

Appendix C  
Cultural Resources February 14, 2011



February 14, 2011

Ms. Maureen Brooks  
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Subject: **Class II Cultural Resource Survey and Paleontological Review Results for the Santa Ana River Trail Project located in the City of Corona, City of Norco, Prado Dam Regional Park and Unincorporated Riverside County, California**

San Bernardino  
909.884.2255

San Ramon  
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Dear Ms. Brooks,

Michael Brandman Associates' (MBA's) cultural resource staff has reviewed cultural resource background information associated with the proposed Santa Ana River Trail (SCRF) to be built at and northeast of Prado Dam in various jurisdictions in the southwestern portions of the County of Riverside.

MBA has determined that there will be no direct impacts to any known significant cultural resources in the proposed project area. Because it is possible that potentially significant cultural resources or paleontological resources will be unearthed during construction, we recommend that limited mitigation monitoring take place during construction.

MBA appreciates the opportunity to assist you on this project. If we can assist further, or if you have questions, please contact me at 909.884.2255 extension 1208.

Sincerely,

Michael H. Dice, M.A., RPA  
Senior Archaeologist  
**Michael Brandman Associates**  
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San Bernardino, CA 92408

Enc: City of Corona - Santa Ana River Trail, Cultural Resources Letter Report

## **1: INTRODUCTION - THE PROJECT DESCRIPTION**

The Santa Ana River Trail, when completed, will extend nearly one-hundred and ten miles from the Pacific Ocean in the City of Huntington Beach to the Pacific Crest Trail in the San Bernardino Mountains. Within that section of the Trail located in southwest Riverside County, the project has been divided into what are known as Reaches, which represent natural subdivisions of the whole trail. Reach 0, located between the Orange County line to the downstream edge of Interstate 71 is being developed as a separate project. The Santa Ana River Trail will be a dual track trail, consisting of a paved track for bicyclists and walkers, and decomposed granite (DG) surfaced dirt trail for equestrians, mountain bicyclists, and hikers. Trail widths would range from 20 to 32 feet depending on the location. Reaches I through XII of the Santa Ana River Trail extend eastward from the downstream edge of State Route 71 to the Hidden Valley Wildlife Area (Exhibit 1). Many segments of the Reaches, especially Reach VII through Reach XII, are located on already-developed paved areas and it is unlikely new paving shall be needed. The project site is located in the La Sierra (Sepulveda and Yorba) Land Grant, as shown on the Corona North, California and Prado Dam, California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle maps Exhibit 2a and Exhibit 2b).

The Area of Potential Effect (APE) consists of each Reach, Alternative Reaches and an area about 10 feet beyond the planned-for trails. No construction-related borrow pits, staging areas or other impacts are included. In the field, the preferred candidates of the Paved and Soft Surface sections were examined for potential impacts to cultural resources as well as all Alternative Alignments.

## **2: CURRENT CONDITIONS**

Recent MBA inspection of the project area showed that most Reaches shall be placed on roads, pavement and paths that have been previously impacted by development in the last 50 years. In a few places, especially within the Prado Dam complex, the prime trail candidates and alternatives are located on existing trails, abandoned roads and/or railroad rights-of-way (Exhibit 3a and Exhibit 3b). Impacts to the subsurface in the relatively undeveloped sections are more likely to impact existing or buried cultural resources. Inspection of the rights-of-way showed that much of the undeveloped property was in fact impacted by previous development.

## **3: COMPLIANCE FACTORS AND RESEARCH DESIGN**

The purpose of this report is to determine whether there is any potential for construction-related impacts and to record potentially significant cultural resources sites or previously unknown and/or buried cultural resource sites.

## **Section 106**

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Federal agencies are required to consider the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings under the National Historic Preservation Act (NHPA) Section (§)106 process. Federal agencies are responsible for initiating Section 106 review and completing the steps in the process that are outlined in the regulations. Furthermore, Section 106 requires that any federal or federally assisted undertaking, or any undertaking requiring federal licensing or permitting, consider the effect of the action on historic properties listed in or eligible for the National Register of Historic Places (NR). Under Code of Federal Regulations (36 CFR) Part 800.8, all federal agencies are specifically required to coordinate compliance with Section 106 and the National Environmental Policy Act (NEPA) process. The implementing regulations “Protection of Historic Properties” are found in 36 CFR Part 800. Resource eligibility for listing on the NR is detailed in 36 CFR Part 63 and the criteria for resource evaluation are found in 36 CFR Part 60.4 [a-d].

Properties less than 50 years old may be considered for listing in the NR if they exhibit exemplary cultural characteristics. Listing on the NR requires integrity, and it is the integrity of the resource that must be addressed first in any one analysis.

The NHPA established the NR as the official federal list for cultural resources that are considered important for their historical significance at the local, state, or national level. To be determined eligible for listing in the NR, properties must meet specific criteria for historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NR are nationally significant in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history;
- B. Is associated with the lives of persons significant in our past;
- C. Embodies the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values, represent a significant and distinguishable entity whose components may lack individual distinction; and
- D. Yields, or may be likely to yield, information important in prehistory or history.

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## **CEQA and CCR 15064.5**

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At the CEQA level of analysis, a site or structure may be considered an historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California (PRC §5020.1(j)) or if it meets the criteria for listing

on the NR or the California Register of Historical Resources (CR), following 14 CFR §4850. CEQA allows for local historic resource guidelines to serve as the CR criteria, if enacted by local legislation, to act as the equivalent of the State criteria.

If the resource has integrity and any one of the criteria noted below are met at the State level of analysis, the resource would be considered significant and a direct impact to the cultural resource would be considered a significant impact on the environment. Typically, researchers in California use a 45-year age threshold following State Historic Preservation Officer (SHPO) recommendations. The time lag of five years between the State and federal criteria is explained by the fact that it takes about five years to plan for and redevelop any one property. Following CCR 15064.5(a)(3), the criteria for State eligibility is thus:

- 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 represent the work of an important creative individual, or possesses high artistic values; and
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

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## **Research Design**

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Previous research can provide a general basic understanding of cultural resources that might be found within the project area. General topic areas common to southern California prehistory include 1) prehistoric chronology, 2) subsistence strategies, 3) settlement patterning, 4) exchange, and 5) tool technology. Historic topic areas include 1) land use, 2) personal backgrounds and 3) construction timetables. These general topics are contexts of research are difficult to address at the inventory level of analysis, but do provide a background for making statements about what is seen during an inventory. These topics allow for site type and content to be understood and evaluated within the framework of the local site area as well as in the broader context of the region.

For this reason, the goals of an archaeological survey study are to determine whether cultural resources are located within or near a defined project area, what type of resources are present or could be present, and to predict the chance for future discoveries of sites in the project area if construction-related impacts take place. Research assumptions were based upon the findings of the records search conducted at the EIC. The research assumptions for the field survey consisted of the following:

- a) The probability for detecting prehistoric archaeological sites appears to be relatively low, based upon the fact that much of the area has undergone severe flooding events repeatedly for millennia. Those areas above observed paleo-channels are relatively stable and may hold

intact historic resources. Portions of the project located in developed areas are also unlikely to impact buried cultural resources because prior to development the area was farmed and was likely impacted by plowing to a point about 3 feet below the modern ground surface.

- b) The probability for detecting historic-age resources appears to be low below Santa Ana River paleo-channels and moderate-to-low above them in the River floodplain because historic aeriels show most of the River floodplain has been heavily disturbed. Historic structures located adjacent to the proposed reaches, especially in Norco, will not be directly affected by construction of the trail system.

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## **Research Goals**

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The goal of this study was to determine whether cultural resources are located within the project area, determine whether any existing cultural resources should be considered significant resources, and develop specific mitigation measures that will address potential impacts to existing or potential resources. Thus, this study consisted of six distinct efforts:

1. Request of NAHC Sacred Lands File record search and contact with appropriate tribal groups and individuals.
2. Review background information associated with previous cultural resource sites and studies in the region.
3. Perform NAHC Sacred Lands File record search and contact with appropriate tribal groups and individuals.
4. Examine archived aerial photographs, topographic maps, and road maps.
5. Evaluation of cultural resource sensitivity as part of the CEQA process.
6. Conduct reconnaissance survey of the project area. Focus on areas that have moderate or better potential for exposed cultural resources.
7. Development of recommendations associated with effect if the project proceeds.

## **4: PREHISTORIC AND HISTORIC BACKGROUND OF THE PROJECT AREA**

The development of a regional chronology in southern California is an understudied but important topic associated with regional archaeological research. Limited by the small quantity of stratified sites and a general lack of dateable samples and artifacts, current southern California chronologies are of little use for model building. In his recent book on California prehistory, Fagan (2003) does not use the archaeologists' traditional cultural sequences for this region, choosing instead to describe the stages in cultural evolution as generalized models related to recent environmental change. His socio-economic models of southern California reflect that the environment has been warming for the last 5,000 years and that cultures have reacted to it in different ways. Regardless of this new point of view, regional archaeologists generally follow William Wallace's southern California format (1955, 1978). The ultimate purpose of cultural sequencing should be to allow for meaningful comparisons

of material culture attributes on an intrasite and intersite basis, and to provide the basis for culture-model building, but the loosely established timeframes for each period are regularly challenged as is the meaning of the individual frames of reference. Wallace's prehistoric format is as follows:

- a) Early Period (before 6000 B.C.)
- b) Millingstone Period (6000 to 3000 B.C.)
- c) Intermediate Period (3000 B.C. to A.D. 500)
- d) Late Prehistoric Period (A.D. 500 to A.D. 1769)

He also argued (Wallace 1978) that the stages prior to 2000 B.C. in southern California could be assigned to a Modified Millingstone period (Period III: 3000-2000 B.C.), a standard Millingstone period (Period II: 6000-3000 B.C.) and a San Dieguito period (Period I: 9000-6000 B.C.). Warren (1968) terms the early period the San Dieguito Tradition (before 5500 B.C.), the middle periods the Encinitas Tradition (5500 B.C. to A.D. 600) and the late period the Shoshonean Tradition (A.D. 600 to A.D. 1769). The Late Period has also been subdivided into the San Luis Rey I (A.D.500-A.D. 1500) and the San Luis Rey II (post 1500). The difference between the latter two is the introduction of locally made brownware pottery, the first indigenous pottery from southern California (Cameron 1999).

Wallace's cultural stages are associated with material culture patterning observed in the archaeological record, which is believed to have taken place in response to a gradual change from a primarily hunting-subsistence mode to a plant gathering and hunting mode. Archaeologists hypothesize (Fagan 2003) that specialization and selective exploitation of micro-environments seems to have taken place gradually beginning about 3000 B.C. Tool kits become more skillfully made and variations in tool types increase statewide. Regional and local specializations appear to become distinct statewide on or about this time. Although the early history of native Californians is poorly understood, ethnographic patterns derived from such analyses may in the future allow archaeologists to determine when particular sites were occupied in the absence of good radiometric or thermoluminescence dating.

A detailed description of the prehistory of southern California can be found in certain ethnographic studies, mission records and major published sources including Kroeber (1925), Wallace (1955), Warren (1968), Heizer (1978), Moratto (1984), and Chartkoff and Chartkoff (1984). Fagan (2003), Moratto and Chartkoff and Chartkoff provide recent overviews of California archaeology in general and review the history of the coastal regions in southern California.

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### **Early Period (Before 6000 B.C.)**

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Beginning with the first human presence in California (dated to about 11,000 years ago), prehistoric artifacts and cultural activities appear to represent a big-game hunting tradition. Much has been made of the few sites that exist in contemporary studies (e.g. Wallace 1978). Unfortunately, very few sites

from the Early Period exist, especially in inland areas. Of the Early Period sites that have been excavated and dated, most exhibit a refuse assemblage suggesting short-term occupations. Such sites have been detected in caves and around fluvial lakes fed by streams that existed near the end of the last glaciation. Chipped stone tools at these sites are clearly ancient, are not made later in the Prehistoric period and reflect a specialized tool kit used by hunters. Large-stemmed bifaces are common. Millingstones and dart points are not part of the Early Period toolkit.

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### **Millingstone Period (6000 to 3000 B.C.)**

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The onset of the Millingstone Period appears to correspond with an interval of warm and dry weather known as the Altithermal (Wallace 1978). Artifact assemblages begin to reflect an emphasis on plant foods and foraging subsistence systems because grinding tools are found at these sites. For inland locales, it has been assumed that exploitation of grass seeds formed a primary subsistence activity. Artifact assemblages include choppers and scraper planes, but there are a reduced number of large bifaces in the excavated assemblages. Sites are occupied for a much greater amount of time than Early Period sites.

The regional distribution of Millingstone sites reflects the theory that aboriginal groups may have followed a modified central-based wandering settlement pattern. Here, large groups for a portion of the year would have occupied a base camp, with smaller bands occupying subsidiary camps in order to exploit resources not generally available near the base camp. Sedentism apparently increased in areas possessing an abundance of resources that were available for longer periods. Arid inland regions would have provided a seasonally and spatially dispersed resource base, restricting sedentary occupation, compared to the coastal areas. Overall, the Millingstone tool kit in the Los Angeles basin is typified by large and heavy deep-basin metates, wedge-shaped manos and large choppers and scrapers. Projectile points are few and dart points do not yet exist. Flaked lithic tools are slightly larger and cruder than later periods. “Cogstones” first appear.

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### **Intermediate Period (3000 B.C. to A.D. 500)**

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Dating between roughly 3000 B.C. and A.D. 500, the Intermediate Period represents a slow technological transition likely related to the slowly drying and warming climate. Site artifact assemblages retain many attributes of the Millingstone Period. Technologically speaking, these sites are difficult to distinguish from earlier sites in the absence of radiometric dates. Additionally, these sites generally contain a reduced number large-stemmed or notched projectile points but with an increase in portable mortars and pestles. The lack of large points combined with the mortars and pestles suggest that the aboriginal populations may have harvested, processed and consumed acorns and other seeds over and above hunting.

Due to a general lack of data, neither the settlement and subsistence systems nor the cultural evolution of this period is well understood. It has been proposed by some researchers that group sedentism



increased with the exploitation of storable high-yield plant food resources. The duration and intensity of occupation of base camps increased during this period, especially in the later part of the period. Overall, the Intermediate Period tool kit in the Los Angeles basin is vague, with elements of the Millingstone Horizon (heavy grinding implements) and the Late Prehistoric Period seen. A higher percentage of projectile points occur and smaller chipped stone tools are used. It has been assumed for decades that mortars and pestles became commonplace during this period and that most of the bedrock mortars found in southern California were ground out during this period. Currently, bedrock mortars cannot be dated by any reliable means.

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### **Late Prehistoric Period (A.D. 500 to A.D. 1769)**

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Extending from about A.D. 500 to Spanish contact in A.D. 1769, the Late Prehistoric Period reflects an increased sophistication and diversity in technology. Village sites are common. Late assemblages characteristically contain small projectile or dart points, which imply the use of the bow and arrow. In addition, assemblages include steatite bowls, asphaltum artifacts, grave goods and elaborate shell ornaments. Use of bedrock milling stations is purported to have been widespread during this period, as it was in the previous one. Increased hunting efficiency and widespread exploitation of acorns provided reliable and storable food resources. Pottery, previously traded into the area, is made locally during the latest stage of this Period and is of simple construction technology (Cameron 1999).

One of the key reasons for understanding how culture change is perceived archaeologically is from the standpoint of determining where the ancestors of living indigenous Native Americans came from. Nothing can illustrate this concept better than to examine the “Shoshonean wedge” concept as first proposed by Kroeber (1925). Because the root languages of the indigenous southern Californians are of two types (Hokan and Uto-Aztecan) and because southwest Uto-Aztecan presence (Nevada, Arizona, etc.) is dated prehistorically late, it is assumed that Uto-Aztecan speakers entered southern California hundreds of years before the Spanish explored the coast (about A.D. 700-1400). Without an analysis of specific cultural markers derived from dated sites (Koerper 1981), it is not possible to distinguish between culture-material artifact assemblages of newly in-migrated groups and their antecedents.

#### **Pre-Contact and Post-Contact Gabrieliño (Tongva)**

The project area is, technically speaking, located within the southeastern section of Gabrieliño tribal territory. The Juaneños lay to the southwest and the Luiseños to the east (Kroeber 1925). Kroeber’s borders were derived from interviews with tribal members who were decades past the aboriginal experience, previous researchers’ work, and Mission records and maps.

Southern California Native Americans exhibited economic and social structures unique to the United States. Just before contact and subjugation by the Spanish, it is likely that many of the native populations consisted of bands of semi-sedentary hunter-gatherers who were living in specific

microenvironments because of ethnohistoric trends and subsistence practices. Fagan (2003) argues that with the advent of acorn-based subsistence systems throughout most of California, small bands (tribelets) of like-minded peoples (tribes) could have survived and prospered in spatially-restricted landscapes. Their cultures could have been relatively unchanged for millennia. Some of these pre-contact tribelets could have consisted of just a few familial groups and, with a reliable supply of food and water; their lifestyles could have remained essentially static.

Kroeber (1925) and Bean and Smith (1978) form the primary historical references for this tribe. The Gabrieliño spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language stock that includes the Shoshonean groups of the Great Basin. The total Gabrieliño population at about 1770 AD was roughly 5,000 people, based on an estimate of 100 small villages of 50 to 200 people apiece. Their range is generally thought to have been located on the Pacific coast from Malibu to San Pedro Bay and south to Aliso Creek, then east to Temescal Canyon, then north to the headwaters of the San Gabriel River. Also included were several islands, including Catalina. This large area encompasses the city of Los Angeles, much of Rancho Cucamonga, Corona, Glendale, and Long Beach. By 1800, most Gabrieliño had either been killed, or fully subjugated by their Spanish conquerors.

The first modern social analyses of Gabrieliño culture took place in the early part of the twentieth century (Kroeber 1925), but by that time, acculturation and disease had reduced their numbers to near extinction. Nonetheless, the early ethnographers viewed the Gabrieliño as a chief-oriented society of semi-sedentary hunter-gatherers. When Spanish explorers and missionaries first visited the southern coastal areas of California, the indigenous inhabitants of the Los Angeles County/County area were given the Spanish name “Gabrieliño.”

At the time of European contact, the Gabrieliño inhabited about 50 to 100 permanent villages in fertile lowlands along streams and rivers and in sheltered areas along the coast. The larger permanent villages most likely had populations averaging 50 to 200 persons. Sedentary villages also had at varying distances smaller satellite villages that remained connected through economic, religious, and social ties (Bean and Smith 1978). Gabrieliño villages contained four basic types of structures. Houses were circular and domed, made of tule mats, fern, or carrizo (Kroeber 1925, Bean and Smith 1978). The Gabrieliño sweathouses were small, circular earth covered buildings. Villages may have included menstrual huts and open-air ceremonial structures made with willows inserted in a wicker fashion among stakes (Bean and Smith 1978).

The Gabrieliño had a rich and varied material culture. Technological and artistic items included shell set in asphaltum, carvings, painting, an extensive steatite industry, baskets, and a wide range of stone, shell, and bone objects that were both utilitarian and decorative. Gabrieliño subsistence was based on a composite hunting and gathering strategy that included large and small land animals, sea mammals, river and ocean fish, and a variety of vegetal resources. Generally, Gabrieliño settlements were created at the intersection of several ecozones: prairies with foothills, floodplains and river courses,

and on the edges of marshes and seashores. The majority of the population drifted throughout the year as families to temporary hillside or coastal camps, returning to the central location on ritual occasions or when resources were low and it was necessary to live on stored foods. Offshore fishing was accomplished from boats made of pine planks sewn together and sealed with asphaltum or bitumen. Much of the fishing, shellfish harvesting, and fowling took place along the ocean shoreline or along freshwater courses. Sea mammals were captured with harpoons, spears, and clubs.

Land animals were hunted with bow and arrow or throwing sticks, and were trapped or clubbed; smaller animals, such as rabbits and ground squirrels, were driven out with grass fires and captured with deadfall traps. Larger animals were hunted with sinew backed bows made of holly, piñon, elder, or juniper, while small game was hunted with bows fashioned from buckeye or elderberry. Seasonal grass fires may have had the effect of yielding new shoots attractive to deer. The transportation of plants and other resources was accomplished using burden devices, such as coiled and woven baskets and hammock carrying nets commonly made from grass and other plant fibers.

The typical contact Gabrieliño village was located near permanent water, such as the many streams found along the base of the Puente Hills and Chino Creek. Kroeber, as noted in the revised edition of his Handbook (1976), placed a village at Chino named “Pasino,” which would have been the closest village to the project area known to the Spanish. This village is named by Hugo Reid in his 1852 letters (Johnston 1962); other villages in the Chino-Pomona area are named in Reid’s letters. One found on the Rancho del Chino was known by Reid as Pasingog-na. The San Fernando Mission baptismal register uses village titles for this place such as Passenga, Passanga, Pachanga, Patzanga, and other derivations. There are 14 entries dating from 1797-1804. Its exact location is uncertain, but Johnston (1962) placed the village several miles northwest of the junction of Chino Creek and the Santa Ana River.

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## **Historic Era (Post 1769)**

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Father Junipero Serra was sent to Alta California to create a chain of Missions and Mission outposts to bring Christianity to the indigenous population and create a foundation for colonization of the region. Located between the previously established presidios in Monterey and San Diego, Serra had military assistance in his quest and the San Bernardino area came under early control of Spanish soldier Pedro Fages and Father Francisco Garces. According to Juan Caballeria (Lugo 1950), on May 20, 1810, Father Francisco Dumetz founded and performed a ceremony to consecrate a new Mission San Gabriel supply station, including a chapel, at the Guachama Ranchería, which was an existing native village near the mouth of San Timoteo Canyon. According to Harley (1988, 1989), it is likely that Dumetz never made this trip and that Caballeria, who was the keeper of Mission San Gabriel history at the time, had wanted to publicize and romanticize several popular misconceptions and fabricated much of the story.

In 1819, Rancho San Bernardino was established. This followed a decision by the heads of the mission system to expand their agricultural holdings into the interior and later establish a chain of additional Missions in the desert interior (Lech 2004). A decision was made to create an estancia, or a ranch headquarters with a chapel and occasional visits by padres, at the Guachama Ranchería. Indian attacks forced the estancia overseers to move the headquarters from the original site to a better-protected location. The so-called San Bernardino Asistencia was located on high ground about 1.5 miles to the east-southeast of the original estancia. Construction began about 1830, and it was not yet finished when the project was abandoned in 1834.

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### **The Mexican Period (1821 to 1848)**

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After years of internal fighting, Mexico achieved its independence from Spain in 1821 and Alta California became the northern frontier of the State of Mexico. The Mission padres were forced to swear allegiance to Mexico in 1822. Secularization of the missions took place over the next decade and the former mission lands were transferred to the large Mexican families that had settled in the area. The Secularization Act went into legal effect in 1834. The rancho culture, first formed by the Spanish, perpetuated a cattle based economy that dominated the Native American cultures. A trail from Sonora to the San Gabriel area passed through San Timoteo Canyon and along the Santa Ana. This brought new settlers to the region and the Colton area was used as one of several stage and mail routes between Arizona and the Los Angeles/San Gabriel area.

Rancho El Rincon was part of a large tract of land granted to Juan Bandini in the 1830s. After the end of political restlessness in 1837, Governor Alvarado made Bandini administrator of the San Gabriel Mission, and he was granted the Jurupa, Rincon, and Cajon de Muscapiabe ranchos, besides land at San Juan Capistrano. After a few years of ownership, financial losses forced Bandini to sell most of his properties, and he died in 1859. Bernardo Yorba purchased a portion of his properties, later called the Rancho El Rincon, which lay in bottomlands adjacent to Rancho Santa Ana del Chino (north) and Rancho La Sierra (southeast). After years of litigation with the California Land Commission, the Rancho El Rincon was officially granted to Yorba, son of Jose Antonio, in October 1858. Yorba died a month later, willing his numerous properties to his descendants.

The other Ranchos along the Santa Ana were carved out of lands semi-occupied by the Missionaries before the Mexican Period began. The Jurupa Rancho was granted to Juan Bandini in September 1838. This Rancho stretched along the vast northern edge of the Santa Ana River between El Rincon and hills in southeastern Rialto. The La Sierra (Sepulveda) Rancho was located on the south side of the River and was granted to Dona Vincenta Sepulveda in 1846, after the death of her husband, by Mexican Governor Pio Pico. Her brother-in-law, Bernardo Yorba, had filed a claim for the property a year earlier, so Pico split the property in half, giving the eastern half to Dona Vincenta (Lech 2004). The Yorba section of the ranch lands were located primarily where the City of Corona is now, while the Sepulveda portion was more eastern and now includes the city of Norco, and the western half of the City of Riverside south of the south bank of the Santa Ana River. The old Mexican land claims

took several decades to clear, but once the United States Lands Commission affirmed the claim to the La Sierra, Dona Vincenta was able to patent it in 1877.

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## **Santa Ana River History**

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The Santa Ana drains the largest watershed in Southern California: 2,650 square miles (Mitchell 2006). The area north of Prado Dam and south of the San Bernardino County line is typically known as the Middle Santa Ana, with the Lower in Orange County and the Upper in San Bernardino and points north. Its ecology is unique in that it is essentially a flash-flood channel, with small average amounts of runoff flowing in it at any one time. Portions of the Santa Ana below the Seven Oaks Dam have been channelized behind soil and concrete berms and dikes, but these are mostly in Orange County and where major transportation routes cross it. Most of the River along the project area has not been channelized. Complex geological faulting in the Middle portion forced the River north around bluffs found in the northern section of Corona and Norco, and east of Hidden Valley Park

The existence of the River was known to Spanish explorers, with the locations of Mission San Gabriel and Mission San Juan Capistrano placed on either side of the Lower portion. First observed in 1542 by Cabrillo, de Portola was the first explorer to cross the River at a location in what is now Yorba Linda in 1769. The Spanish has experience with large watercourses in Mexico and quickly realized that the River was a danger during a flash flood. Overland exploration by Anza paralleled the River in early 1774, fording the River near Riverside, then after a time drove overland through Chino to Mission San Gabriel.

River bottomlands were grazed by cattlemen and as the population grew, lands near the active channels were plowed for agriculture. Regardless of the potential, the River was obviously a draw for agriculture, especially in the massive floodplain that is Orange County. As American homesteaders entered the area, lands on the Chino, Jurupa and El Rincon ranchos became desirable and the past river history was quickly forgotten. In 1862, the Inland Empire was devastated by what is now considered a 1,000 year flood, and all farms and ranches downstream of the San Bernardino Mountains were destroyed. Water gushed through the pass and into what is now Orange County, turning the land into an “inland sea” for a time. In that year, few farms had been established, but given what happened during the 1938 flood, it is likely that much of the established agricultural topsoil was washed away. The 1862 flooding was following by two years of drought, which essentially brought an end to the Spanish-Mexican cattle ranching methods.

The River saw major floods in 1859, 1862, 1884, 1891, 1910, 1916, 1938, 1943 and 1969 (Taylor and Taylor 2007). Minor flooding in 1934 and the major flood of March 1938 devastated the citrus industry in Orange County because the carefully cultivated topsoil in thousands of grove acres was washed away or buried by flood sediments. This, plus the build up to World War II, drove the Army Corps of Engineers (USACE) into understanding the regional importance for local flood protection. The USACE began planning to build the Prado Dam in the mid-1930s but development of the

project was speeded up after the March 1938 flooding. The town of Rincon was abandoned, as were peripheral homesteads below the 543-foot above mean sea level (amsl). An aerial photo downloaded from the on-line library of the Water Resources Institute of California State University-San Bernardino (Exhibit 4a and Exhibit 4b) shows that in 1962, the Basin was mostly devoid of heavy vegetation. The Santa Ana River, Chino Creek, and Temescal Creek were channelized in what appear to be individual canals that dropped from sight as the Dam was reached. In addition, numerous formal fields are noted in this area suggesting that hay was being harvested from the old farm lands below the 543 foot amsl mark, especially south of the Temescal Creek channel. Once water behind the Dam was contained and stored for recharge instead of being piped away, vegetation could build up to the density we see today. Exhibit 4a and Exhibit 4b do not show evidence that water was being stored for recharge in 1962.

## **5: CULTURAL RESOURCE RECORDS SEARCH RESULTS**

On May 4 2009, MBA staff archaeologist Arabesque Said-Abdelwahed reviewed records associated with cultural resources at the Eastern Information Center (EIC) located in the Department of Anthropology at the University of California-Riverside. A search radius of one-half mile around each Reach was utilized. As noted above, the APE for the project consists of numerous Alternative trail routes known as Reaches. These are identified in Exhibits 5, 6, 7, and 8 in Attachment B of this report. Table 1 identifies those recorded cultural resources that are located near the Reaches, with the approximate distance from the closest point on a Reach to the resource. The data generated from the records search effort is inherently incomplete in that the current condition of most recorded cultural resources in Riverside County is noted if and only if an archaeologist visits the site. It is possible, however, to estimate whether some resources are intact on the basis of development and erosion impacts over time as shown in historic aerial photographs. Cultural resources are often lost through erosion or development without an archaeologist present. Several sites on this list are certainly lost but have not been removed from the EIC inventory.

According to historical and modern topographic maps, the original high water mark for the Prado Dam (completed 1941) was 543 feet amsl. No data exists for the Prado Basin with regard to regularly measured water height behind the Dam on the USGS website, but it is likely that the maximum allowable water height was never reached between 1941 and 2006 because the USACE releases water into downstream channels well before the maximum height occurs. Research undertaken by Hampson et al. (1988) showed that numerous historic resources were exposed to view for field crews to observe during their watershed survey project, which detected numerous historic sites behind the Dam for the first time. Swanson and Hatheway (1989) provided an extensive history of the Prado Dam and reviewed potential impacts to cultural resources as a result of increasing the Dam height. In addition, Greenwood et al (1987) excavated the old Rincon townsite and Brock (1985) excavated a Rincon cemetery. These researchers did not report that an extensive amount of silt had covered the

historic components, but they did note that the sites had lost some integrity due to USACE construction efforts and local pot hunting.

The records search showed that the entirety of the Prado Flood Control Basin was surveyed by an archaeological team in the late 1970s through the early 1980s. The survey was limited to all that ground behind the Dam and below 566' feet amsl. Properties located in the area of River Road (Reach VIII and IX) have had little research undertaken. Most of the proposed trail in the Lake Norconian area (Reach IX and X) lies upon roads or paths that had been developed in the 1950s and 1960s. Proposed trails on land adjacent to the south side of the River and east of Interstate 15 was surveyed by CRMTEch in 1998 as part of the Hole Ranch development project. Those sites recorded as being crossed by a proposed Reach or at least 100 feet from a proposed Reach are noted in the columns of Table 1.

Review of historic aerial photographs show that since the Prado Dam was built, the local water table and amount of subcanopy vegetation has risen significantly. The historic aerials show little permanent vegetation until the 1970s. This, combined with a lack of ground-disturbing development in the area, allows the assumption that the density of brush and tree vegetation behind the Dam has hidden many historic resources from view. Records show that all historic-era buildings below the 543-foot mark were destroyed by Army Corps of Engineers staff in the early 1940s during the relocation of farmers and merchants. Once the Dam was raised in 2006, the potential high water mark for the reservoir was still 543 feet because the existing spillway located southeast of the Dam has not yet been raised. Historic structures located below the 566-foot mark were evaluated during the 1980s and several significant sites were detected, including a pioneer cemetery. Elements of the historic Prado Dam were presumably mitigated for as part of recent Dam construction. These facts suggest that all known historic resources in the USACE-managed Prado have been mitigated for and further impact will not result in the loss of significant historical features, unless buried and previously unknown resources are encountered during construction.

Table 1: Previously Recorded Cultural Resources within One-half Mile of Primary and Alternative Trail Routes

Site Name	Type	Within 100-foot of a Reach Alignment?	Closest Reach	Distance, Comment	2nd Closest Reach	Distance, Comment	3rd Closest Reach	Distance, Comment
P33-000652 (CA-RIV-652)	Prehistoric "Bovine Site" which is a sparse but large scatter of stone artifacts.	No	Reach VIII	2300'	Greater than ½ mile	x	Greater than ½ mile	x
P33-000807 (CA-RIV-807)	Prehistoric milling slick on bedrock outcrop	Yes	Reach XII	>100', RXII is a paved street. The soft surface alignment must avoid this site.	Reach XI	2600'	Greater than ½ mile	x
P33-001039 (CA-RIV-1039H)	Historic Ashcroft family ranch	Yes	Reach IV	Reach IV crosses site. Site has been removed or capped due to recent USACE levee construction.	Reach III	1000'	Greater than ½ mile	x
P33-001042 (CA-RIV-1042)	Prehistoric sparse lithic scatter.	Yes	Reach IX south side of River	>100'. Site likely destroyed by Tract development	Reach X	1400'	Reach IX alternative on north side of River	1600'
P33-001043 (CA-RIV-1043)	Prehistoric sparse lithic scatter.	Yes	Reach IX south side of River	>100'. Site likely destroyed by Tract development	Reach X	1500'	Reach IX alternative on north side of River	2600'
P33-001044 (CA-RIV-1044H)	Historic Carrillo family farm	Yes	Reach IV	>100' Reach IV will pass by old structure on the site, making it subject to vandalism.	Reach V	>230'	Reach III	2600'
P33-001094 (CA-RIV-1094)	Prehistoric mortars and milling slicks on outcrops	No	Reach XII	1000'	Reach 11	2500'	Greater than ½ mile	x
P33-001229 (CA-RIV-1229)	Prehistoric grinding slick on a boulder	No	Reach IX	2600'	Greater than ½ mile	x	Greater than ½ mile	x
P33-001230 (CA-RIV-1230)	Possible non-site: artifacts collected and lost.	No	Reach IX	2020'	Greater than ½ mile	x	Greater than ½ mile	x
P33-001436 (CA-RIV-1436)	Prehistoric sparse flake scatter	Yes	Reach IX	>100' from Bluff Street (paved). If a soft-surface alternative is chosen near this site and native soil is found exposed near the site, the native soil should be tested for the presence of prehistoric artifacts before construction begins	Reach VIII	950' from intersection Bluff Street and River Road	Greater than ½ mile	x
P33-001452 (CA-RIV-1452)	Prehistoric milling slicks on boulder.	No	Reach X	>200' (?) from paved Taft Street Site may have been destroyed during I-15 Freeway construction.	Reach XI	975' (?) from paved Detroit Street	Reach IX	2300'
P33-002201 (CA-RIV-2201H)	Historic clay irrigation pipe scatter on floor of small wash.	No	Reach IV	2000'. Site was destroyed during commercial development.	Greater than ½ mile	x	Greater than ½ mile	x
P33-002202 (CA-RIV-2202H)	Historic clay roof tiles eroding out of small wash bank.	No	Reach V	2400'. Site was destroyed during commercial development	Greater than ½ mile	x	Greater than ½ mile	x
P33-002315 (CA-RIV-2315)	Prehistoric milling surface(s) on boulders	No	Reach IX	2600'	Greater than ½ mile	x	Greater than ½ mile	x
P33-002316 (CA-RIV-2316)	Prehistoric milling surfaces on boulders	No	Reach IX	2600'	Greater than ½ mile	x	Greater than ½ mile	x
P33-002802 (CA-RIV-2802H)	Historic building site.	No	Reach IV	>300' Hidden from view and access due to heavy vegetation	Reach V	500'	Greater than ½ mile	x
P33-003002 (CA-RIV-3002)	Prehistoric grinding slick on a boulder	No	Reach IX	2600'	Greater than ½ mile	x	Greater than ½ mile	x



Table 1 (cont.): Previously Recorded Cultural Resources within One-half Mile of Primary and Alternative Trail Routes

Site Name	Type	Within 100-foot of a Reach Alignment?	Closest Reach	Distance, Comment	2nd Closest Reach	Distance, Comment	3rd Closest Reach	Distance, Comment
P33-003357 (CA-RIV-3357H)	Historic-era Pedley power plant and canal (1904-1910)	No	Reach XII	200', former canal alignment section only. A proposed soft surface alignment may run past the power plant foundation remnants within 100' and therefore the site could be subject to vandalism.	Reach XI	1600'	Greater than ½ mile	x
P33-003372 (CA-RIV-3372)	Historic Rincon cemetery. A few burials were excavated in the 1980s. Significant resource	Yes	Reach IV	100' (?) Site has been removed or capped due to recent USACE levee construction.	Reach III	1200'	Greater than ½ mile	x
P33-003694H (CA-RIV-3698H)	Historic townsite of Rincon (1880s) Site was tested in the 1980s.	Yes	Reach IV	100' (?) Site has been removed or capped due to recent USACE levee construction.	Reach III	2000'	Greater than ½ mile	x
P33-003740 (CA-RIV-3740H)	Historic Meredith Ranch	Yes	Reach IV	Reach IV crosses site. Site has been removed or capped due to recent USACE levee construction.	Reach III	1900'	Greater than ½ mile	x
P33-003945 (CA-RIV-3945)	Prehistoric milling slicks on bedrock outcrops	No	Reach XII	1600'. Inside Regional Park	Greater than ½ mile	x	Greater than ½ mile	x
P33-004730 (CA-RIV-4730H)	Historic-era Prado Dam complex. Most historic elements appear to have been lost due to Dam raising	No	Reach I	Dam Complex appears fully modern. No potential impact	Reach I	Dam Complex appears modern	Greater than ½ mile	x
P33-005783 (CA-RIV-5523)	DPR missing Historic resource	Yes	Reach IV	Reach IV crosses site. Site has been removed or capped due to recent USACE levee construction.	Reach III	1200'	Greater than ½ mile	x
P33-005784 (CA-RIV-5524)	DPR missing Historic resource	Yes	Reach IV	Reach IV crosses site. Site has been removed or capped due to recent USACE levee construction.	Reach III	1200'	Greater than ½ mile	x
P33-006524	Historic building complex off Archibald at Grapewin. Uncertain whether historic buildings are still intact	Yes	Reach IX, north side of River	>100'. Likely no potential impact as all Alternatives are located in the public right-of-way	Greater than ½ mile	x	Greater than ½ mile	x
P33-007585 (CA-RIV-5808H)	Historic Fisher farm waterline	No	Reach VI	700'	Reach VII	700'	Reach VIII	2300'
P33-007586 (CA-RIV-5809H)	Historic structure on 1902 topo. Artifacts found near this spot may be associated.	No	Reach VI	800'	Reach VII	800'	Reach VIII	2200'
P33-008840	Historic water pipeline and trestle	No	Reach XII	1600'	Greater than ½ mile	x	Greater than ½ mile	x
P33-009101	Historic Lake Norconian Club hotel and resort complex built 1928-1929.	No	Reach IX	2100'	Reach X	2600'	Greater than ½ mile	x
P33-012622	Isolated prehistoric mano fragment	No	Reach VIII	550' Probably part of a site destroyed during historic structure development	Reach VII	750'	Greater than ½ mile	x
P33-012900	Historic resource scatter	No	Reach II	970'. Probably destroyed during recent USACE levee development	Reach III	970'	Reach IV	1900'
P33-013244	House built in 1945, likely demolished during Tract development	No	Reach IX, north side of River	2200'	Greater than ½ mile	x	Greater than ½ mile	x
P33-013408	Isolated prehistoric mano	No	Reach IX	2000'	Reach VIII	2400'	Greater than ½ mile	x

Table 1 (cont.): Previously Recorded Cultural Resources within One-half Mile of Primary and Alternative Trail Routes

Site Name	Type	Within 100-foot of a Reach Alignment?	Closest Reach	Distance, Comment	2nd Closest Reach	Distance, Comment	3rd Closest Reach	Distance, Comment
P33-014736 (CA-RIV-7844H)	Historic Johnson Ranch. Tested in 2005	No	Reach VI	2450'	Greater than ½ mile	x	Greater than ½ mile	x
P33-016249 (CA-RIV-8400)	Prehistoric site found during construction of an USAE Dike	No	Reach VII	1080'	Reach VI	1900'	Reach VIII	2550'
P33-005782 (CA-RIV-5522H)	Historic former AT&SF railroad grade and bridge posts. Several remain in-situ.	Yes	Reach I	>100' No impact to site during development is certain because these are located on the north side of the Santa Ana.	Reach II	1100'	Greater than ½ mile	x

The record search data collected for this project shows that less than ¼ of the project area has been examined by professional archaeologists since the late 1970s, and linear surveys of each Reach do not exist. Few of the Reaches cross undisturbed private land, but most Reaches follow existing roads and trails that will be accessed by crossing over private land. In addition, much of the routing has been previously disturbed by flooding, development, or both. These factors substantially reduce the potential for impacts to buried cultural resources during construction.

Review of the recorded cultural resource types relative to geography shows that prehistoric resources with prehistoric artifacts have been found quite consistently on stabilized terraces located above high-flow channels of the River. Most of the sites have been uncovered on the southern edge of the upper terrace, and are located in places developed after 1975. The hydrogeomorphic positions of the recorded prehistoric sites are important to recognize because the River's perennial watercourses have changed significantly over the last 150 years in response to natural flooding and man-made redirection. Given that the 1862, 1884, 1938 and 1969 floods discussed above were the worst on record and were later tied to strong El Nino events, the active channel (low bank-to-low bank) portions of the River in the Norco-Corona region have clearly been swept clean of archaeological sites.

Potentially significant sites may be exposed to view only on those areas above high-water marks or near paleo-channels. For example, sites P33-16249, P33-12622, P33-001040, P33-001043, and P33-001042 are located at the 580-620 foot mark above sea level. The sites are near modern riverine resources, but are not located in an area that would be swept away during strong El Niño storm events. The prehistoric sites noted above were typically observed before any development impacts had taken place, although there have been several monitoring finds since their discovery. No prehistoric resources have been located in the "bankfull" or active floodplain areas, nor have any significant historic resources (outside of those associated with the Rincon townsite) been detected. For this reason, we expect that during trail construction, impacts to significant prehistoric resources might occur in the stabilized low terrace or high terrace areas only.

## **6: NATIVE AMERICAN SACRED LANDS SEARCH AND INFORMATION REQUESTS**

MBA cultural resource staff undertook the sacred lands search only after the exact delineation of the Reach locations were established. The results of the lands search consultation is pending as of the date of this report

## **7: FIELD EXAMINATION OF PUBLIC REACHES**

On April 23, 2010, Mr. Dice examined Reach V through Reach XII for the purpose of evaluating the level of impact on recorded and unrecorded resources in and near the right-of-way of each Reach. As

noted above, most of the street rights-of-way in the City of Norco are wider than in other communities because they have been designed with large setbacks to allow for horse paths between the property line and the street curb. Homeowners are not permitted to block these paths including planting vegetation or parking cars in the paths outside their homes. It is therefore assumed that little modification of these horse trails shall be required during development of the Project. We also note that lands along the River and Temescal Creek have flooded repeatedly during recorded history and excavations associated with construction of the trails are not anticipated to be greater than 3 to 5 feet below present ground surface. For these reasons, we do not believe that any significant cultural resources exist along the banks of the active floodplain, and that linear surveys along that floodplain will not result in a reinterpretation of findings by Hampson et al. (1988).

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### **Reach I, II, III and IV West Half**

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These Reaches are located northeast of a bend in the old Pomona-Rincon Road and south of the old Butterfield Stage Road. A series of historic sites associated with the old Rincon townsite (CA-RIV-3694H) and several homesteads are located in this area. According to USACE staff, all sites in the Prado have been cleared by others and construction of the new levees associated with dam raising have begun. The site visit took place in early February 2011 and it was noted that cutting and deposition of soils for the levee was taking place west of site CA-RIV-5524. Thus, the western half of Reach IV and Reaches I, II and III cannot be accessed but appear to lack any significant historical resources that would require mitigative clearance before construction can begin. This position is further corroborated by USACE activities previously planned for the area as documented in previous environmental documents..

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### **Reach IV, East Side**

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The east end of Reach IV emanates from ACOE-controlled property and ends on ACOE property near Butterfield Stage Park in the City of Corona. Although tested in the 1990s, site CA-RIV-1044 appears relatively intact and construction of this Reach should avoid this historic-era site by staying on existing path and roads. Site CA-RIV-2801 is hidden by dense vegetation and was recorded as being several hundred meters from a road or path. Review of the available areas of the reach shows that it is unlikely that there will be effects to any observed or buried cultural resources during construction in the eastern half of Reach IV.

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### **Reach V**

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Portions of Reach V are accessible without permission but a gate blocks entrance to the Prado Basin at the northwest corner of Butterfield Stage Park. The eastward extension of the Reach will likely include paths inside the City of Corona's Butterfield Park. Historic aerial photographs show that the Park was built after 1980 and before 1994 on ground that was once used for grazing. Review of the

available areas of the reach shows that it is unlikely that there will be effects to any cultural resources during construction in Reach V.

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## **Reach VI**

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The Corona Municipal Airport was placed on a pad of slightly higher ground before 1967 with numerous earthen flood-control and siltation basins built to the east and northeast between 1967 and 1980. These were filled with water in 1980 and probably helped to control storm flows out of Temescal Creek. Reach VI will be extended along Butterfield Stage Road near the Airport entrance and cross what appears to be now-abandoned flood control basins. The tops of the basins are too narrow to support trails and so the basin areas will have to be modified, but there will be no potential impact to historic resources in this area. The Reach ends at West Rincon Street, where a new concrete-faced riprap Dike protects the eastern segment of Rincon Street from flooding. Field review shows that it is unlikely that there will be effects to any cultural resources during construction of Reach VI.

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## **Reach VII**

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Reach VII is planned to begin at Rincon Street and splits between two segments: one winding its way through woods and an old road downslope from a modern housing tract along Noah Drive in Corona thence to the southeastern extension of Stagecoach Park. Another section runs into the woods northwest of the corner of Rincon and Corydon. A run of tall palm trees extends due west from the corner of Rincon and Corydon: these appear to have been planted after 1967 and were associated with a farm in that area that was abandoned after 1980 and is now heavily overgrown. The northern tip of Reach VII ends at Stagecoach Park in Corona. Field review shows that it is unlikely that there will be effects to any cultural resources during construction of Reach VII.

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## **Reach VIII**

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Reach VIII includes several alignments on City of Norco and City of Corona jurisdictions south of the intersection of River Road and Bluff Street, with River Road the northeastern border. Reach VIII segments along Corydon and Stagecoach Streets in Corona are modern concrete sidewalks. Unpaved sections are entirely within Norco jurisdiction. The Reach at the foot of the peninsula below Bluff Street appears to exist and is being used as a horse trail, but aerial photos show that this ends at a point 820 feet due southwest of Homestead Road. The proposed segment to be constructed between Reach VII and this point appears raw and may be located in Prado Park jurisdiction. A rough path exists between the trails at the foot of the bluff and the intersection of Bluff Street and Stagecoach Road. This is being used by horse owners and follows the base of the bluff along the southern floodplain of the River. For the remainder of Reach VIII, it is unlikely that there will be effects to any cultural resources during construction.

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## **Reach IX**

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Reach IX is very large and includes existing trails located on either side of the River, the new crossing at the new River Road Bridge, existing community horse trails between homes and streets in west Norco and on paved sidewalks in sections of unincorporated Riverside County north of the River floodplain. In the unincorporated areas, most of the proposed trails follow formal paths created when housing developments went in over the last several years. City of Norco sections include existing trails on the developed plain south of the River between River Road and where Reach IX joins Reach X. Much of Corydon Ave is lined with houses that are more than 45 years old but since there will be no land taken as part of direct project development impact and existing trails shall be used, there will be no visible effect to the structures lining the street.

There is a section that will require formal survey before the project is approved. This is the Spur A portion of an existing dirt trail overlooking the north bank of the River. This begins at Archibald west of Kendra Road and ends at a new concrete path off the cul-de-sac on Dearborn Street. A second segment (Spur B) begins at the concrete path off the cul-de-sac on Dearborn Street, continues to the cul-de-sac off Cobble Creek Drive east on a dirt path toward a historic and unrecorded ranch south of the new Eleanor Roosevelt High School. Spur B is not a part of this study and is included in documentation being completed by the Jurupa Community Services District.

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## **Reach X**

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Reach X is located entirely within the City of Norco. The most western tip of the reach lies at the corner of Norco Drive and Alhambra Street and runs along Norco Avenue to the Norco Community Park. These are along existing horse trails. Reach alternatives run north to points where the proposed Reach segment along the south side of the River crosses the River. Another Reach alternative runs north along Hamner Road to raw land south of the Silverlakes Sports Park. Once at the North Community Park, one reach segment jogs northeast and joins Reach XI before it crosses Interstate 15 at the Detroit Street overcrossing. The Community Park grounds (baseball field) were built about 1960 and this lies adjacent to a community pool and a gymnasium that were built after 1967. The Community Services building located at about the 3600 block of Acacia Avenue was built before 1948 and is a part of the Community Park complex. The trail will pass right by these features and thence to a segment running north along Old Hamner Road. Reach X crosses the Santa Ana at two points east of the Interstate. Historic elements of the Community Park should be recorded. For the remainder of Reach X, it is unlikely that there will be effects to any cultural resources during construction.

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## **Reach XI**

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Reach XI features three segments. The main segment runs along existing horse trails between Detroit Street and the intersection of Pedley and River Drive. An alternative exists where the Reach splits at

8th Street and a course runs between the segments at Pedley Avenue. All of Reach XI is located either on the bluff trail overlooking the River or on Norco-developed trail and streets. Many older homes are located along the bluff in Norco as these were built during the early days of rural development, but they will not be directly affected. For this reason, it is unlikely that there will be effects to any cultural resources during construction.

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## Reach XII

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Reach XII is associated with two segments in East Norco near Hidden Valley Park. The uppermost section is located above the River floodplain and runs east to meet Pedley Substation Road. The second runs along developed trail along 8th Street, then to Crestview, Arlington and the Park entrance. It is possible that historic resources are located in the western sections of Hidden Valley Park, but this has been surveyed several times in the past and as most of the western section of the Park is composed of former farmland, it is likely that all significant historic resources have been identified.

## 8: RECOMMENDATIONS

As noted above there are a few segments of the proposed Reaches may require pre-construction surveys because it was not possible to examine the soils in and near those Reach segments properly, but it appears that the vast majority of the project is devoid of potential impacts to significant cultural resources because of previous development. Under NEPA guidelines, the project has been cleared of potential impacts to existing potentially significant cultural resources and mitigation-monitoring is not a technically proper way of dealing with potential impacts to buried cultural resources.

Under CEQA guidelines, mitigation-monitoring is an appropriate response to potentially significant impacts of buried cultural resources. Based on all facts presented in this report, we recommend that the cultural resource mitigation measures for this project should read as follows:

**Table 2: Recommended Mitigation Measures**

Mitigation No.	Mitigation Text
CR-1	Prior to the issuance of construction permits, a qualified archaeologist shall be retained to initiate and supervise cultural resource mitigation-monitoring during project-related earthmoving in all areas of the project exhibiting raw, undisturbed soils, subject to certain constraints found in Mitigation Measure CR-2.
CR-2	Project-related archaeological monitoring shall include the following constraints: <ol style="list-style-type: none"><li>1. All construction-related earthmoving shall be monitored once a depth of three (3) feet below grade by the Project Archaeologist or his/her designated representative;</li><li>2. If buried cultural resources are detected during monitoring, monitoring must continue until 100 percent of virgin earth within the study area has been disturbed and inspected by the Project Archaeologist or his/her designated representative.</li></ol>

**Table 2 (cont.): Recommended Mitigation Measures**

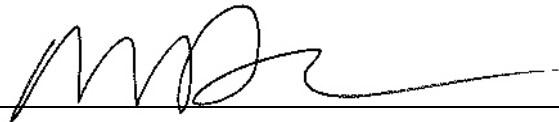
Mitigation No.	Mitigation Text
CR-2 (cont.)	<p>3. If cultural resources are uncovered, earthmoving shall cease in the area of a cultural artifact or potentially significant cultural site as delineated by the Project Archaeologist or his/her designated representative. Earthmoving can continue in other areas of the project while the uncovered finds are investigated by the archaeologist; and</p> <p>4. If cultural artifacts are uncovered during grading, they shall be examined by a professional archaeologist subject to Mitigation Measure CR-3, and then curated in a museum facility. A mitigation-monitoring report must accompany the artifacts once they are donated to the museum facility.</p>
CR-3	Should buried prehistoric cultural resources be encountered during monitoring, the resources shall be Phase-II tested and evaluated for significance following CEQA Guidelines prior to continuance of grading in the area.

## 9: CERTIFICATION

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

Date: February 7, 2011

Signed: \_\_\_\_\_



Michael H. Dice, M.A., RPA  
Michael Brandman Associates  
San Bernardino, CA

## 10: REFERENCES

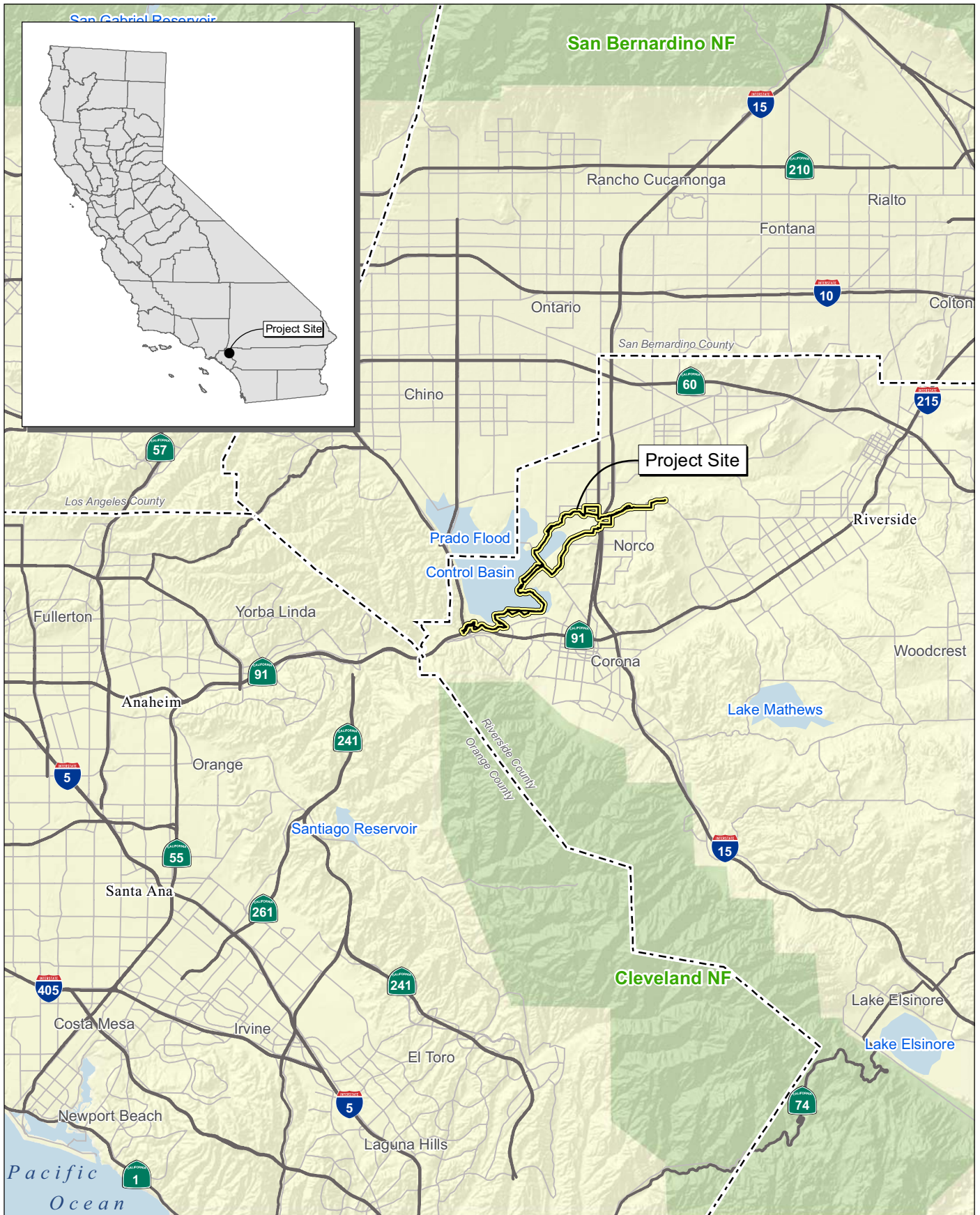
- Bean, L.J. and C.R. Smith. 1978. "Gabieliño." In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer pp 538-549. Smithsonian Institution, Washington, D.C.
- Cameron, C. 1999. "Defining Tribal Boundaries Through Potsherds - An Archaeological Perspective." Pacific Coast Archaeological Society Quarterly. 35(2 and 3):96-128. Spring 1999.
- Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.
- Fagan, B.M. 2003. Before California: An Archaeologist Looks at Our Earliest Inhabitants. Alta Mira Press.



- Hampson, R.P., J. Sorenson, S.K. Goldberg, M.T. Swanson and J.E. Arnold. 1988. Cultural Resources Survey, Upper Santa Ana River, California. (AIC Report #1061852) On file, Archaeological Information Center, San Bernardino County Museum, Redlands.
- Harley, R.B. 1988. "Rev Juan Caballeria: Historian or Storyteller? Rethinking the 1810 Dumetz Expedition." San Bernardino County Museum Association Quarterly V33, No. 2.
- Harley, R.B. 1989. "Did Mission San Gabriel have Two Asistencias? The Case of Rancho San Bernardino." San Bernardino County Museum Association Quarterly V36, No. 4.
- Heizer, R.F., ed. 1978. Handbook of North American Indians, Vol. 8: California. Washington, DC: Smithsonian Institution.
- Johnston, B.E. 1962. California's Gabrieliño Indians. Southwest Museum, Los Angeles
- Lech, S. 2004. Along the Old Roads: a History of the Portion of Southern California that became Riverside County, 1772-1893. Riverside: Self-published.
- Lugo, D.J. de C. 1950 (1877). "Life of a Rancher (Vida de un Ranchero)." 1877 document translated in Historical Society of Southern California Quarterly vol 33.
- Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC: Smithsonian Institution.
- Mitchell, P. 2006. Santa Ana River Guide. Wilderness Press, Berkeley, CA.
- Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.
- Taylor, W.L. and R.W. Taylor. 2007. "The Great California Flood of 1862." The Fortnightly Club of Redlands, California. <http://www.redlandsfortnightly.org/papers/Taylor06.htm>.
- Wallace, W.J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." Southwestern Journal of Anthropology 11(3):214-230.
- Wallace, W.J. 1978. "Post -Pleistocene Archeology, 9000 to 2000 B.C." In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 25-36. Washington, DC: Smithsonian Institution.
- Warren, C.N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast In Archaic Prehistory in the Western United States," edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1.

## **Attachments**

**Attachment A:  
Exhibits**

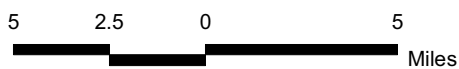


Source: Census 2000 Data, The CaSIL, MBA GIS (2011).



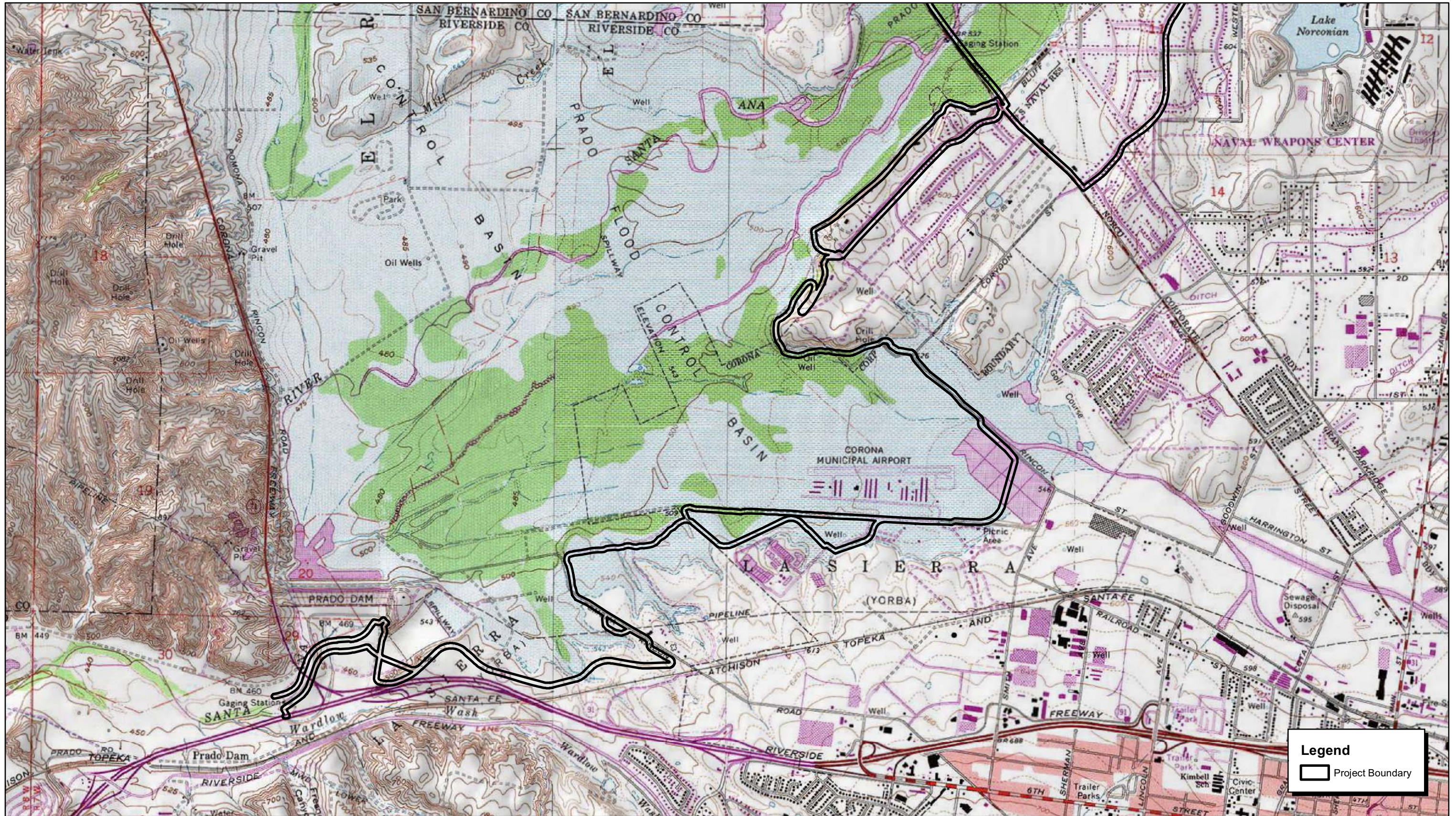
Michael Brandman Associates

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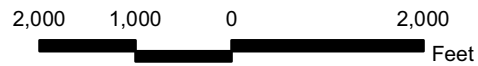


## Exhibit 1 Regional Location Map

THE DANGERMOND GROUP • SANTA ANA RIVER TRAIL  
PHASE I CULTURAL RESOURCES ASSESSMENT



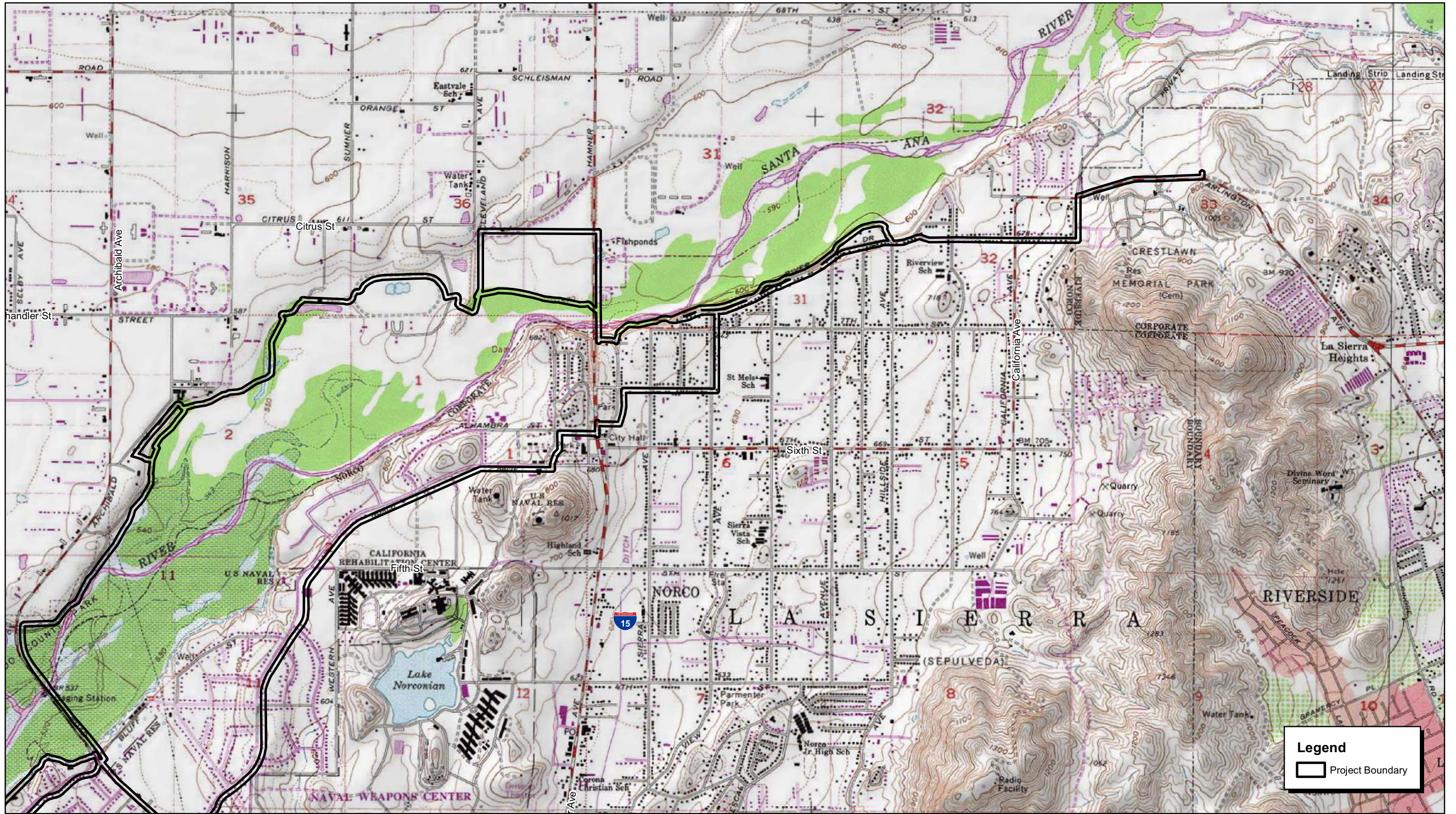
Source: TOPO! USGS Corona North, CA (1981), Prado Dam, CA (1981) 7.5' DRG.



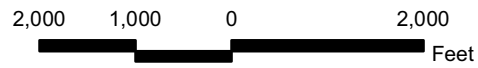
34800002 • 02/2011 | 2a\_local\_topo\_south.mxd

Exhibit 2a  
South Portion  
Local Vicinity Map - Topographic Base

THE DANGERMOND GROUP • SANTA ANA RIVER TRAIL  
PHASE I CULTURAL RESOURCES ASSESSMENT



Source: TOPO! USGS Corona North, CA (1981) 7.5' DRG.



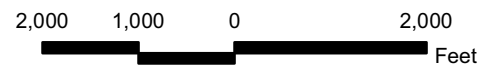
34800002 • 02/2011 | 2b\_local\_topo\_north.mxd

Exhibit 2b  
North Portion  
Local Vicinity Map - Topographic Base

THE DANGERMOND GROUP • SANTA ANA RIVER TRAIL  
PHASE I CULTURAL RESOURCES ASSESSMENT



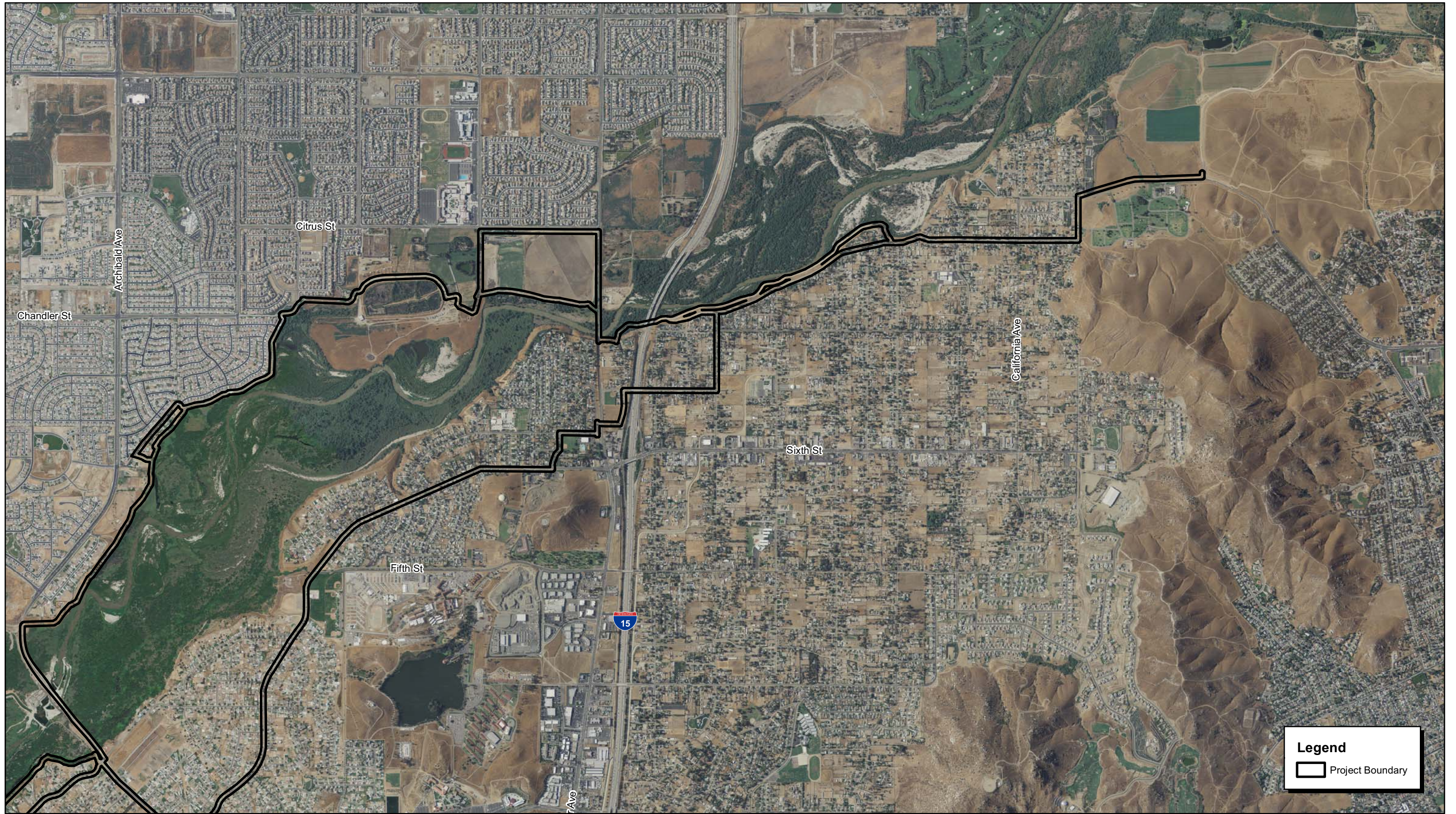
Source: NAIP for Riverside County (2009); NAIP for San Bernardino County (2009).



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Exhibit 3a  
 South Portion  
 Local Vicinity Map - Aerial Base

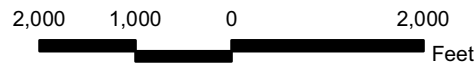
THE DANGERMOND GROUP • SANTA ANA RIVER TRAIL  
 PHASE I CULTURAL RESOURCES ASSESSMENT



Source: NAIP for Riverside County (2009); NAIP for San Bernardino County (2009).



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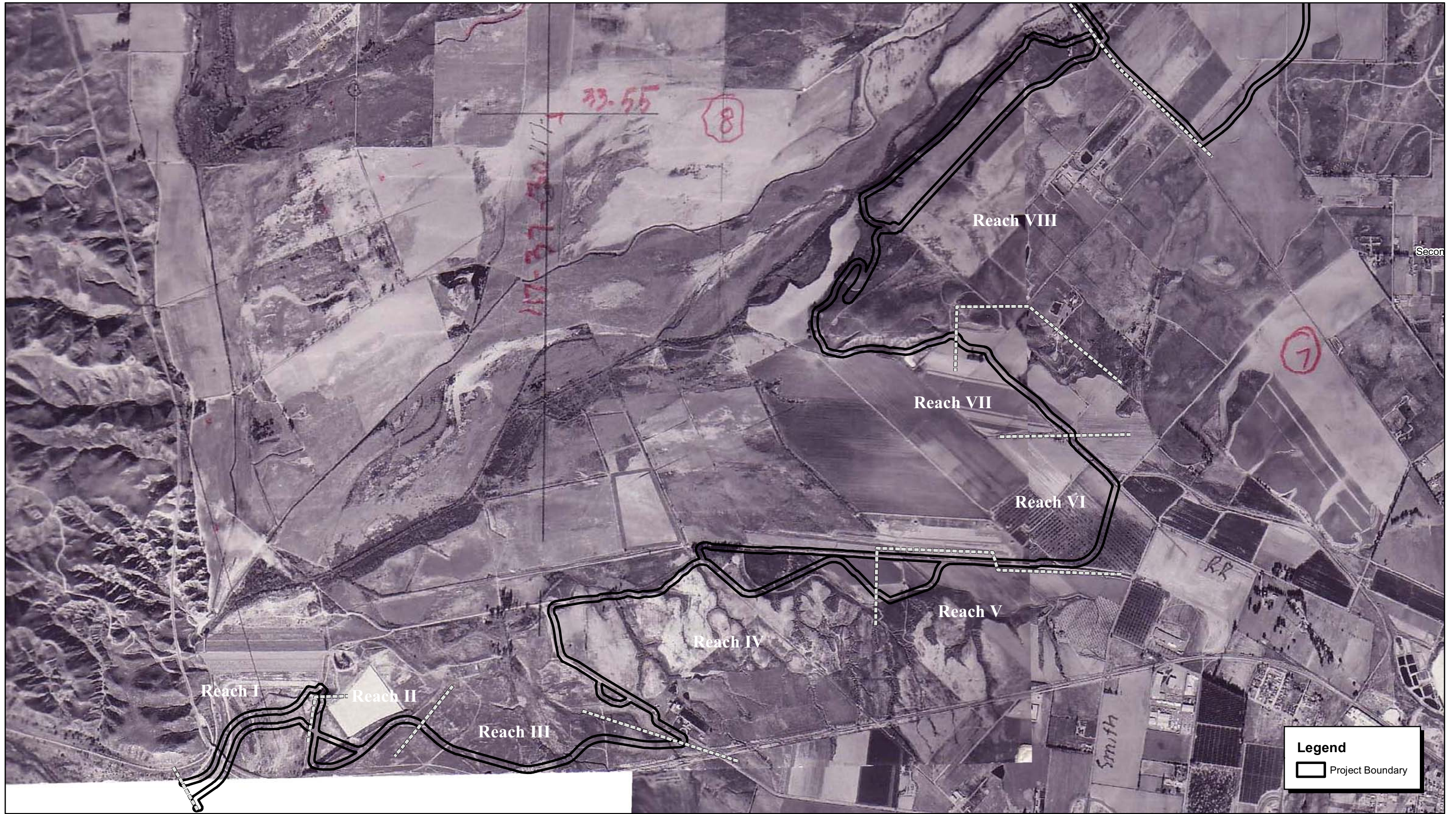


**Legend**  
 Project Boundary

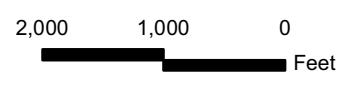
Exhibit 3b  
 North Portion  
 Local Vicinity Map - Aerial Base

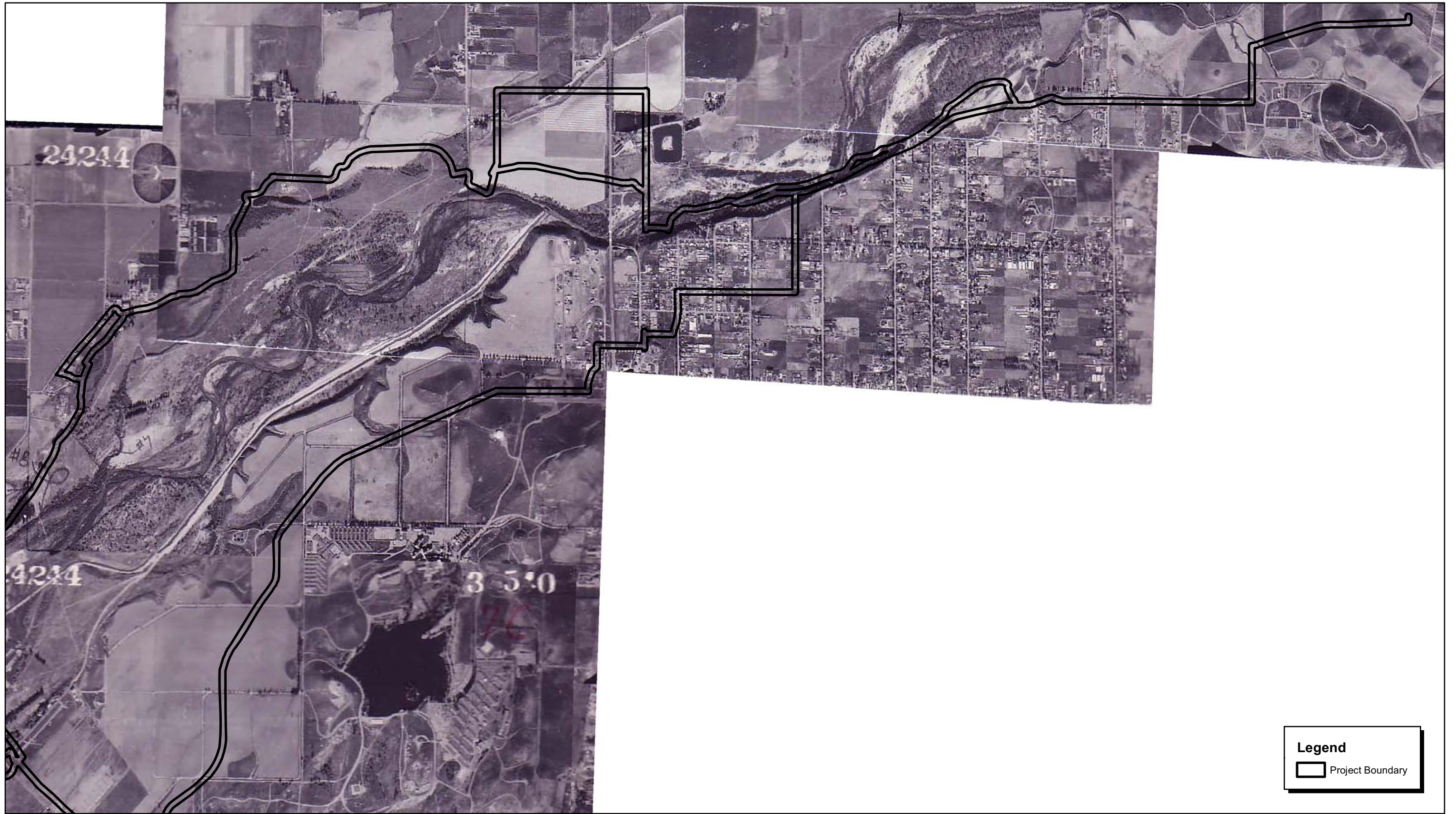
THE DANGERMOND GROUP • SANTA ANA RIVER TRAIL  
 PHASE I CULTURAL RESOURCES ASSESSMENT



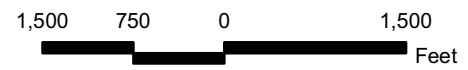


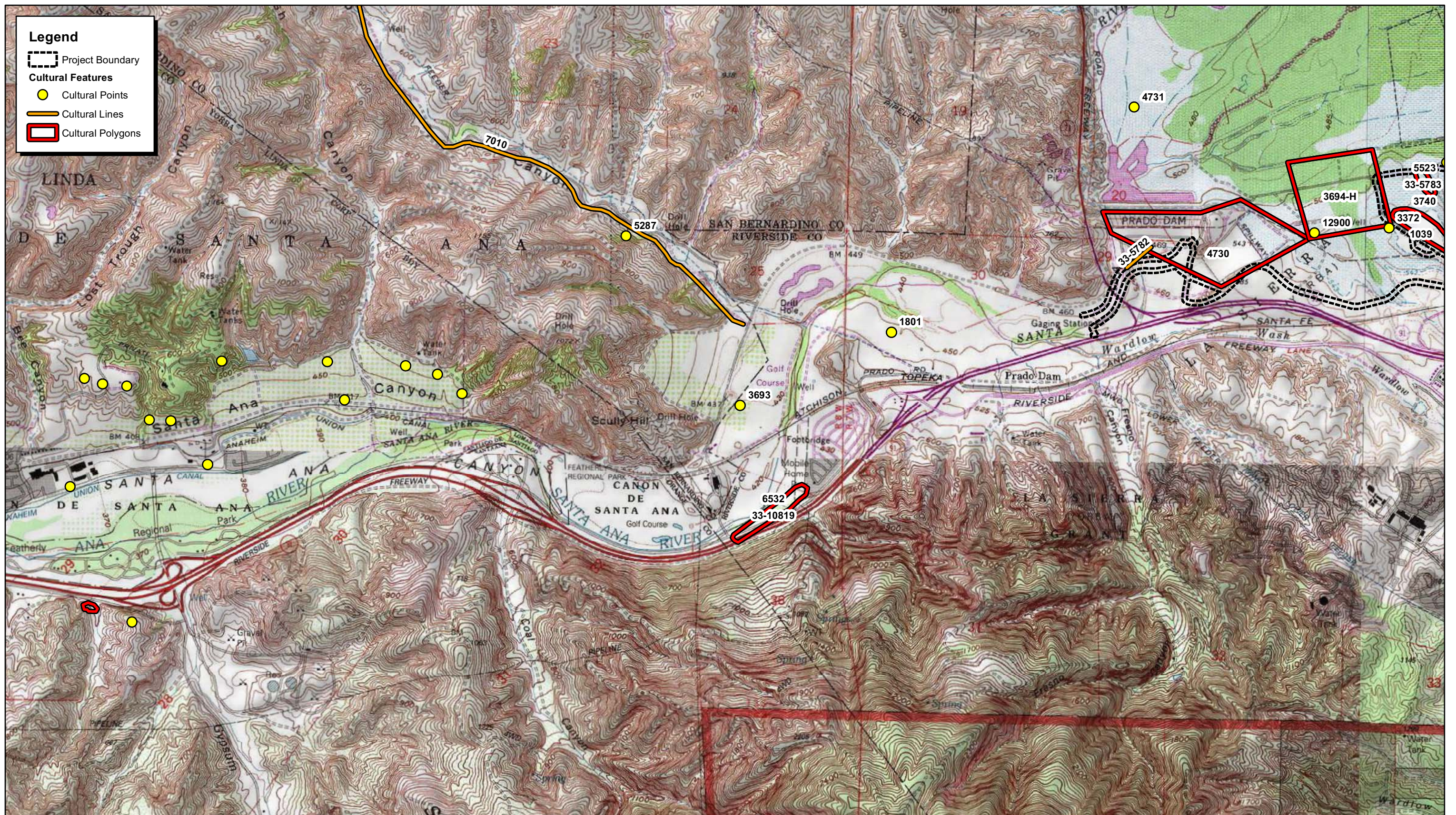
Source: NAIP for Riverside County (2009); NAIP for San Bernardino County (2009).



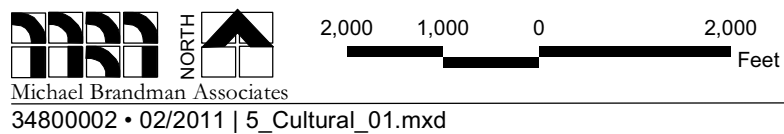


Source: NAIP for Riverside County (2009); NAIP for San Bernardino County (2009).

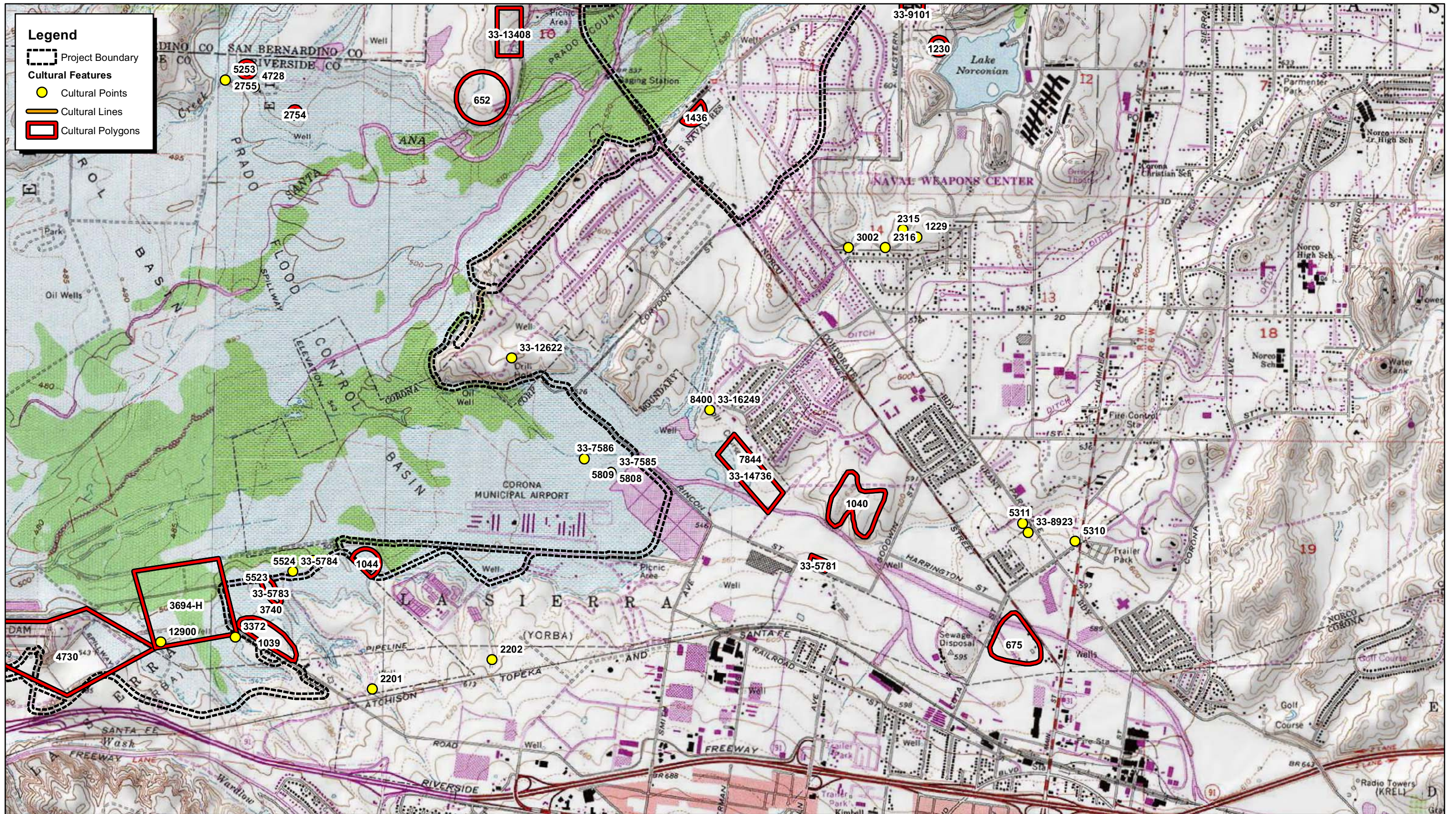




Source: TOPO! USGS Prado Dam, Corona North, & Black Star Canyon (1996) 7.5' DRG.



## Exhibit 5 Cultural Resources



Source: TOPO! USGS Prado Dam, Corona North, & Black Star Canyon (1996) 7.5' DRG.

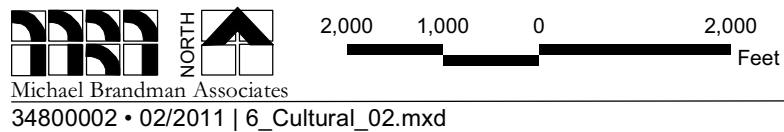
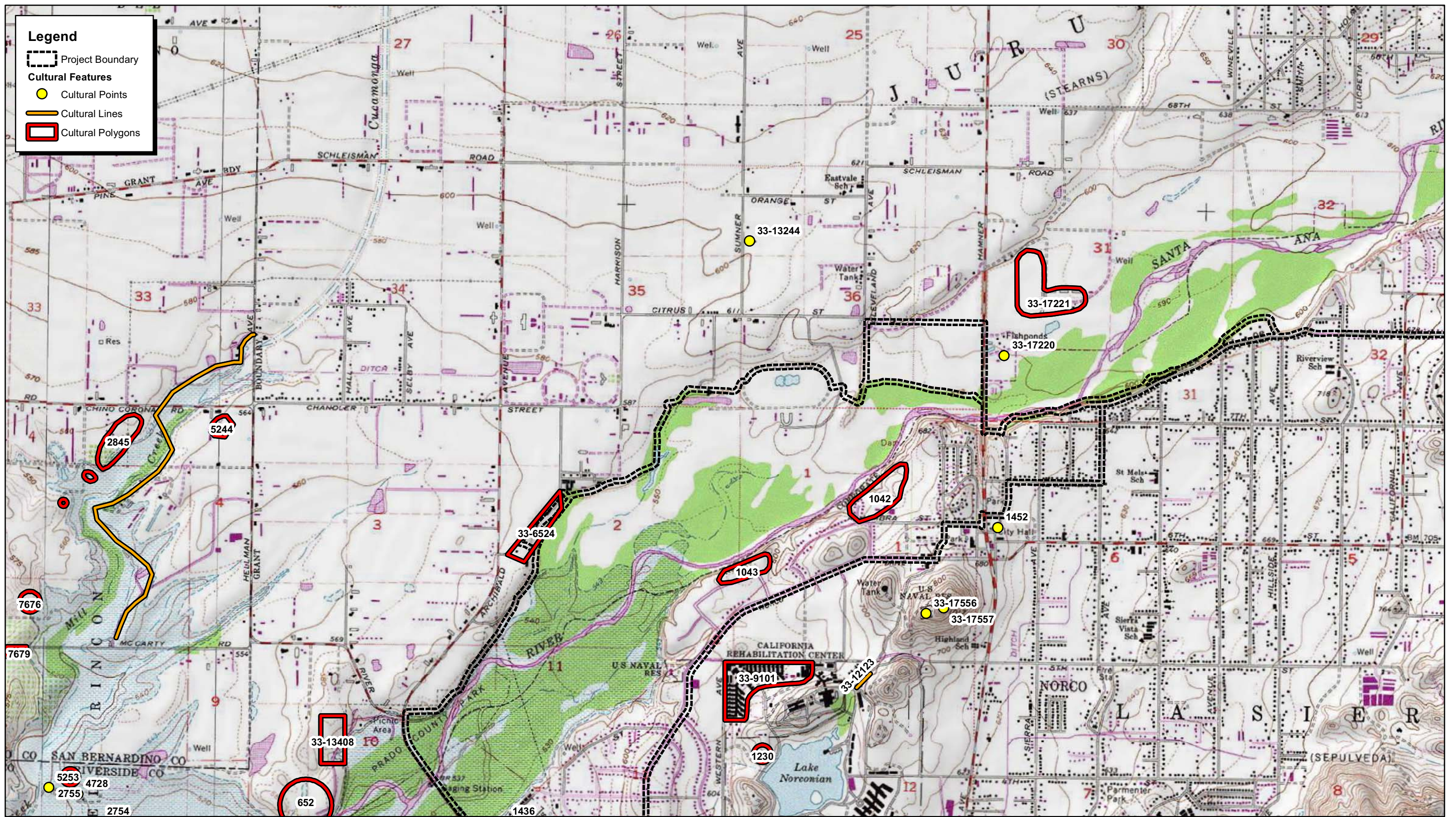
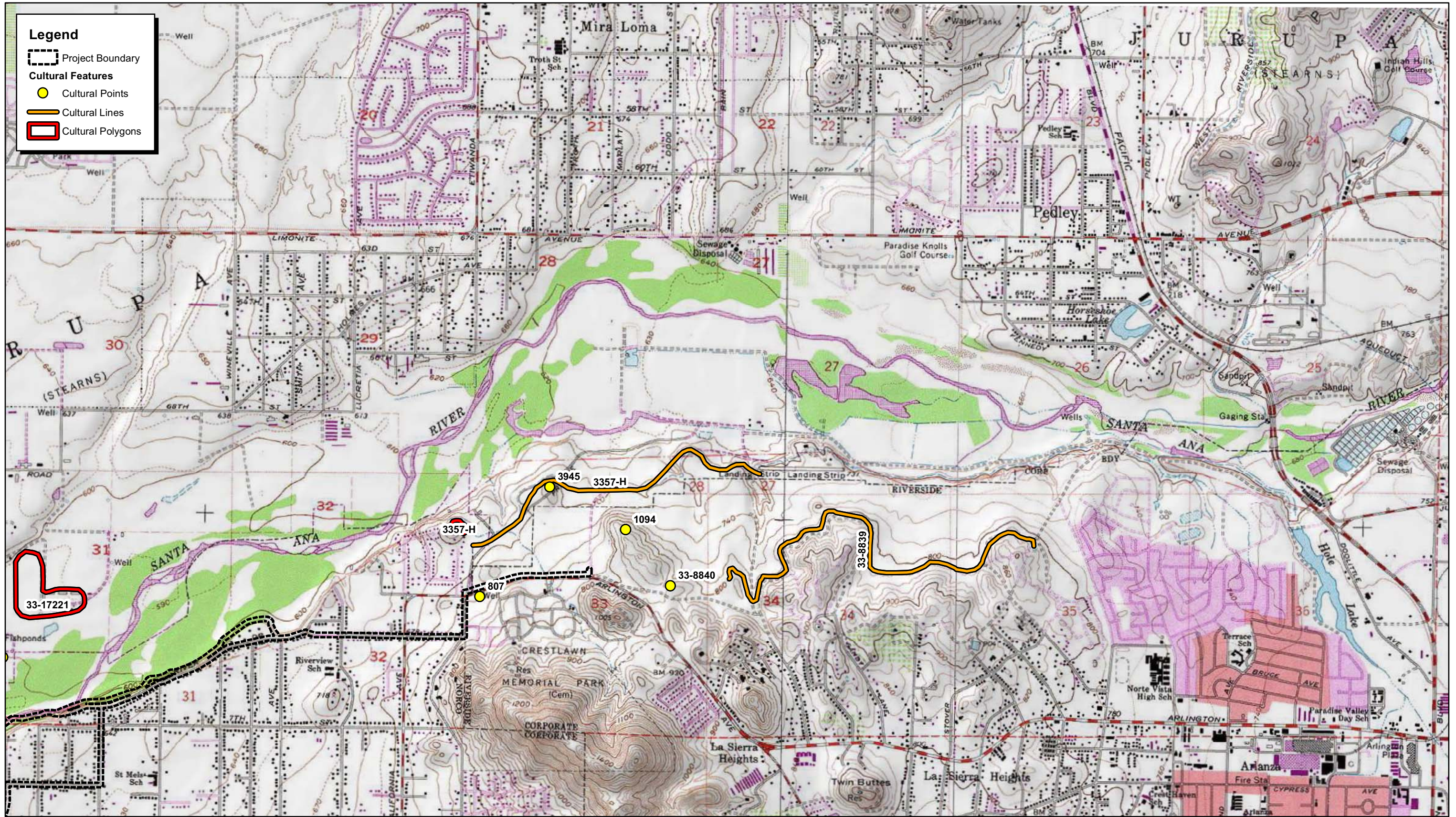


Exhibit 6  
Cultural Resources

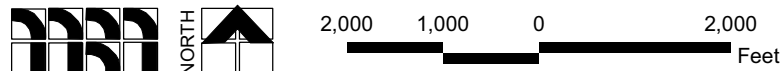


Source: TOPOI USGS Prado Dam, Corona North, & Black Star Canyon (1996) 7.5' DRG.





Source: TOPOI USGS Prado Dam, Corona North, & Black Star Canyon (1996) 7.5' DRG.



Michael Brandman Associates

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## Exhibit 8 Cultural Resources

THE DANGERMOND GROUP • SANTA ANA RIVER TRAIL  
PHASE I CULTURAL RESOURCES ASSESSMENT

**Attachment B:  
NAHC Response, Native American Consultation Letters,  
Tribal Responses (if any)**

**To Be Provided**



**Attachment C:  
Current Site Photographs**



Photograph 1: Reach XI near the north end of Pedley Avenue. View downstream.



Photograph 2: Reach XI view upstream at the north end of Pedley Avenue.



Photograph 3: Reach XI downstream view with River Road to the left. The trail shall be placed on the embankment in this photograph.



Photograph 4: View of the corner of River Road and Valley View in Norco showing the rural nature of the current environment. This is representative of Reach XII and XI whereas much of Reach X and Reach IX are recently developed.



Photograph 5: View to the west of a historic-era building near the Norco Community Center Park, Reach X. Other possibly historic-era buildings and the Park itself are more than 50 years old at this location.



Photograph 6: View of an unrecorded historic water waste treatment plant north of Norco Drive in Reach IX. Most of the soils in this area are artificial due to build up of soil during developmental construction.



Photograph 7: View of raw land near the intersection of Stagecoach Drive and Bluff Street in Reach VIII. The trail is proposed to run near the Prado waterline around a knoll located near this photograph.



Photograph 8: View of land in Reach VI from Reach VII. All of the property in Reach VI and much of Reach VII has been filled and there cannot be any direct impact to buried cultural resources in areas of fill.



Photograph 9: View of the east end of Reach V toward the west with the Corona Airport to the right. The green fields are filled and leveled paleo river bank and bottom.



Photograph 10: View of lands within Butterfield Stagecoach Park, Reach V. The entirety of the property below the original Santa Ana terrace (seen here) has been developed for a Park.



Photograph 11: View of the abandoned road leading from Reach V into Reach IV. At one time, this road represented a railroad right-of-way and then the original Pomona-Rincon Road extending into Corona. None of the vegetation would exist in this view except for the rise in the water table was a result of the Prado Dam.



Photograph 12: Structural remnant of CA-RIV-1044. Reach IV and alternatives pass by this structure remnant, leaving it vulnerable to future vandalism.

**Attachment D:  
Resumes for Michael Dice, M.A. and Ken Lord, Ph.D.**





## **Michael H. Dice, M.A.**

### **Project Scientist/Senior Archaeologist**

#### **Overview**

- M.A., Anthropology, Arizona State University, Tempe, Arizona
- B.A., Anthropology, Washington State University, Pullman, Washington
- Anthropology Track, University of Washington, Seattle, Washington

**Michael H. Dice, M.A., RPA** a certified archaeologist, has performed record searches, archaeological surveys, archaeological site testing (Phase 2), and data collection (Phase 3) on private and public lands in the Southwestern United States and Southern California since 1986. During his career, he has authored or co-authored more than 150 CEQA and/or NEPA level documents including several manuscripts for the National Park Service. Mr. Dice is a member of the California Historical Society, the Society for American Archaeology (SAA), a Registered Professional Archaeologist (RPA) and is a member of the National Trust for Historic Preservation

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#### **Project Experience, 1998-2009**

##### **Transportation**

###### ***Transportation***

**Sunset Avenue PEAR Project, City of Banning.** Caltrans-compliant Cultural Resource and Paleontological Reports for the Sunset Avenue Overcrossing Project.

**Santa Ana Art Wall Project (Santa Ana, CA), OCTA Tracks/Santa Ana Depot at Santiago Street.** Caltrans-compliant ASR/HRER/HPSR package for the City of Santa Ana as part of a Caltrans District 12 submission.

**Community Impact Assessment and Cultural Resource Survey for the Westside Parkway Project,** West Bakersfield, Kern County. Cultural survey report for planned infrastructure development in Bakersfield.

**Section 106 HPSR Technical Analysis for the City of Santa Ana Art Wall Project, City of Santa Ana.** Caltrans-compliant Section 106 Evaluation of Project Areas in the City of Santa Ana. Included Section 106 evaluation of specific properties.

**Cultural Resource Survey for the Patricia Lane Park Project, near 6th and Patricia Lane, City of Santa Ana.** Caltrans-compliant Section 106 Evaluation of Project Areas in the City of Santa Ana.

**State Route 18 and Paine Road Intersection Improvement Project, City of Big Bear.** Caltrans-compliant Section 106 Evaluation of Project Areas in the City of Big Bear.

**Cultural Resources Assessment for the Proposed West Beltway/Westside Parkway Interchange Project,** Bakersfield, Kern County. Cultural survey report for planned development in Bakersfield.

**El Centro-Dogwood Street Bridge Widening Project, El Centro, Imperial County.** Cultural survey report for planned development in the City of El Centro.

**Phase I Cultural Resources Survey Report for the Pepper Street Specific Plan.** City of Rialto, San Bernardino County. Cultural survey report for a planned development in the City of Rialto.

### **Federal, State, and Local Infrastructure**

**Cultural Resource Assessment, proposed Bakersfield State Vehicular Recreation Area (SVRA), Kern County.** 1200 Acre cultural survey report for planned State Park north of Bakersfield, in Kern County.

**Cultural Resource Assessment – CDBG-Funded City of Corona Projects.** Section 106 Evaluation of Project Areas in the City of Corona. Includes Section 106 evaluation of specific properties.

**Cultural Resource Assessment, Washington Addendum and Consolidated Addendum Redevelopment Areas, City Old Santa Fe Springs.** Historic structure survey report for two planned Redevelopment Areas in the City of Santa Fe Springs. 200+ structures identified and mitigation measures developed.

**Project Archaeologist/Database Manager for the emergency Chapin-5 Fire Rehabilitation Project, Mesa Verde National Park, Colorado (1996-1999).** Began as Field Crew Chief (GS-7) and finished with the Park as a GS-9 Database Manager. Created an ACCESS 6.0 database for the recordation or re-recordation of more than 500 archaeological sites within the rehabilitation area.

### **Telecommunication**

**NEPA Compliance/Telecommunication Facilities.** Serving as Project Scientist for a variety of telecommunication providers throughout California in complying with the National Environmental Policy Act (NEPA) for the implementation of cellular communication facilities.

### **Water Infrastructure**

**Corona Recycled Water Project. CEQA+ (project-level) Section 106/CEQA analysis for the Corona Recycled Water Project through Bauer Environmental.**

**Victor Valley Recycled Water Project. CEQA+ (program-level) Section 106/CEQA analysis for the Victor Valley Recycled Water Project through Bauer Environmental.**

**Realignment of the Friant-Kern Canal, In the City of Bakersfield.** Proposed Mitigated Negative Declaration, and finding of no significant impact, With the Draft Initial Study and Environmental Assessment. Cultural evaluation for Initial study.

### **Mining Infrastructure**

**Cultural Resources Survey Report for the Palm Desert Rock Project, Riverside County.** Cultural survey report for planned mining development in the County of Riverside.

**Cultural Resources Survey Report for the Coachella Aggregates Expansion Project, Riverside County.** Cultural survey report for planned mining development in the County of Riverside.

**Cultural Resources Survey Report for the California Lightweight Pumice Makalya Mine Expansion Project, Inyo County.** Section 106 cultural survey report, Ridgecrest-BLM jurisdiction.

**Survey and testing reports for the Williams Field Services Trunk S Natural Gas Project, Rio Arriba County, New Mexico.** Section 106 cultural survey and excavation reports, Farmington-BLM jurisdiction.

### **Utilities**

**Cultural Resource Records Search Results and Sensitivity Evaluation for the Palm Springs and Desert Hot Springs Master Drainage Plan Project.** Cultural evaluation report for planned utility construction in the Coachella Valley.

**Cultural Resource Survey, City of Huntington Beach Planning Department Environmental Assessment, Warner Sewer Lift Station.** Cultural survey report for new sewer outflow line in the City of Huntington Beach.

**Cultural Resource Survey, O'Neill Park Sewer Conversion Project, Community of Trabuco Canyon, Orange County.** Cultural survey report for new City Park sewer line in the County of Orange

**Phase 1 Survey Report for the Navajo Sewer Pipeline Project located in the Town of Apple Valley.** Cultural survey report and Phase 2 testing for new sewer line in the Town of Apple Valley.

**Archaeological Resources Assessment of the City of Corona Recycled Water Project, located in the City of Corona, County of Riverside.** Cultural survey report for new recycled water project in the City of Corona, Section 106/CEQA project.

**NEPA-Level Cultural Assessment and Paleontological Records Check Associated With The Victor Valley Subregional Facilities Project, County of San Bernardino.** Cultural survey report for new recycled water project in the Cities of Victorville, Hesperia, Section 106/CEQA project.

**Mark Technologies Corporation Alta Mesa Pumped Storage Hydroelectric Project.** A Class III Intensive Field Survey On Federal And Private Properties Located Within Sections 3,4,5,9, and 10, T3S - R3E, Cabazon-White Water Area, County of Riverside, California." L&L Environmental, JBG-01-172. On file, L&L.

**Cultural Monitoring Services at the Navajo Road Sewer Project, Town of Apple Valley.** Cultural resource monitoring for new sewer line in the Town of Apple Valley.

**Archaeological and paleontological resources assessment of the San Clemente storm drain project, West Avenida Palazada, San Clemente.** Cultural survey report for planned development in the City of Orange.

#### **Airports**

Cultural Resource Records Search and Site Visit Results for the Proposed Ontario Airport TIS Transmitter Site. Cultural survey for a planned transmitter within the Ontario International Airport, Section 106 Study.

#### **Cultural Resource Surveys for Private Developers, Partial List by Lead Agency and Project Name**

**City of Rancho Cucamonga.** TTM 16072, SP 04-001 Annexation and TTM 32023.

**City of Rialto.** Rancho El Rivino Specific Plan.

**City of Murrieta.** TTM 30953, 42310 "B" Street property.

**City of Chino.** The Englesma Property project.

**County of Riverside.** The Burns Ranch project, TTM 31386, TTM 31330, TTM 29962.

**City of Loma Linda.** Loma Linda Golf Range project.

**City of Desert Hot Springs.** Mission Lakes project, The Mission Glen Project.

**City of Loma Linda.** The Trails at Mission Park project.

**City of Simi Valley.** Runkle Canyon Specific Plan.

**City of Fullerton.** 2226 Euclid Avenue (Sunrise Senior Living) project.

**City of Upland.** The College Park project.

**City of Chino.** Distinguished Homes Project footprint APN# #1055-511-01 and 1055-511-01, McBride RV Storage Property at Kimball and Euclid Avenues.

**City of Riverside.** The KUO Development Project, TTM 32787, TTM 33028 and 33029 (The Kunny Ranch Property).

**County of San Bernardino.** Lytle Creek North Tentative Tract Map (Map #15900), The Martin Ranch Project.

Commercial and residential projects include cultural resource surveys, historic surveys, architectural surveys, Phase 2 testing and Phase 3 data collection at the CEQA and NEPA levels.

**Professional Affiliations**

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Registered Professional Archaeologist (RPA)
- Registered Archaeologist, Orange County



**Kenneth J. Lord, Ph.D., RPA**  
**Director, Natural/Cultural Resources**

**Overview**

- 30 Years Experience
- Doctorate degree, Archaeology – University of Texas, Austin
- Bachelor's degree, Anthropology – University of Pittsburgh

**Kenneth Lord** possesses 30 years of professional experience in the areas of environmental consulting, cultural resources management, and environmental assessment of major transmission and development projects. He has managed multi-disciplinary teams preparing Environmental Impact Studies (EISs) and Environmental Impact Reports (EIRs) that have been used by the Federal Energy Regulatory Commission, US Army Corps of Engineers, and State of California agencies in licensing pipeline projects in California and the western United States. He has been involved in management of the construction/ environmental compliance monitoring associated with a variety of development projects.

Dr. Lord's experience encompasses the reconnaissance, feasibility, and environmental impact aspects of a variety of project types. He is knowledgeable about California's county environmental documentation procedures and regulations, as well as other federal and state environmental laws, regulations, and guidelines. He prepared and supervised the preparation of EIRs, EISs, and Biological Assessments in accordance with NEPA and CEQA rules and regulations.

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**Relevant Project Experience**

**General City/County Consulting**

**Mt. Olympus and Wilderness Gardens Preserves, County of San Diego Department of Parks and Recreation.** Project Manager of multi-disciplinary study of over 1,400 acres of Preserve lands within the North County Multiple Species Conservation Plan. Four different types of reports were prepared: year-long biodiversity reports for Mt. Olympus and Wilderness Gardens, vegetation management reports for both preserves; cultural resources inventory reports for both preserves; and a public access plan for the Mt. Olympus Preserve. All reports will be utilized as the County prepares Resource Management Plans for the Preserves.

**Paleontological Assessment of the Badlands and Lamb Canyon Landfill Expansion, County of Riverside Waste Management.** Conducted surveys of expansion areas in both landfills to determine the presence of paleontological resources and to assess the potential for resources to be encountered during the expansion.

**Santa Ana River Trail, County of Riverside Parks, City of Corona and City of Norco.** Project manager for the preparation of a joint EA/MND for the Santa Ana River Trail segment between Hidden Valley County Park and Prado Dam at SR 71. Primary activities include determining feasible routes through MSHCP lands and areas with substantial biological resources on U.S. Army Corps of Engineers lands.

**Monrovia Nursery Development Project Third Party Review, City of Azusa.** Project Manager of a third party review of a historic architectural resources report for a project for the City of Azusa, located in Los Angeles County, California.

**Phase I Cultural Resources**

**Historic Resource Significance Evaluation Sunny-Cal Milling Facility Redlands, San Bernardino County, California.** Served as project manager and evaluator an historic complex of buildings within the City of Redlands. The series of structures were evaluated for significance and documentation of the structures was completed to satisfy local Historic Commission guidelines.

**Kona Road III Project Cultural Resources Survey, French Valley Area.** Project Manager for a Phase I cultural resources survey and paleontological review of a 4.65-acre property project located in the French Valley Area of unincorporated Riverside County, California, for John Laing Homes.

**Newport Road Project Cultural Resources Assessment, Menifee Area.** Project Manager for a Phase I cultural resources assessment and paleontological records review for a project in the Menifee Area of the County of Riverside, California, for Granite Equities, LLC.

**Taylor-Woodrow Ivy House Project Cultural Resources Assessment, Murrieta.** Project Manager for a Phase I cultural resources assessment and paleontological records review for a project located in Murrieta, Riverside County, California, for Taylor Woodrow Homes.

**Lake Elsinore Property Cultural Resources Report, City of Lake Elsinore.** Project Manager for a Phase I cultural resources report and paleontological records review of 8 parcels totaling 49.57-acres for a project in the City of Lake Elsinore, Riverside County, California, for Dakota Development, LLC.

**Cultural Resources Survey Report, San Jacinto.** Project Manager for a Phase I cultural resources survey report and paleontological records review for tentative tract 33862, a project located in San Jacinto, County of Riverside, California, for JD Pierce Company.

**Pigeon Pass Property Cultural Resources Assessment, Moreno Valley.** Project Manager for a Phase I cultural resources assessment and paleontological records review of 37.8-acres for a project located in Moreno Valley, Riverside County, California, for Pacific Land Company.

**Cultural Resources Assessment, French Valley.** Project Manager for a Phase I cultural resources assessment and paleontological records review of Tract 34150, a project located in French Valley, County of Riverside, California, for Granite Equities, LLC.

**Cultural Resources Survey, Corona.** Project Manager for a Phase I cultural resources survey and paleontological records review for a project located in Corona, California, for Knowlton Communities.

**Menifee Farms Project Cultural Resources Assessment, Menifee Valley.** Project Manager for a Phase I cultural resources assessment, Phase II archaeological test and paleontological records review of a 26.14-acre property for a project located in Menifee Valley, Riverside County, California for Granite Equities, LLC.

**Temecula Lane 2 Property Cultural Resources Assessment, City of Temecula.** Project Manager for a Phase I cultural resources survey for a project located in the City of Temecula, Riverside County, California for DR Horton.

**Ramona Expressway and Alessandro Avenue Project Cultural Resources Assessment, San Jacinto.** Project Manager for a Phase I cultural resources survey and paleontological records review for a project located in San Jacinto, Riverside County, California, for Mr. Cornell Kasbergen.

### **Professional Affiliations**

- Association of Environmental Professionals
- Riverside County Certified Archaeologist #100
- Registered Professional Archaeologist #11821