail Project (Project). Any information you are able to provide would be appreciated. Appropriate and other knowledgeable tribal members whose names and addresses you provide will be contacted.

ICF International is preparing a cultural resources inventory for The County of San Diego, Department of Parks and Recreation (DPR). The proposed project consists of the construction of a new public use trail on Helix Water District (HWD) owned land in the unincorporated community of Lakeside. The proposed trail would extend from El Monte Road, through the historic pump house facilities up a ridgeline to connect to a historic flume trail near Lake Jennings.

The project site is located in unincorporated Lakeside, San Diego County. Specifically, the project site is located within the El Cajon Land Grant, as mapped on the United States Geological Survey (USGS) 7.5 minute Series El Cajon, California quadrangle.

A record search performed at the South Coastal Information Center, indicated no previously identified resources in the project area. Several resources (habitation site, bedrock milling features, lithic scatters) were identified in a one-mile buffer surrounding the project area.

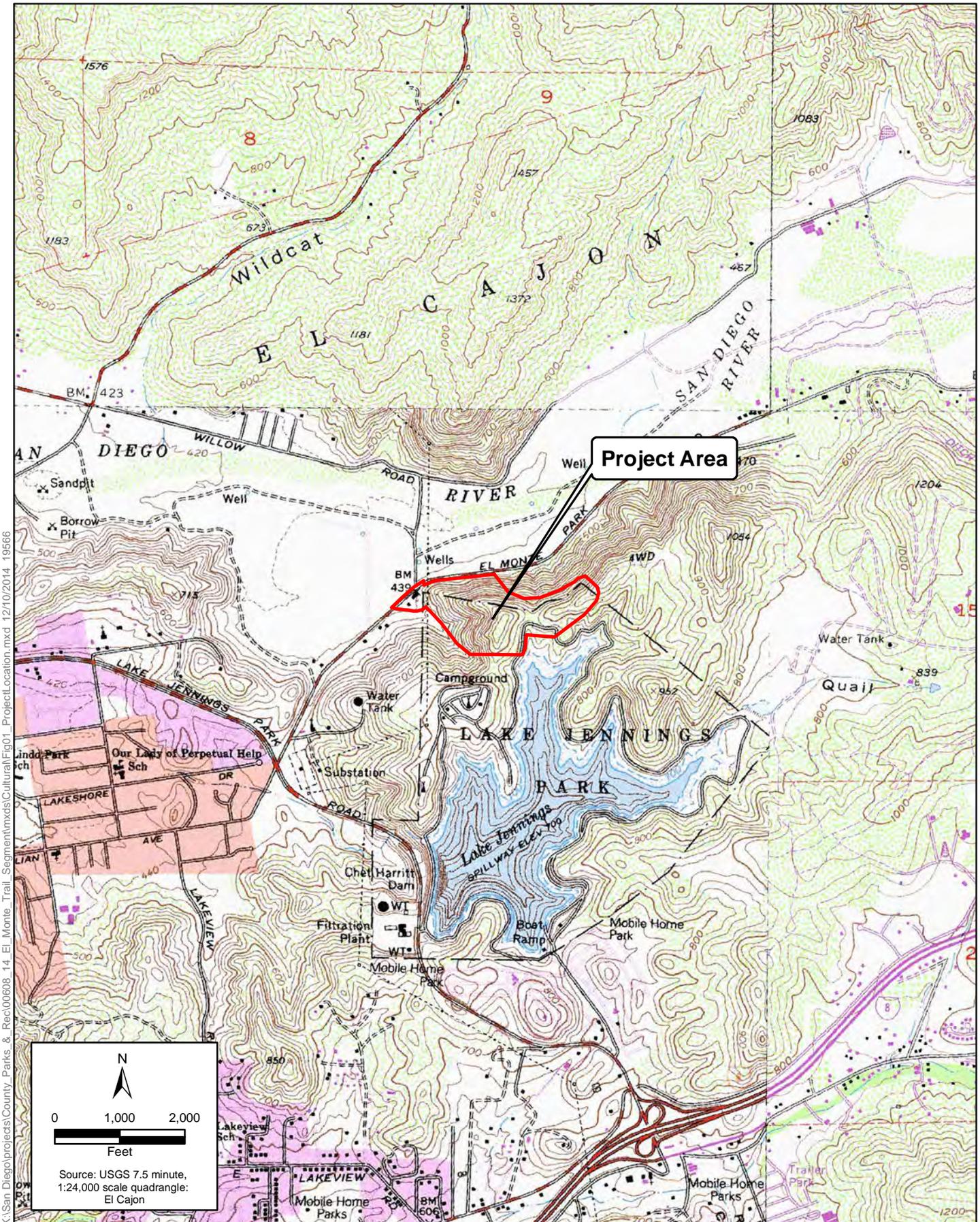
If you have any questions please feel free to contact me by telephone at 858-444-3936 or e-mail at Karolina.Chmiel@icfi.com. Our fax number is 858-578-0573.

Thank you,

A handwritten signature in blue ink that reads "Karolina Chmiel".

Karolina Chmiel

Encl. Figure 1 – Project Location



K:\San Diego\projects\County Parks & Rec\00608.14.El Monte_Trail_Segment\mxd\Cultural\Fig01_ProjectLocation.mxd 12/10/2014 19566



Figure 1
Project Location
El Monte Segment of the San Diego Trail

STATE OF CALIFORNIA

Edmund G. Brown, Jr. Governor

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



December 24, 2014

Karolina Chmiel
ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131

Sent by Fax: (858) 578-0573

Number of Pages: 4

Re: Cultural Resources Inventory for the El Monte Segment of the San Diego Trail, San Diego County.

Dear Ms. Chmiel,

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) for the project referenced above. The search indicates the potential of Native American cultural resources in the El Cajon Quadrangle that may be impacted. For specific information regarding this site, please contact the Ewiiapaayp Tribal Office on the attached San Diego County list.

The absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE. Other sources of cultural resources information should be contacted regarding known and recorded sites. Please contact all of the people on the attached *Native American Contact List*. The list should provide a starting place to locate areas of potential adverse impact within the APE. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Handwritten signature of Katy Sanchez in cursive.

Katy Sanchez
Associate Government Program Analyst

**Native American Contacts
San Diego County
December 16, 2014**

Ewijaapaayp Tribal Office
Robert Pinto Sr., Chairperson
4054 Willows Road Diegueno/Kumeyaay
Alpine CA 91901
wmicklin@leaningrock.net
(619) 445-6315
(619) 445-9126 Fax

Viejas Band of Kumeyaay Indians
Anthony R. Pico, Chairperson
P.O. Box 908 Diegueno/Kumeyaay
Alpine CA 91903
jhagen@viejas-nsn.gov
(619) 445-3810
(619) 445-5337 Fax

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno/Kumeyaay
Boulevard CA 91905
gparada@lapostacasino.com
(619) 478-2113
(619) 478-2125

Kumeyaay Cultural Historic Committee
Ron Christman
56 Viejas Grade Road Diegueno/Kumeyaay
Alpine CA 92001
(619) 445-0385

Manzanita Band of Kumeyaay Nation
Leroy J. Elliott, Chairperson
P.O. Box 1302 Diegueno/Kumeyaay
Boulevard CA 91905
ljbirdsinger@aol.com
(619) 766-4930
(619) 766-4957 Fax

Campo Band of Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo CA 91906
chairgoff@aol.com
(619) 478-9046
(619) 478-5818 Fax

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez, Chairperson
1 Kwaaypaay Court Diegueno/Kumeyaay
El Cajon CA 92019
ssilva@sycuan-nsn.gov
(619) 445-2613

(619) 445-1927 Fax

Jamul Indian Village
Raymond Hunter, Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul CA 91935
jamulrez@sctdv.net
(619) 669-4785

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

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

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed El Monte Segment of the San Diego Trail, San Diego County.

**Native American Contacts
San Diego County
December 16, 2014**

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas
P.O. Box 775 Diegueno-Kwaaymii
Pine Valley, CA 91962 Kumeyaay
(619) 709-4207

Manzanita Band of Mission Indians
ATTN: Keith Adkins, EPA Director
P.O. Box 1302 Kumeyaay
Boulevard, CA 91905
(619) 766-4930
(619) 766-4957 Fax

Kumeyaay Cultural Repatriation Committee
Steve Banegas, Spokesperson
1095 Barona Road Diegueno/Kumeyaay
Lakeside, CA 92040
sbenegas50@gmail.com
(619) 742-5587
(619) 443-0681 Fax

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 Diegueno/Kumeyaay
Santa Ysabel, CA 92070
cjlinton73@aol.com
(760) 803-5694

Viejas Band of Kumeyaay Indians
ATTN: Julie Hagen, Cultural Resources
P.O. Box 908 Diegueno/Kumeyaay
Alpine, CA 91903
jhagen@viejas-nsn.gov
(619) 445-3810
(619) 445-5337

Sycuan Band of the Kumeyaay Nation
Lisa Haws, Cultural Resource Manager
1 Kwaaypaay Court Diegueno/Kumeyaay
El Cajon, CA 92019
(619) 445-4564

Ewiiapaayp Tribal Office
Will Micklin, Executive Director
4054 Willows Road Diegueno/Kumeyaay
Alpine, CA 91901
wmicklin@leaningrock.net
(619) 445-6315
(619) 445-9126 Fax

Manzanita Band of the Kumeyaay Nation
Nick Elliott, Cultural Resources Coordinator
P.O. Box 1302 Kumeyaay
Boulevard, CA 91905
nickmepa@yahoo.com
(619) 766-4930
(619) 925-0952 Cell
(619) 766-4957 Fax

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 7060.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting Native Americans with regard to cultural resources for the proposed El Monte Segment of the San Diego Trail, San Diego County.

**Native American Contacts
San Diego County
December 16, 2014**

Kumeyaay Diegueno Land Conservancy
Mr. Kim Bactad, Executive Director
2 Kwaaypaay Court Diegueno/Kumeyaay
El Cajon , CA 91919
kimbactad@gmail.com
(619) 659-1008 Office
(619) 445-0238 Fax

Inter-Tribal Cultural Resource Protection Council
Frank Brown, Coordinator
240 Brown Road Diegueno/Kumeyaay
Alpine , CA 91901
frbrown@viejas-nsn.gov
(619) 884-6437

Kumeyaay Cultural Repatriation Committee
Bernice Paipa, Vice Spokesperson
P.O. Box 937 Diegueno/Kumeyaay
Boulevard , CA 91905
bernicepaipa@gmail.com

Tipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 Diegueno/Kumeyaay
Santa Ysabel, CA 92070
(760) 765-0845
(760) 765-0320 Fax

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 7050.6 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed El Monte Segment of the San Diego Trail, San Diego County.



December 30, 2014

[NAME]
[ADDRESS]
[ADDRESS]
[ADDRESS]

Subject: Cultural Resources Inventory for the San Diego River Trail El Monte Segment Project

Dear [NAME]:

I'm writing to inform you that the County of San Diego Department of Parks and Recreation, the San Diego River Conservancy and the Helix Water District (HWD) propose to design and construct a public use trail on HWD owned land in Lakeside. The Project is located in an unsectioned portion of Township 15 South, Range 1 East, within the historic El Cajón Mexican Land Grant, and appears on the El Cajon, California USGS 7.5-minute series topographic maps (Figure 1).

The proposed trail would extend from El Monte Road, through the HWD pump station facilities up to the ridgeline to connect to the bench cut for the historic flume and the trail along the ridgeline, which connect to the existing trail around Lake Jennings (Figure 2). It is anticipated that in order to provide for safe trail access, a staging/parking area and other trail head facilities would also be constructed within the HWD pump station property, which contains the historic-period El Monte Pumphouse and associated historic-period resources.

ICF International has been retained to conduct a Phase I cultural resources survey and inventory to determine the presence or absence of cultural resources on or near the project property. The technical study includes both archival research and an intensive pedestrian survey. Archival research refers to both written and oral history including record searches at the South Coastal Information Center (SCIC), the Native American Heritage Commission (NAHC), local historical societies and libraries, as well as Native American consultation.

A records search completed by the SCIC indicated no previously identified resources in the project area. An ICF archaeologist, along with a Native American monitor provided by Red Tail Monitoring and Research, Inc., conducted an intensive pedestrian survey of the project area and identified two prehistoric cultural resources. Both of the resources consisted of bedrock milling features with no observed associated artifacts.

The NAHC completed a search of the Sacred Lands File and indicated the potential for Native American cultural resources in the area. The NAHC also identify you as a person who may have

[NAME]

December 30, 2014

Page 2 of 2

concerns or knowledge of cultural resources in the project area. Any information you might be able to share about the Project Area would greatly enhance the study and would be most appreciated.

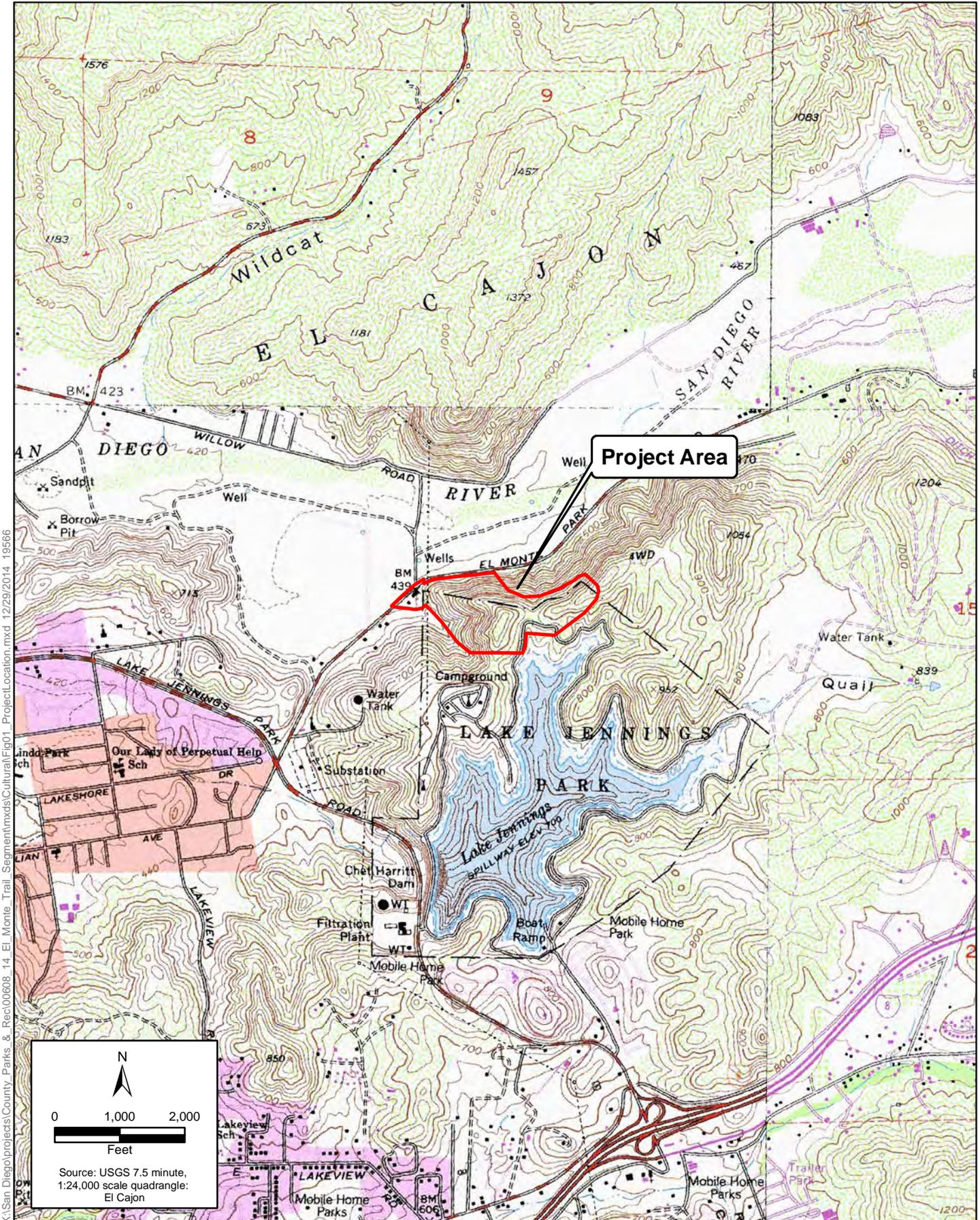
If you would like to participate in the consultation process, or if you have any recommendations regarding the Project, please address them to me so that I can incorporate them into our draft report. As required by State law, all site data and other culturally sensitive information will not be released to the general public and will be kept strictly confidential.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Chmiel', is positioned above the typed name.

Karolina Chmiel, MA
Archaeologist

Encl. Figure 1 and Figure 2



K:\San Diego\projects\County Parks & Rec\00608.14.El Monte_Trail_Segment\mxd\Cultural\Fig01_ProjectLocation.mxd 12/29/2014 19566

Figure 1
Project Location
San Diego Trail El Monte Segment





Figure 2
Project Area- Aerial View
San Diego Trail El Monte Segment



SD River Trail El Monte Segment: Native American Outreach

Viejas Band of Kumeyaay Indians

1/5/2015: ICF received letter from Viejas requesting additional information on the archaeological data of the project site.

1/7/2015: K. Crawford forwarded letter to J. Price at County Parks.

1/29/15: K. Crawford phoned Julie Hagen of Viejas and discussed the project methodology and findings to date. Ms. Crawford emailed Ms. Hagen a summary of the discussion, which includes an action item that Viejas will be updated when final trail design is complete. Viejas would like to visit the site after the final trail design is submitted. Ms. Crawford informed the County.

2/9/15: J. Price emailed K. Crawford. She agreed that a site visit with Viejas should wait until the final trail alignment is determined. She suggested that DPR can provide meeting dates and the meeting attendees would consist of DPR, ICF, and the Viejas monitor.

Carmen Lucas

1/8/2015: Carmen Lucas called ICF and left a message with Alex at the front desk about an "inventory Project".

1/13/2015: K. Crawford called Ms. Lucas and left a VM asking if she had called about the SD Parks inventory. Left office phone number on VM inviting Ms. Lucas to call her.

1/15/2015: Ms. Lucas called, recommends Native American monitor for ground disturbing activities, and the use of split rail to mask/protect BRMs.

VIEJAS

TRIBAL GOVERNMENT

P.O. Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejas.com

January 5, 2015

Karolina Chmiel
Businesspark Ave., Suite 200
San Diego, CA 92131

RE: San Diego River Trail El Monte Segment

Dear Ms. Chmiel,

The Viejas Band of Kumeyaay Indians would like to request additional information on the archeological data of the project site on the above referenced project and site visit in order to make an informed decision/recommendation on the matter.

Sincerely,

VIEJAS BAND OF KUMEYAAY INDIANS

From: Crawford, Karen
To: jhagen@viejas-nsn.gov
Subject: San Diego River Trail--El Monte segment
Date: Thursday, January 29, 2015 4:12:00 PM

Hello Ms. Hagan,

Thanks for talking with me on the phone today about the San Diego County Dept. of Parks and Recreation's San Diego River Trail--El Monte to historic Flume bench segment project. We discussed the following points, listed below:

1. A records search conducted by the South Coastal Information Center did not indicate any previously recorded resources in the project area.
2. ICF surveyed the project area and identified two bedrock milling features, each more than 250 feet away from the planned trail alignment. It is our understanding that County Parks will ensure the resources are avoided by the trail design and construction.
3. Native American monitor Gabe Kitchen of Red Tail Monitoring and Research accompanied the archaeologist throughout the survey.
4. As you requested, ICF will send you a project update when the trail design is completed.

My contact information is below, please call or email me if you have any questions.

Thanks again,

Karen

Karen L. Crawford MA RPA | Senior Manager, Cultural Resources + Regional Archaeology Manager | office 858.444.3913 | cell 916.730.1233 | karen.crawford@icfi.com | icfi.com

ICF INTERNATIONAL | 9775 Businesspark Avenue, San Diego, CA, 92131 | 858.578.8964
In 2010, ICF Jones & Stokes became ICF International.



Please consider the environment before printing this e-mail.

Lees, Laurel

From: Lees, Laurel
Sent: Monday, June 22, 2015 1:19 PM
To: jhagen@viejas-nsn.gov
Cc: Crawford, Karen (Karen.Crawford@icfi.com); Tylke, Melanie; Dobrowolski, Adam; Goddard, Cheryl
Subject: San Diego River Trail El Monte Segment Project - Native American Consultation

Good afternoon Julie,

Thank you for attending a site visit this morning and walking the proposed trail alignment with the County of San Diego Department of Parks and Recreation.

The purpose of this email is to document the Viejas Band of Kumeyaay Indians concludes no additional tribal cultural resources were found in the project area beyond what was analyzed in the *Cultural Resources Inventory and Impact Assessment for the San Diego River Trail El Monte Segment Project* (ICF International, 2015).

Thank you again for your continued coordination on this project. Please let me know if you have any additional comments or questions on the project.

Have a good day,

Laurel Lees

Adjunct Staff – Land Use/Environmental Planner III
County of San Diego Department of Parks and Recreation
5500 Overland Avenue, Ste. 410
San Diego, CA 92123
(858) 966-1375 - Direct
(858) 663-9118 - Cell
laurel.lees@sdcounty.ca.gov

Lees, Laurel

From: Lees, Laurel
Sent: Wednesday, July 01, 2015 9:48 AM
To: 'ljbirdsinger@aol.com'; 'nickmepa@yahoo.com'; 'ssilva@sycuan-nsn.gov';
jhagen@viejas-nsn.gov; 'sbengas50@gmail.com'; 'bernicepaipa@gmail.com';
'kimbactad@gmail.com'
Cc: Beddow, Donna; Goddard, Cheryl; Sloan, Christine; Tylke, Melanie
Subject: AB 52 Consultation; San Diego River Trail Segment Project; Lakeside, San Diego, CA
Attachments: 2015-07-01_AB52 Consultation Letter.pdf

Good morning Kumeyaay representatives,

Attached is the County of San Diego (County) Department of Parks and Recreation's (DPR) Assembly Bill 52 (AB 52) Consultation Letter for the proposed *San Diego River Trail Segment – El Monte Road to Historic Flume and Lake Jennings Campground Connection Project* (project). The proposed project is located in the unincorporated community of Lakeside in San Diego County, California.

The letter summarizes that on June 22, 2015, Julie Hagen of the Viejas band of Kumeyaay Indians performed a site visit with County DPR and concluded no additional Tribal Cultural Resources are located in the area that were not previously analyzed in the Cultural Resources Inventory and Impact Assessment for the proposed project.

Please review the attached letter and notify County DPR if you request consultation under AB 52 for the proposed project. Thank you for your continued coordination.

We look forward to working with you,

Laurel Lees

Adjunct Staff – Land Use/Environmental Planner III
County of San Diego Department of Parks and Recreation
5500 Overland Avenue, Ste. 410, San Diego, CA 92123
Direct: (858) 966-1375; Mobile: (858) 663-9118
laurel.lees@sdcounty.ca.gov
www.sdparks.org





County of San Diego

DEPARTMENT OF PARKS AND RECREATION

BRIAN ALBRIGHT
DIRECTOR

Administrative Office: (858) 694-3030
Fax: (858) 495-5841
Reservations: (858) 565-3600

www.sdparks.org

June 30, 2015

Manzanita Band of the Kumeyaay Nation
Leroy J. Elliott; ljbirdsinger@aol.com
Nick Elliott; nickmepa@yahoo.com

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez; ssilva@sycuan-nsn.gov
Attn: Lisa Haws

Viejas Band of Kumeyaay Indians
Julie Hagen; jhagen@viejas-nsn.gov
Attn: Anthony R. Pico

Kumeyaay Cultural Repatriation Committee
Steve Banegas; sbanegas50@gmail.com
Bernice Paipa; bernicepaipa@gmail.com
Attn: Ron Christman, Kumeyaay Cultural Historic Committee

Kumeyaay Diegueno Land Conservancy
Kim Bactad; kimbactad@gmail.com

Sent via email to the above addresses

Re: AB 52 Consultation; San Diego River Trail Segment – El Monte Road to Historic Flume and Lake Jennings Campground Connection Project; Section: unsectioned, Township: 15S, Range: 1E; Lakeside, San Diego County, California

To whom it may concern:

The County of San Diego (County) Department of Parks and Recreation (DPR) is inquiring whether you desire Assembly Bill No. 52 (AB 52) consultation on the subject project. According to AB 52, public agencies will be required to consult with California Native American tribes on the Native American Heritage Commission's (NAHC) consultation list that are traditionally and culturally affiliated with the geographic area of a proposed project that is subject to the California Environmental Quality Act (CEQA). County DPR has not received notification of California Native American tribes that are interested in AB 52 consultation.

County DPR is proposing to construct the San Diego River Trail Segment – El Monte Road to Historic Flume and Lake Jennings Campground Connection Project (project). The proposed project involves construction of a multi-use trail and trailhead facilities on Helix Water District property in the unincorporated community of Lakeside in San Diego County, California (Figure 1-1). The proposed project is located in an unsectioned portion of Township 15 South Range 1 East within the historic El Cajon Mexican Land Grant, and appears on the U.S. Geologic Survey (USGS) 7.5-



minute El Cajon, California topographic map (Figure 1-2). A Sacred Lands File Search, Phase I Survey, and Native American Consultation were conducted in November and December 2014 for the project area (Figure 1-3).

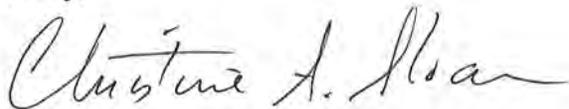
Results of the Cultural Resources Inventory and Impact Assessment prepared for the proposed project concluded six cultural resources, including two bedrock milling features, are located within the project area and will be avoided through implementation of mitigation measures.

On December 10, 2014, Archaeologist Karolina Chmiel sent a letter to the NAHC requesting a review of its Sacred Lands Files for the project area. On December 30, 2014, project letters were sent to all 20 tribes identified by the NAHC. On January 5, 2015, the Viejas Band of Kumeyaay Indians requested additional information on the archaeological data of the project area. On June 22, 2015, Julie Hagen of the Viejas Band of Kumeyaay Indians performed a site visit with County DPR staff, confirmed the results of the Cultural Resources Inventory and Impact Assessment, and concluded no additional Tribal Cultural Resources exist within the project area. County DPR is currently using this information to prepare a CEQA environmental document for the proposed project, which is anticipated to be circulated for public review after AB 52 becomes effective on July 1, 2015.

Any information you have regarding Tribal Cultural Resources will be kept strictly confidential and will not be divulged to the public. County DPR understands your comments regarding decisions that may affect Tribal Cultural Resources are important. Please forward any comments regarding the proposed project and AB 52 consultation to Cheryl Goddard within 30 days of the date of this letter.

Please feel free to contact Cheryl Goddard by telephone at (858) 966-1374, e-mail at cheryl.goddard@sdcounty.ca.gov, or fax at (858) 495-5841.

Sincerely,



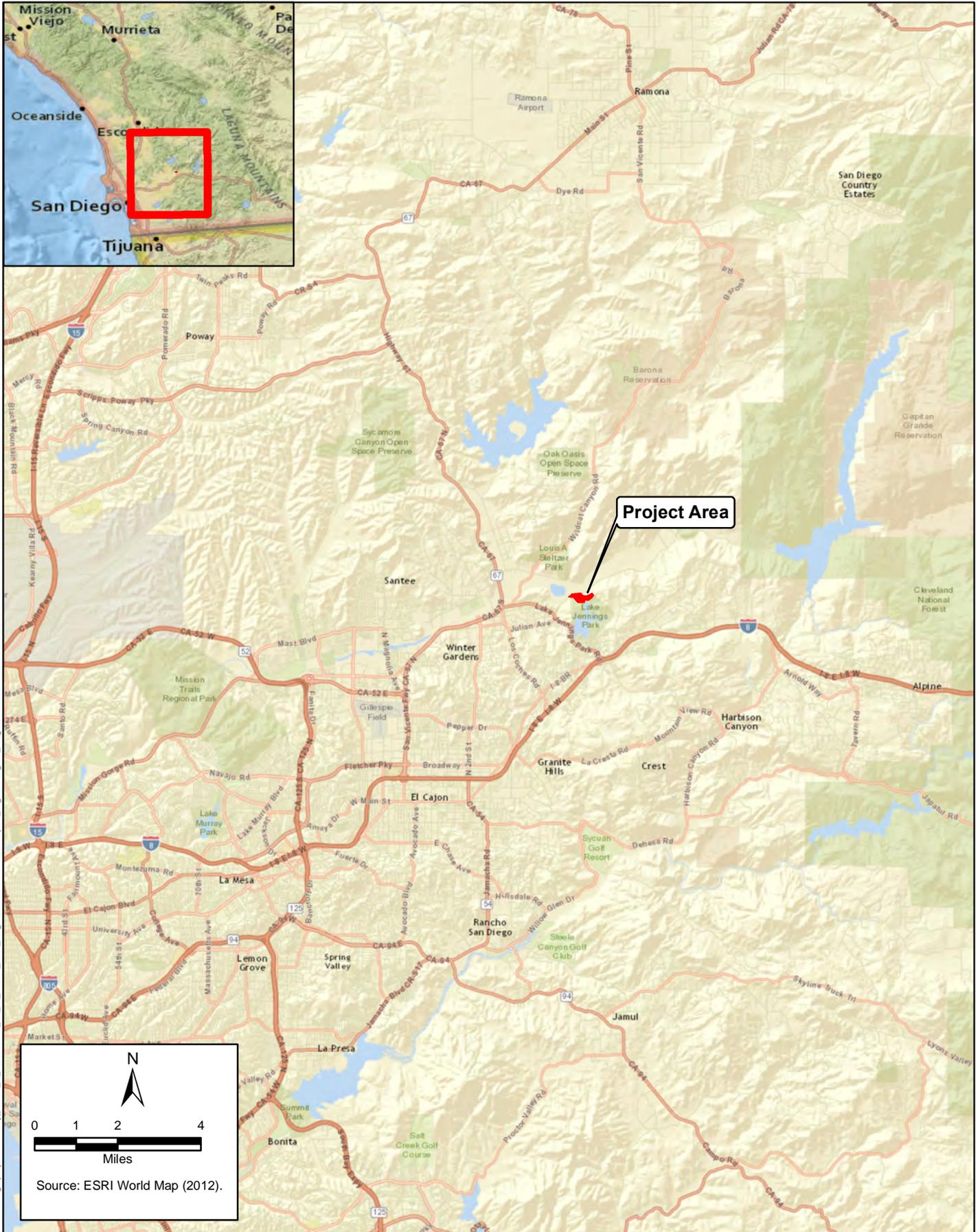
Christine Sloan
Chief, Resource Management Division
County of San Diego Department of Parks and Recreation
5500 Overland Ave., Ste. 410
San Diego, CA. 92123

Enclosed:

- Figure 1-1: Project Regional Location
- Figure 1-2: Project Location on USGS Map
- Figure 1-3: Aerial Photograph of Project Area

cc:

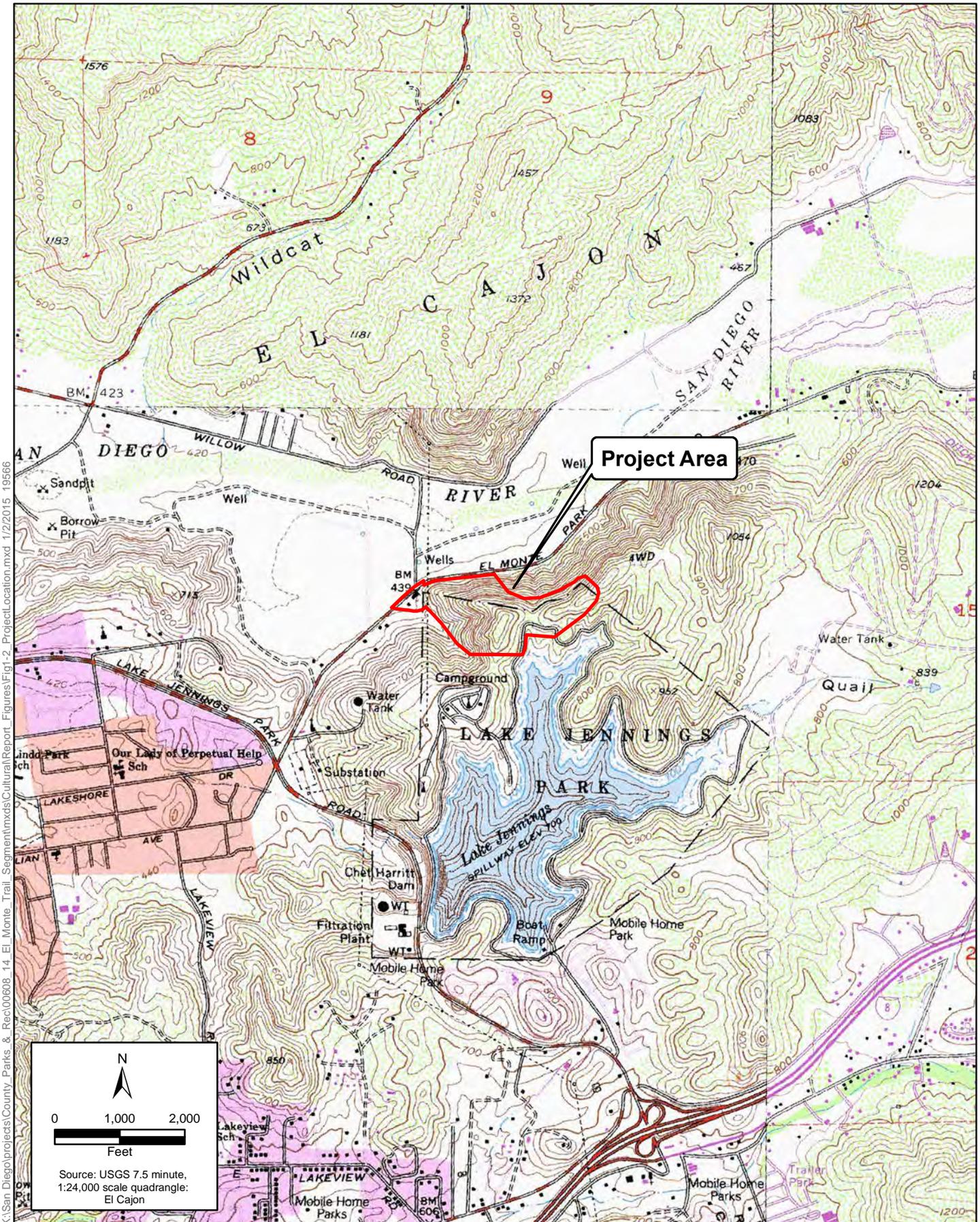
Donna Beddow, Staff Archaeologist, County of San Diego Planning & Development Services, donna.beddow@sdcounty.ca.gov



K:\San Diego\projects\County_Parks_ & Rec\00608_14_El Monte_Trail_Segment\mxd\CulturalReport_Figures\Fig1-1_RegionalLocation.mxd 1/2/2015 19:56



Figure 1-1
Regional Location
San Diego River Trail—El Monte Segment



K:\San Diego\projects\County Parks & Rec\00608.14.El Monte_Trail_Segment\mxd\Cultural\Report_Figures\Fig1-2.ProjectLocation.mxd 1/2/2015 19:56:6



Figure 1-2
Project Location
San Diego River Trail—El Monte Segment

K:\San Diego\projects\County_Parks & Rec\00608_14_El_Monte_Trail_Segment\mxd\CulturalReport_Figures\Fig1-3_Aerial.mxd 1/2/2015 19566

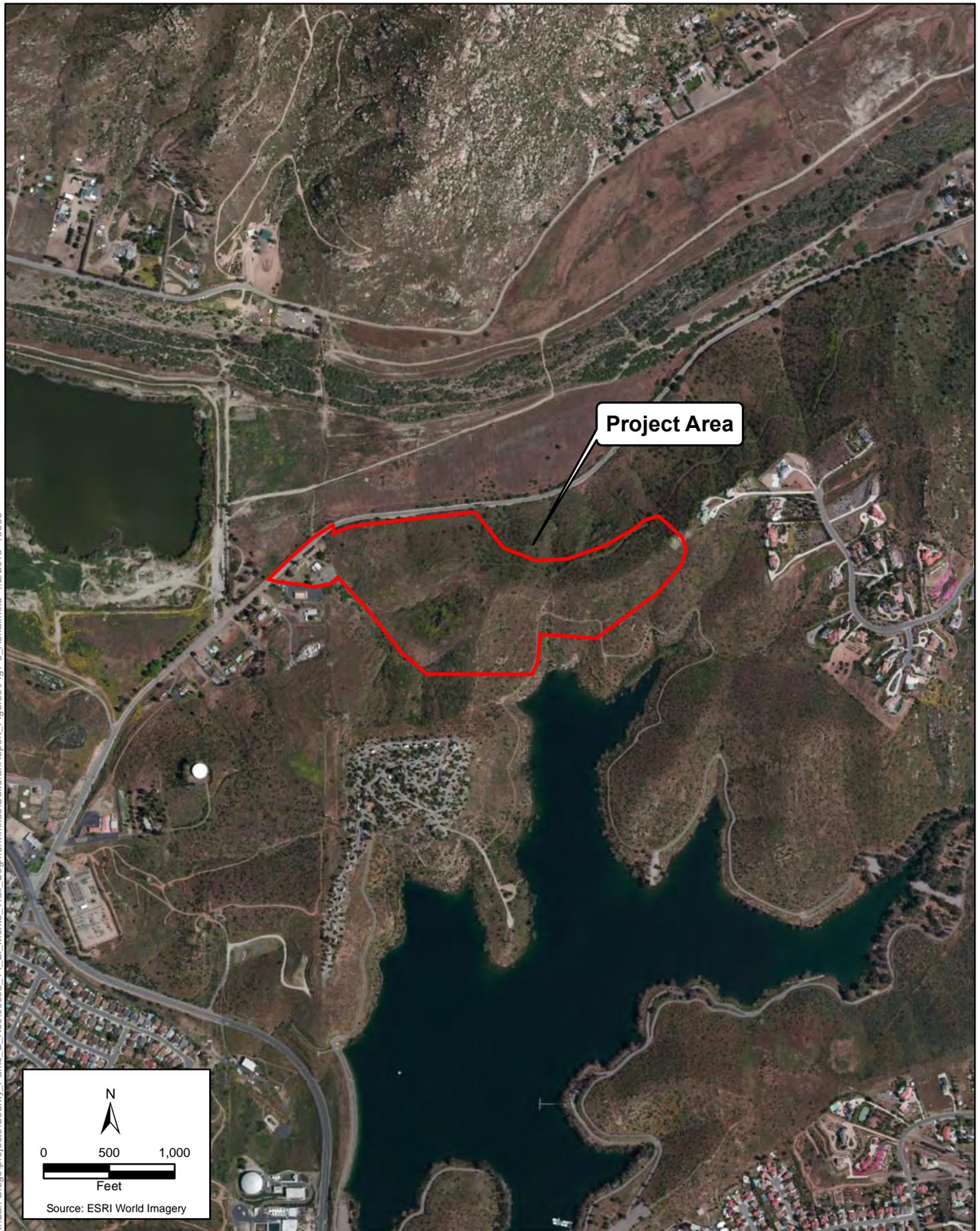


Figure 1-3
Project Area-Aerial View
San Diego River Trail—El Monte Segment



SD River Trail El Monte Segment: Additional Native American Outreach/AB52 Consultation

Viejas Band of Kumeyaay Indians

1/5/2015: ICF received letter from Viejas requesting additional information on the archaeological data of the project site.

1/7/2015: K. Crawford forwarded letter to J. Price at County Parks.

1/29/15: K. Crawford phoned Julie Hagen of Viejas and discussed the project methodology and findings to date. Ms. Crawford emailed Ms. Hagen a summary of the discussion, which includes an action item that Viejas will be updated when final trail design is complete. Viejas would like to visit the site after the final trail design is submitted.

2/9/15: J. Price emailed K. Crawford. She agreed that a site visit with Viejas should wait until the final trail alignment is determined. She suggested that DPR can provide meeting dates and the meeting attendees would consist of DPR, ICF, and the Viejas monitor.

6/22/2015: Laurel Lees (as substitute for J. Price), Adam Dobrowolski and Melanie Tylke performed a site visit with Julie Hagen of Viejas. They walked the entire final trail alignment, and J. Hagen concluded that no tribal cultural resources exist in the project area outside of what was documented in the Draft Screencheck Cultural Resources Report (dated June 2015, by K. Crawford).

Carmen Lucas

1/8/2015: Carmen Lucas called ICF and left a message with Alex at the front desk about an "inventory Project".

1/13/2015: K. Crawford called Ms. Lucas and left a VM asking if she had called about the SD Parks inventory. Left office phone number on VM inviting Ms. Lucas to call her.

1/15/2015: Ms. Lucas called, recommends Native American monitor for ground disturbing activities, and the use of split rail to mask/protect BRMs.

All Kumeyaay Tribes

7/1/2015: L. Lees initiated the AB52 consultation process by emailing representatives of the Kumeyaay tribes. No tribes requested additional coordination during the 30-day noticing period.