

FINAL

**Cultural and Paleontological Resources Study for the
Tijuana River Valley Regional Park
Trails and Habitat Restoration Enhancement Project
San Diego County, California**

Prepared for

**County of San Diego
Department of Parks and Recreation**

Prepared by

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USGS 7.5' Quadrangle
Imperial Beach, Calif.-Baja Calif. Norte 1975

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MANAGEMENT SUMMARY/ABSTRACT

Purpose and Scope: SWCA Environmental Consultants (SWCA), as a subconsultant to Van Dyke, LLP, was contracted by the County of San Diego Department of Parks and Recreation (County) to provide cultural resources services in support of the Trails and Habitat Restoration Enhancement Project (Project) for the Tijuana River Valley Regional Park (TRVRP) in San Diego County, California. The research entailed a records and literature search, and survey of selected portions of the Project area for archaeological, historic built environment, and paleontological resources. One historic structure was formally evaluated for significance; however, because the Project (as currently designed) will avoid impacts to known archaeological resources, no archaeological resources were evaluated. General and resource-specific management recommendations are also provided. This report contains two sections: cultural (archaeological and historic built environment) resources and paleontological resources.

Dates of Investigation: The California Historical Resources Information System (CHRIS) records search was conducted on May 6 and 7, 2004. Archival research at the Office of the County Historian, San Diego County Department of Parks and Recreation was conducted on May 20 and August 13, 2004. Archaeological and paleontological surveys were conducted on June 4 and August 3-6, 2004. The historic built environment survey was conducted on August 12 and 13, 2004. Additional pedestrian archaeological survey was conducted on November 11, 2004.

Findings of the Investigation: The records and literature search indicated that 29 previously recorded cultural resources are located entirely within the Project area. In addition, five previously recorded cultural resources are partially within the Project area, three are outside but immediately adjacent to the project area, and 17 are located within 0.25-mile of the Project area. Prior to this study, a total of 43 known cultural resource studies had been previously conducted within one-quarter mile of the Project area, 32 of which are located completely or partially within the Project area. The archaeological survey of selected portions of the TRVRP resulted in the identification and recordation of seven previously unrecorded archaeological resources and the update of records for one previously recorded archaeological site. The historic built environment survey resulted in the recordation of one previously unrecorded historic structure adjacent to one of the survey areas. This historic bridge was formally evaluated and recommended eligible for inclusion on the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP) under Criteria A and C. The paleontological resources survey resulted in the identification and recordation of three fossil localities. The Project is not expected to result in significant impacts to cultural or paleontological resources under the California Environmental Quality Act (CEQA), nor is it expected to result in adverse effects to such resources under the National Historic Preservation Act (NHPA).

Investigation Constraints: The archaeological survey of selected portions of the TRVRP was constrained by several factors, including: numerous historic and prehistoric flood events in the valley that have severely disturbed and/or buried archaeological sites; historic and modern disturbance associated with agriculture, as well as levee, road, and building construction; areas of dense vegetation which restricted access and/or resulted in poor visibility of the ground

surface; and standing water in active, irrigated fields.

Recommendations: The Project has been designed to avoid impacts to all known cultural resources. However, only the proposed Project was assessed by SWCA; no alternatives were analyzed. Furthermore, several specific elements of the Project were not surveyed by SWCA (i.e. Trail Head, Bench, and Signage locations, etc.). SWCA recommends that all Project elements be installed/constructed within areas that have been previously surveyed for cultural resources. Once the Project design has been finalized (and prior to construction), an archaeologist should assess whether the final proposed locations of specific Project elements are located within areas previously surveyed for cultural resources. If so, and the proposed location is not within or immediately adjacent to a known cultural resource, then construction should proceed with an archaeological monitor. If not, the proposed element should be relocated to an area that has been previously surveyed, or the area must be surveyed for cultural resources prior to construction. However, should future projects or changes in Project design involve ground disturbing activities in areas of known cultural resources, those resources should be formally evaluated for eligibility for CRHR/NRHP inclusion in order to determine if Project related impacts/effects would be significant/adverse under CEQA/NHPA.

The archaeologist should also assess whether the final proposed location of each specific Project element is located within or immediately adjacent to known cultural resources. If so, the element in question should be relocated to avoid impacts to potentially significant cultural resources. If the proposed element cannot be relocated, the cultural resource must be formally evaluated for eligibility for inclusion on the CRHR and NRHP, if such an evaluation has not already been conducted. Once the CRHR/NRHP eligibility of the resource has been evaluated, the significance of Project related impacts must be assessed. Mitigation measures may be required to reduce Project related impacts to a less than significant level.

As the Project area is predominantly located within the Tijuana River Valley, the potential for buried prehistoric archaeological deposits is high. SWCA recommends that a qualified archaeologist be retained to monitor all ground disturbing activities within the Project area. Archaeological monitoring should be conducted full-time within 100 feet of known cultural resources; part-time, or “spot-check” monitoring is recommended for ground-disturbing activity in all other portions of the TRVVRP. The archaeological monitor must have the authority to redirect earthmoving construction away from unanticipated discoveries in order to safely evaluate the resources. If previously unrecorded archaeological materials are identified during monitoring, it may be necessary to conduct additional testing to evaluate the finds. If Project personnel discover any previously unknown cultural resources, a qualified archaeologist should be notified immediately to evaluate the significance of the find.

SWCA recommends that all Project elements be installed/constructed within areas that have been previously surveyed for paleontological resources. Once the Project design has been finalized (and prior to construction), a paleontologist should assess whether the final proposed locations of specific Project elements are located within areas previously surveyed for paleontological resources. If so, and the proposed location is not within or immediately adjacent to a known paleontological resource, then construction should proceed with a paleontological monitor. If not, the proposed element should be relocated to an area that has been previously surveyed, or the area must be surveyed for paleontological resources prior to construction.

The paleontologist should also assess whether the final proposed location of each specific Project element is located within or immediately adjacent to known surficial paleontological resources. If so, the surficial paleontological resources to be affected by the Project must be salvaged by a qualified paleontologist prior to construction. In addition, construction should be monitored by a qualified paleontological monitor.

The San Diego Natural History Museum (SDNHM) has assigned the San Diego and Bay Point formations high paleontological resource sensitivity due to their known potential to contain a high density and diversity of fossils. Therefore, it is recommended that full-time paleontological monitoring be conducted in all areas where these rock units will be impacted by future ground disturbance. Because no fossils were found in the Lindavista Formation during the field survey and it has been assigned moderate resource sensitivity by the SDNHM, it is recommended this unit be spot-checked for fossils during ground disturbance. The paleontological monitor must have the authority to redirect earthmoving construction away from unanticipated discoveries in order to safely evaluate the resources.

Disposition of Data: The final report will be filed with the South Coastal Information Center, located at San Diego State University, the San Diego Natural History Museum, and at SWCA Environmental Consultants. All field notes, photographs, and records related to the current study are on file at SWCA's San Diego office.

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SECTION 1. CULTURAL RESOURCES STUDY

1.1 INTRODUCTION

1.1.1 PROJECT SUMMARY

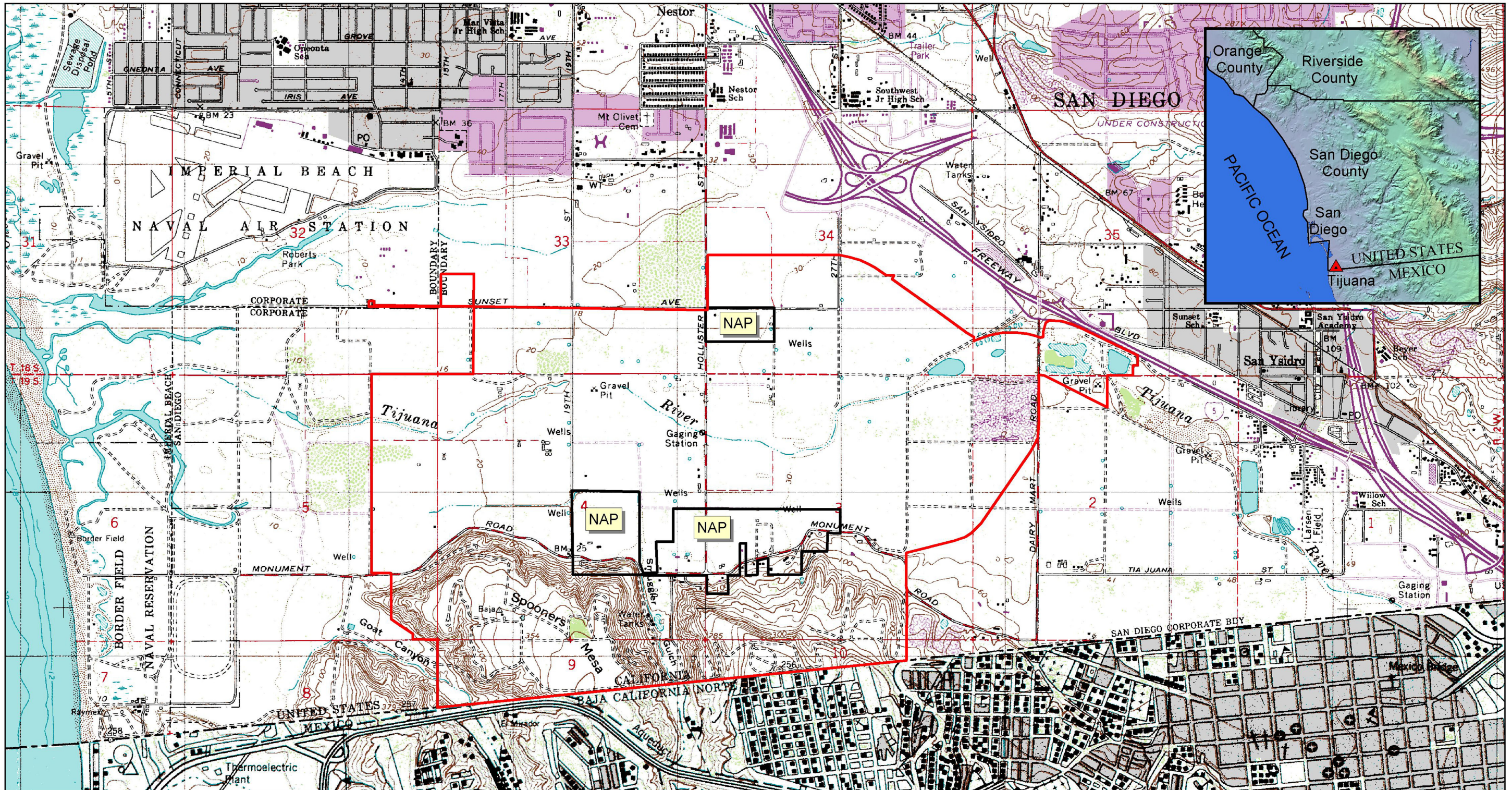
Section 1 documents SWCA Environmental Consultants' (SWCA) cultural resources¹ study for the Tijuana River Valley Regional Park (TRVRP) Trails and Habitat Restoration Enhancement Project (Project). SWCA conducted the following services for the Project: a records search and archival research for the entire TRVRP; Native American consultation; survey of selected portions of the TRVRP for archaeological and historic built environment resources; recordation of previously unrecorded archaeological sites; recordation of built environment resources; formal evaluations of one historic architectural resource; and recommendations for management and mitigation, as appropriate.

The undertaking consists of a trails and habitat restoration enhancement project including California Environmental Quality Act (CEQA) documentation for portions of the approximately 1,800-acre TRVRP. The Project area is depicted in Figure 1.1.1-1. The Project is subject to CEQA and the National Historic Preservation Act (NHPA). This cultural resources study was performed to identify potentially significant cultural resources that could be affected by the Project, assess potential Project related impacts, and provide recommendations for resource management as appropriate.

1.1.2 PERSONNEL

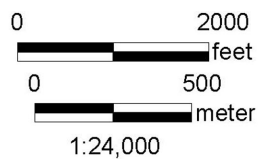
SWCA archaeologist Joan Brown is Principal Investigator for this study. Senior Technical Advisor Susan Hector, of Susan Hector Consulting, prepared portions of this report and participated in portions of the survey. SWCA archaeologist Alex Wesson managed the study, participated in the archaeological and historical surveys, and co-authored this report. SWCA archaeologist Kevin Hunt conducted archival research, directed the archaeological survey and site recordation, and co-authored this report. SWCA historian and architectural historian Jim Steely coauthored this report and conducted the historic architectural and engineering survey. SWCA ethnographer Stephen O'Neil co-authored the ethnography section of the report. SWCA archaeologists Luis Burgos, Matt Tennyson, and Michael Cruz participated in the archaeological survey and site recordation. SWCA archaeologist Jason Miller conducted the California Historical Resources Information System (CHRIS) records search and assisted in the preparation of this report and site records. SWCA Geographic Information Systems (GIS) analysts Rebecca Korinek, Bert McAlpine, Tyson Schreiner, and Jennifer Haessig created all maps and graphics.

¹ For the purposes of this document, the term "cultural resources" refers to archaeological, Native American, and historic built environment resources.



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Map Source: USGS 7.5' Quad:
IMPERIAL BEACH
1967, 1975



- Tijuana River Valley Regional Park Boundary
- Not a Part of Park (NAP)
- ▲ Project Location

Tijuana River Valley Regional Park
Trails and Habitat Restoration
Enhancement Project

Figure 1.1.1-1 Project Location

1.2 SETTING

1.2.1 NATURAL

The study area is located in and along the Tijuana River Valley adjacent to the international border with Mexico in southwestern San Diego County, California (see Figure 1.1.1-1 and Photo 1.2.1-1). The topography ranges from the relatively flat valley floor to the tall mesas to the south. The TRVRP is bordered on the west by Border Field State Park, Tijuana River National Estuarine Research Reserve, Tijuana River National Wildlife Refuge, U.S. Navy lands and City of San Diego lands. The TRVRP extends east nearly to Interstate 5, and to the north is bordered primarily by the City of Imperial Beach and the City of San Diego. The areas surveyed for the Project are predominantly located on the valley floor along both sides of the Tijuana River. Vegetation types present include coastal sage scrub, riparian, active agriculture, and ruderal vegetation.



Photo 1.2.1-1. Overview of the western portion of the TRVRP, from Spooners Mesa facing northwest.

1.2.2 CULTURAL

1.2.2.1 PREHISTORIC

Early archaeological researchers in southern California generally worked in isolation and gave localized names to the various archaeological periods they were studying. The result was a plethora of names for each segment of the archaeological sequence, even though the same broad characteristics could be found over a large region. One of the early researchers in southern California was Malcolm Rogers. An astute and tireless observer, Rogers recorded a large number of sites, completed many excavations and defined cultural periods and characteristics.

His work, beginning in the late 1920s, formed the basis for later archaeological research in the region. In an early paper, Rogers (1929) defined two early cultures in the coastal region, identified as the Shell Midden People and the Scraper-Maker Culture, and decided they had appeared in that order. Later, Rogers (1939, 1945) reversed the order of these manifestations and changed the names to San Dieguito for the older and La Jollan for the younger.² Cultures similar to the San Dieguito were being defined in the areas to the east. Later researchers, seeing the similarities, subsumed all these early cultures into the San Dieguito Complex and, later, the Western Pluvial Lakes Tradition (Wallace 1962, Warren 1968, Bedwell 1970).

Regardless of the terminology, these early sites share certain characteristics. As defined by Moratto (1984: 93) these characteristics are:

1. A tendency for sites to be located on or near the shores of former pluvial lakes and marshes or along old stream channels.
2. Dependence on hunting various animals, fowling, collecting and gathering vegetal products.
3. An absence of ground stone artifacts such as millingstones, hence a presumed lack of hard seeds in the diet.
4. A developed flaked stone industry, marked especially by percussion flaked foliate (leaf shaped) knives or points, Silver Lake and Lake Mojave points, lanceolate bifaces, and points similar to the long stemmed variety from Lind Coulee (Hester 1973).
5. A tool kit commonly including chipped stone crescents, large flake and core scrapers, choppers, scraper planes, hammerstones, several types of cores, drills, gravers, and diverse flakes.

The local type site for definition of the San Dieguito is CA-SDI-149, the C. W. Harris site, located on the San Dieguito River some 15 kilometers from the current coast. Rogers first investigated the site in 1938 and additional excavations were accomplished by Warren and True in 1961. The San Dieguito component of the deposit was interpreted as a series of campsites on gravel bars within the broad river floodplain. Radiocarbon dates established that the occupation occurred between 7430 B.C. and 6140 B.C. Artifacts recovered from the San Dieguito component included ovoid bifaces that may be knife blanks, two forms of leaf shaped knives, a crescent, leaf shaped points, short bladed shouldered points, gravers, choppers, core and pebble hammerstones, cores, and a variety of scrapers. The San Dieguito suite of identifying characteristics, listed above, was originally derived from this data (Warren 1968).

A site revealing another facet of San Dieguito adaptation was excavated by Ezell and Kaldenberg in 1974. This site, SDM-W-49, also referred to as Rancho Park North, Site A, is

² During the last 20 years, the relationship between San Dieguito and later La Jolla sites has been the subject of considerable debate (Bull 1983, 1987; Gallegos et al. 1987; Moriarty 1969; Warren 1985, 1987; Warren et al. 1993). The key issues concern whether San Dieguito sites are chronologically earlier than La Jolla (Archaic) sites; whether early sites really do lack ground stone artifacts; and whether subsequent Archaic sites have a strong bifacial tool characteristic. An alternative interpretation considers San Dieguito and La Jollan sites as simply functional variants of a single culture, with so-called San Dieguito sites representing specialized quarrying or hunting activities (Bull 1987; Gallegos et al. 1987). Many archaeologists now combine the two “traditions” into an Archaic culture, with regional and environmental variants.

located about 3.5 kilometers southwest of Batiquitos Lagoon. The San Dieguito tool kit at SDM-W-49 was quite similar to that from CA-SDI-149 and radiocarbon dates established that occupation occurred between 6410 B.C. and 5970 B.C. The major difference in the two deposits was the presence of large quantities of shellfish remains at SDM-W-49, while very few such remains were present at CA-SDI-149. It is clear that the people near the coast relied heavily on marine resources. The shell midden associated with the San Dieguito component at SDM-W-49 is a meter in depth and was accumulated in only a few hundred years, clearly demonstrating a heavy reliance on marine resources (Kaldenberg 1976).

Both CA-SDI-149 and SDM-W-49 had components related to the next period of the archaeological sequence, known today as the La Jollan. At CA-SDI-149 the San Dieguito component was separated from the La Jollan component by nearly a meter of sterile riverine deposits, but at SDM-W-49 the two components were in direct contact. Radiocarbon dates for the two deposits establish occupation between roughly 4600 B.C. and 2600 B.C. Dating efforts at other sites have extended the La Jollan period from about 5500 B.C. to perhaps as late as 500 B.C. The major change from San Dieguito to La Jollan times was the addition of seed grinding implements to the suite of tools. Such tools indicate that hard seeds were a major part of the diet by La Jollan times. The decreasing emphasis on hunting is seen in the poorer quality and decreased frequency of La Jollan projectile points and other tools related to that activity, in comparison to the earlier San Dieguito.

The La Jolla Complex is recognized by the numerous milling tools found in coastal shell middens and at inland sites with little or no shell. La Jollan sites typically have metates with deep basins, unshaped manos (handheld milling stones), many flaked cobble tools, a few Pinto-style projectile points and infrequent perforated stones. Burials tend to be flexed, head northward and under cairns that frequently contain many broken tools. Some researchers have divided the La Jollan into phases, based on perceived developmental factors. For example, Moriarty (1966) sees three phases:

La Jolla I (5500-3500 B.C.), first appearance of millstones, flexed burials, crude scrapers.

La Jolla II (3500-2000 B.C.), true cemeteries, discoids, expanded projectile point type inventory.

La Jolla III (2000-1000 B.C.), arrival of Yuman cultural influence from the east.

Regardless of such divisions, it is clear that La Jollan adaptations were quite successful, since the basic culture persisted for an extremely long period of time (roughly 5000 years).

One major question related to the change from San Dieguito cultural adaptations to La Jollan is whether the changes resulted from internal development in response to changing environmental conditions or from external influences related to migration into the area from the east. Data related to this question is important to our clear understanding of a critical archaeological period.

The time from the end of the La Jollan period to the appearance of Europeans was a time of complex and ongoing change. Many important cultural traits reached the San Diego region through diffusion from the north and east. It is clear that major migrations of people also had

significant effect on area cultures. Local people also changed their lifestyles, apparently in response to changing environmental conditions.

Probably the most important infused trait was mortar and pestle technology. This technology probably arrived in the San Diego area from the north. The mortar and pestle (when coupled with knowledge of how to leach tannic acid from acorn meal) allowed exploitation of the acorn as a food resource. Since large quantities of acorns were available, and since they could be stored for long periods of time, the impact on local cultures was significant. The emphasis shifted from the immediate coastal regions to upland areas to the east containing the most favored oak species. This shift in emphasis was probably driven in part by changing environmental conditions. The rate of sea level increase had slowed dramatically, and the stable levels meant that lagoons and estuaries began to silt up. The silting seriously degraded resources previously exploited. Thus, the change in emphasis from coastal to inland regions was probably driven not only by the appearance of a new technology, but also by natural degradation of what had been staple resources.

The major intrusion of people into the region is now commonly referred to as the Shoshonean Migration, which extended over at least several centuries. People from the Great Basin area moved into coastal California and either replaced or absorbed the indigenous people. The Shoshoneans did not replace all of the coastal people. Their influence extends northward to about the Los Angeles/Ventura County line (excluding the Chumash) and southward to approximately Agua Hedionda Lagoon.

The late prehistoric people to the north of the current study area are today identified as the San Luis Rey Complex. San Luis Rey people practiced cremation of the dead and used millingstones, bedrock mortars, small triangular points (indicating use of bow and arrow), bone awls, and bone and shell ornaments. Most researchers divide the San Luis Rey into two phases, with the latter phase having pottery, cremation urns, and rock painting (pictographs).

In inland San Diego County cultures now known as the Cuyamaca Complex developed during late prehistoric times. These cultures shared many similarities with the San Luis Rey people, but there were also major differences. A few of these differences are: cemeteries apart from living areas, grave markers, cremations placed in urns, purposely produced mortuary goods, abundant and quite varied ceramics, and a steatite industry. It is thought that the Cuyamaca Complex developed from La Jollan precursors that occupied the area. Clearly, there was influence from areas to the east, and the traits shared with the San Luis Rey Complex probably indicate Shoshonean influence from the north as well. The Cuyamaca Complex people are the apparent precursors of the people living in the San Diego area at the time of arrival of the Spanish.

1.2.2.2 ETHNOGRAPHIC

The Native American people in San Diego County at the time of European contact people were first generally known as the Diegueño, but linguistic studies have led to their separation into two groups, the Northern Diegueño (or Ipai) and the Southern Diegueño (or Tipai, or Kumeyaay)

(Carrico 1987).³ The traditional boundary between these two groups lies north of the study area. This boundary was by no means fixed and it is likely that the distinction between these two groups existed as a gradient rather than a clearly divided and separate cultural and political unit (Bissell 1997, Maxon 1999).

The study area was inhabited by the Kumeyaay (Tipai), who spoke a language broadly designated Diegueño which is a member of the Yuman Language family. The Yuman family of languages is derived from the American southwest while the Takic family can be traced to the Great Basin area (Driver 1969). Linguistic analysis of the Luiseño, Cupeño, Cahuilla and other Takic languages on their northern border has suggested that these speakers settled between the Ipai-Tipai and Chumash some time after 500 B.C. The implication is that the entire southern California coastal region was once filled with these Chumashan and Yuman speakers who were gradually separated and displaced by Takic speaking migrants from the Great Basin area (Kroeber 1925:578-579). The earlier supposition that the Yuman and Chumashan languages both stemmed from a common Hokan language family, however, has been dismissed (Mithun 1999:304). The timing, extent, and impact on local societies with regard to the migration is not well understood and any data related to it represents an important contribution to the understanding of local prehistory.

The Ipai-Tipai inhabited the region along the Pacific coast from central San Diego County, around Agua Hedionda Lagoon, south to a point below Ensenada and Todos Santos Bay in Baja California, Mexico. Their territory stretched inland throughout the Cuyamaca and Laguna Mountains into the Yuha and Anza Borrego deserts of Imperial County. As such, they had access to an extremely varied set of environments from which to draw upon. They also had communication with other Yuman speaking social groups along the Colorado River and into Baja California. Their population was originally estimated at 3,000 as a total, but as Luomala pointed out (1978:596), this figure was derived from Franciscan mission records at San Diego that did not take into account unbaptized persons nor those in Baja California who went to other missions; an estimate of roughly 9,000 people may be more appropriate. The Kumeyaay (Tipai) inhabited the bulk of these lands and therefore accounted for the greater part of the population. The area around the Tijuana and San Diego rivers provided some of the best resources within Kumeyaay lands, supporting large populations in southwestern San Diego County.

Over the past 60 years, recognition of two principal dialects within the San Diego and Baja California region have been identified and this has led to the distinction of the Tipai and the Ipai groups. Kroeber (1925) described the study area inhabitants as "...divided into exogamous patrilineal clans." He further stated that the local clan system was rudimentary, without totemic moieties or names. Kroeber identifies 12 clans in the Ipai area and 13 clans in the Tipai area. Each band or clan was autonomous and had a clan chief and at least one assistant chief. The chief was responsible for the bulk of intra-clan and inter-clan affairs. They directed ceremonies, gave advice about marriages, resolved disputes, hosted visitors, and appointed leaders for expeditions. At that time, the position of chief was hereditary to the eldest son, but could fall to brothers, or in rare cases a widow.

³The term Diegueño has fallen out of favor due to its Spanish origin. This report uses Ipai-Tipai when referring to the group as a whole, and Kumeyaay when referring specifically to the people from southern San Diego County.

The summer camps, though visited each year by the same families and clans, featured structures that did not have to hold up for long periods nor protect against incumbent weather. Therefore only ramadas and windbreaks were common there, sometimes built into trees and rock shelters. When within an oak grove, which was more frequently visited, granaries and more permanent housing would sometimes be built.

Dwellings in the more permanent winter villages were semi-subterranean and oval or circular in shape. They were made of a wooden pole framework covered with brush thatch of grass and earth. The floors were generally dug into the ground, and there were usually two low entrances to the structure, each placed in such a way as to avoid the wind and insulate as much as possible. The main entrance was often gabled, had a mat covering to keep out the wind and insure privacy, and ritually faced the east (Luomala 1978:597). A smoke hole was usually placed near the peak on the east side of the structure.

Other structures in the village consisted of granaries for each family, most frequently platform supported. The village-owned ceremonial enclosure was made of brush, though sometimes a rock wall surrounded ceremonial and dance areas. Occasionally these areas were rectangular or even covered with a brush roof. A semi-circular enclosure was used for the *keruk* mourning ceremony. Sweat lodges existed, but were not used to the degree of the Luiseño to the north.

Winter villages were located in sheltered valleys near reliable sources of water with an entire clan or more present. From here the coastal resources could be gathered – fish, shellfish, migratory birds coming into the estuaries, as well as small game along the mesas and foothills. Small game and seasonal herbs flourished in the valleys and canyons during the winter rainy season. The Ipai-Tipai depended heavily on the acorns that had been gathered during the late summer and stored in the family and village granaries. During the late spring and summer, smaller groups would forage in favored spots, usually at progressively higher elevations as various floral resources ripened. In the early fall, people would move to the mountain oak groves then return to the primary encampment just prior to the onset of winter.

A wide variety of vegetal resources were exploited and most men hunted, but only a select few were big game hunters (Luomala 1978:601). Hunting was highly ritualistic, with the aim of the rituals and observances being to ensure a successful hunt.

The clothing of the Ipai-Tipai was minimal. Men and children went naked for most of the year except for utilitarian belt sashes and pouches designed to hold tools and small game. Robes of rabbit, willow bark, or deerskin were worn in the winter and also served as bedding. Women wore a one or two piece apron made of shredded bark, and a round, twined cap. Sandals woven from agave fibers were worn when traveling distances (Luomala 1978:599). Adornment was simple, but tattoos and pendants of various forms were used. Women had facial tattoos and frequently painted their faces with various red, black, and white designs, but male tattooing and facial painting may not have been common until after the arrival of the Europeans (Luomala 1978:599).

The Ipai-Tipai religion was well developed, but underwent rapid modification during the early

historic era. The modifications resulted from the introduction of toloache customs arriving from the north. *Toloache* was a hallucinogen derived from the Jimson weed (*Datura spp.*) plant and was used in seeking visions or to develop latent skills. Some Shamans were born as such while others were trained. Shamans were involved in many aspects of daily life, including weather control and curing.

1.2.2.3 HISTORIC

1.2.2.3.1 EARLY EXPLORATION, RANCHING, AND SETTLEMENT

The first European presence in the region occurred when Juan Rodríguez Cabrillo, on September 28, 1542, entered the bay that would become San Diego Harbor. Cabrillo, a Portuguese explorer serving Spain, named the bay San Miguel. In 1602, Sebastián Vizcaíno, exploring areas for settlement, renamed the bay, San Diego de Alcalá de HERNANDEZ. In 1769 San Diego harbor was chosen as the base for further exploration of northern California. Gaspar de Portola established a presidio and on July 16, 1769 Father Junipero Serra dedicated Mission San Diego de Alcalá, the first of the Alta California Missions. Unrest among the local Native Americans, the threat of foreign invasion, and political dissatisfaction kept growth to a minimum until Mexico gained freedom from Spain in 1822. Only then did development occur beyond the walls of the presidio in the area now known as Old Town. The Mexican Period (1822-1848) is largely identified with the Ranchos acquired by individuals through the land grant system. San Diego was organized as a pueblo in 1834.

As a result of the Mexican American War in 1846-1848, California officially became a part of the United States at the signing of the Treaty of Guadalupe Hidalgo in 1848. California gained statehood in 1850, the same year San Diego was incorporated. The charter of incorporation was lost two years later, however, due to a lack of growth. Alonzo E. Horton arrived in 1867, purchased land adjacent to the bay about six kilometers south of Old Town and laid out a town site. Within a few years San Diego became the largest California city south of Los Angeles and has remained so to the present day. The city was incorporated in 1872. The rapid development was aided by the arrival of the Atchison, Topeka & Santa Fe Railroad (as its California Southern Railroad subsidiary) in 1884. Development has been steady since Horton's time. The harbor became the site for a U.S. Navy base in 1898 and San Diego County became host to several major naval installations. Combined with the mild climate, this strong military presence attracted numerous aircraft manufacturers in the 1930s and into the 1950s. After World War II, many personnel that had been stationed in San Diego returned to the area with their families.

In 1769, the first written descriptions of the Tijuana River Valley were provided by Father Juan Crespi and Father Junipero Serra, who both arrived from the south in separate Spanish overland expeditions. Father Crespi, who likely entered the valley near present day Goat Canyon (Crosby 2003), described "a large plain of good land with much green grass. We stopped near the village, where we had good water and pasture for the animals. Although firewood is scarce, the mountains, which are not far off, have it in abundance (Crespi 1927)." Crespi mentioned "a populous village" adjacent to which his expedition spent the night. Father Serra also described seeing a "thickly populated" village while heading north to "another hamlet some leagues farther (Serra 1955)." Both of these accounts are believed to describe the village known by the name

Milejo (or Melijo, Millejo, Melejo, Milijo, and possibly even Mel-lajo cerca de la Santo Domingo), which purportedly means “meadow at the orifice of the hose (Shipek 1976).” This Kumeyaay village was inhabited until approximately 1850, and is now believed to have been swept away or buried under tons of silt deposited by various floods of the Tijuana River Valley (Shipek 1976).

With the dedication of Mission San Diego de Alcalá in 1769, much of the nearby Tijuana River Valley was used for grazing cattle for the mission. Grazing resulted in the loss of land by the local Kumeyaay, which negatively impacted their traditional subsistence strategies (Carrico 1987). Many of the native inhabitants of the valley worked for the missions. This continued to be the case during the Mexican Period until 1834, when the secularization of the missions led to the increased privatization of land and development of ranchos, which additionally impacted the Kumeyaay living in the Tijuana River Valley.

During the Mexican Period, three ranchos occupied the Tijuana River Valley (Rush 1958). The largest of these was Rancho Ti Juan (or Tijuán or Tijuana), a 26,000-acre rancho granted to Santiago Arguello on March 24, 1829, by Governor Jose Maria Echeandia. The other ranchos were Rancho Jesus Maria, a vineyard operated by winemaker Don Jose Lopez, and Rancho de San Ysidro, which was operated by Juan Ybarra.⁴ In 1837, Native Americans raided the three ranchos resulting in the burning of two ranchos and the deaths of several people. Among the dead were Señor Ybarra and two hired hands at Rancho de San Ysidro. Señor Ybarra’s two grown daughters were taken captive to the mountains and it is uncertain what became of them.⁵ In 1833, Santiago Emilio Arguello, son of Santiago Arguello, was granted Rancho Milijo by Governor Jose Figueroa. This rancho, which eventually came to be known as Rancho La Punta, included over thirty square miles in the areas now known as Otay, Palm City, Nestor, and San Ysidro (Rojas 1992). A large adobe was built on this rancho in 1834 or 1835 near the southern terminus of San Diego Bay and the location of this adobe is visible on A.B. Gray’s 1850 Sketch of the Port of San Diego.

The Treaty of Guadalupe Hidalgo, which ended the war between Mexico and the United States in 1848, resulted in Rancho Ti Juan being divided by the international border. The initial boundary monument at the SW corner of the United States was erected on June 16, 1851, and an 1856 boundary survey formalized the boundary between the United States and Mexico. A patent for Rancho La Punta, including the U.S. portion of Rancho Ti Juan, was received by the Arguello heirs in 1876. However, the land became subject to squatter problems and the land was never recovered. The portion of Rancho Ti Juan on the Mexican side of the border was also the subject of ownership disputes, which led to a long series of legal battles. Ultimately the Arguello family lost their claim, and the city of Tijuana developed on the former Rancho land.

On the U.S. side of the border, population and land booms that started in 1869 with Horton’s purchase and subsequent development of New Town (San Diego) affected the Tijuana River Valley area. Much of the large tracts of land from the ranchos were divided and subdivided. The Great Drought of 1862-1864 heavily damaged the ranching industry in the Tijuana River

⁴ There is some disagreement here. Pourade’s account (1963, p.67) has Jose Lopez operating Rancho San Ysidro.

⁵ Again, Pourade has a similar but not identical story (1963, p.30).

Valley (Rawls 1984). Droughts combined with the “no fence” law of 1872, which held ranchers responsible for cattle that destroyed crops, further promoted the valley’s change from large-scale ranching to smaller-scale agriculture.

In 1869, Monument School, the first public school in California and named for the nearby international boundary monument, was built in the Tijuana River Valley just southeast of the intersection of Monument Road and Hollister Road. The town of Monument City or International City was reported to have been in the current location of Border Field State Park; the streets had both Spanish and English names (Painter 1985: 5). Painter (1985: 5) cited several sources that stated the town had a brief, disreputable existence, and was destroyed during the flood of 1891. No town is shown in that location on the San Diego 1904 topographic quadrangle.

As with the rest of San Diego, the far end of the south bay experienced a boom period in the 1880s. Several small towns, some of which survive today as place names (e.g., Nestor), were established around San Diego Bay; most of these were based on the anticipated development of Otay Mesa and Otay Valley as a major agricultural and residential area (Painter 1985: 1). The town of Oneonta was located three miles south of San Diego Bay, near the end of the National City and Otay Railroad (Painter 1985: 3) and was advertised as “the loveliest and healthiest place in Southern California” (advertisement in 27 July, 1888 San Diego Union). The post office for this 450-acre tract, located in the area of the present day Imperial Beach Naval Air Station, was established in 1889 but was closed when the Nestor Post Office was established (W.D. 1935). The present Oneonta Slough of the Tijuana River is named for this town site.

At the close of the nineteenth century, the economies and futures of the cities of San Diego and Tijuana were intertwined. The Tijuana River Valley was bound economically and geographically to these growing cities. “At the same time,” noted recent investigators Jackson Underwood and Carrie Gregory, “National City, Chula Vista, Otay, Sweetwater River Valley, Nestor, and the Tijuana River Valley were producing large crops of citrus and other farm produce” (Underwood and Gregory 2003:10). The fertile but flood-prone valley’s position on the border also attracted people outside of the mainstream. One such group of people was the Little Landers Colony. Started in 1908 by San Diego developer William E. Smythe, in the present day location of San Ysidro, the Little Landers Colony was established as a communally organized town based on self-sustaining agriculture (Ramírez and Paris 2000). Dams that aided the colony and many other settlers on the Tijuana River drainage, Morena Dam (1912) and Barrett Dam (1922) on Cottonwood Creek, “were built for water storage, not flood control, [and] gave a false sense of security” (National Science Foundation 2004). Indeed, a 1916 flood destroyed most of the Little Landers Colony buildings and led to abandonment of the community and its goals.

1.2.2.3.2 AGRICULTURE AND FLOOD CONTROL, 1916-1967

The 1916 San Diego floods dramatically emphasized the nature of California’s typical coastal drainages, as most are relatively short and thus have low containment capacity during major storms. The heavy local rains that year are known in some chronicles as the Hatfield Flood, named for Charles Mallory Hatfield, a rainmaker brought to San Diego in December 1915 to

relieve perceived drought conditions. The infamous rains of January 1916 broke all informal records in the memories of local residents. “Reliable records for the San Diego River exist only from 1912, for most other streams only from the 1920s or 1930s” (National Science Foundation 2004).

Real tragedy developed on the 18th [of January 1916] in the valley of the Tijuana River, a little north of the international border. There, some 40 families, 100 persons or more, constituted a colony known as the Little Landers.... The river left its channel and overflowed the Little Landers' homes and gardens. It cut a new channel and not only destroyed many of the homes but also literally carried the land away. Two women were drowned [Patterson 1970].

Throughout San Diego, the 1916 floods “breached dams, severed all transportation arteries, and took several lives among the handful of floodplain settlers that existed at that time.” The recovery in the agriculture-based drainages took years, including rebuilding Otay Dam whose breach caused much of the damage elsewhere in San Diego (National Science Foundation 2004). Yet “one year after the most severe flood recorded to date, the *San Diego Union* (1917:16) reported on the profitability of sugar beet farming in the valley” (Dedina 1991:57).

San Diego in the late 1910s experienced an urban boom highlighted by the Panama-California Exposition of 1915 through 1916, its ambitious rivalry with the growing port city of Los Angeles, and a rapidly blossoming relationship with the U.S. Navy following completion of the Panama Canal. During the booming port-based economy of World War I, and in an era when most food products still originated on farms close to urban populations, prospects for recovering Tijuana River farmlands were excellent. Also during the war, the Navy “utilized the western portion of the valley [eventually Border Field, and now Border Field State Park] since 1917 as an airfield, gunnery range, and auxiliary training base,” according to geography researcher Serge Dedina. “Fortifications were constructed after World War I in the southwest corner of the valley [near the 1851 Initial Point monument] to defend against potential enemy attack from Mexico and the Pacific Ocean” (Dedina 1991:56-57).

In the meantime, however, the valley’s fastest growing human activity resulted from the emergence of Tijuana, Mexico, as a destination for multiple pleasures not legal in San Diego proper. The new horse racetrack, on Spooner’s Mesa in Mexico just south of the valley, also recovered after heavy damage from the 1916 flood and drew large American crowds to the small border town. Tijuana’s original town plat closely hugged the international crossing of the San Diego & Arizona Eastern Railway (after 1932 part of the Southern Pacific Railroad), completed in 1919 southeast of San Ysidro and winding easterly through Mexico back into California’s Imperial Valley (Metropolitan Transit Development Board 2004). Following national enforcement of alcoholic-beverage prohibition in the U.S. after 1919, Tijuana posted a 1921 population of 1,028, just as its racetrack accompanied new development west of town toward the Pacific beach (Flores 1983).

In the 1920s, automobile owners could easily—in dry weather—avoid the train and drive straight south from San Diego along the Hollister Street alignment through the Tijuana River Valley. Traversing a short jog west around the one-room schoolhouse on Monument Road, drivers could

rise through Smuggler's Gulch to the mesa crest and into Mexico where alcohol, gambling, racehorses, and prostitutes awaited. Maps of the period indicate that Hollister developed along the north-south section line between Sections 33 and 34, providing access to and from San Diego and adjacent southern developments for valley farmers, visitors to the small park around the 1851 Initial Point international boundary marker, and *touristas* from both sides of the border.

An 1849 map of the international boundary area indicated thoroughfares between San Diego and Mexico through the west Tijuana River Valley—initially hugging low terrain along the beach—and east—following the later rail and main highway route into to Tijuana (U.S. Commission 1849). But maps as early as 1872 (Wheeler & Co. 1872) indicated the (later named) Hollister Street alignment in use, and a connecting unimproved road rising south through Smuggler's Gulch as late as 1943 (USGS 1943) as an active vehicular entry into Mexico.

Agriculture in the Tijuana River Valley, less dramatic than commercial destinations south of the border, regained success through the 1920s, and took its place as a major produce supplier to San Diego and neighboring communities. "Agricultural activity in the Tijuana River Valley recovered from the [1916] flood," wrote Underwood and Gregory (2003:10), "but began to decline by the 1930s." This ironic drop in rural productivity during continued growth of the San Diego urban population probably resulted from mounting competition elsewhere. By the mid 1930s, San Diego enjoyed a sophisticated transportation system by ship, rail, and highway. Other California and Latin American produce areas could prevail with volume production and low shipping costs over the small truck farms of Tijuana River Valley, especially after prices dropped more and more during the Great Depression after 1930.

The national economic crisis brought another colony of sorts to the valley, as "a collection of shacks known as "Depression Town" at the mouth of the Tijuana estuary. This unfortunate village, as had Little Landers in 1916, washed away in a 1939 storm that focused the entire Tijuana River drainage into the narrow estuary (Dedina 1991:56). As the United States moved from Depression to war preparation in the late 1930s, the San Diego economy grew even larger while the Tijuana River Valley responded through more non-agricultural changes. "The military [sic: the Navy] had a presence in the Tijuana River Valley," Underwood and Gregory noted (2003:10), "with Naval training at both Ream Field and Border Field," the former at the valley's northwest elevations south of Imperial Beach, and the latter along the beach between the river's mouth and the Initial Point international marker's surrounding high-terrace park.

By the mid 1940s with the worldly distractions and domestic economic rewards of World War II, severe weather in San Diego seemed ancient history. Wartime cooperation with Mexico and California's bordering communities—Tijuana's census registered 16,486 residents in 1940—and concern over past and future flooding inspired a U.S.-Mexico treaty in 1944 for joint regulation of Colorado and Tijuana River drainages (International Boundary Water Commission [IBWC] 2004, Dedina 1991:58). Nevertheless, "rapid urbanization of [all San Diego] county...brought in hundreds of thousands of new residents, many of whom [were] unfamiliar with the nature of either runoff in arid regions in general or its history in San Diego in particular," summarizes a National Science Foundation (2004) report on Southern California floods.

As a result, many people have disbelieved the "tales of the old-timers," and viewed the negligible urban runoff in the streams in summer as the norm.... All of these faulty perceptions were compounded by a dry period from 1946 to around 1965, and a nearly average rainfall period from 1965 to 1978 [National Science Foundation 2004].

Under these favorable conditions, farms in the valley and regional neighbors reached perhaps their peaks of productivity in the 1950s. The Hollister Street bridge, an 800-foot-long wood-pile, wood-deck viaduct over the Tijuana River, received a major repair and upgrade in 1953, indicating both heavy traffic and needed attention from government maintainers (Caltrans 2004b). "Crop Estimates Rise, Rains Improve Celery Prospects," reported the *San Diego Union* (1957) in January 1957. "Osborne Farms, Tia Juana River Valley, Emil Ghio, Partner," the newspaper explained, contributed to a \$3 million celery crop from San Diego County that year. "In 1957 about 50 percent of the [Tijuana River] valley was under cultivation in fruits and vegetables and forage crops" (IBWC, U.S. Section 1976).

During the same period, all around the Tijuana River Valley bumper crops made headlines: Mission olives from National Ranch and tomatoes from Chula Vista in 1959; cucumbers from Otay in 1962. Unfortunately, unregulated depletion of one of the Tijuana River Valley's best resources, fresh groundwater, caused a growing number of localized problems. "Saltwater intrusion into the groundwater table due to excessive pumping and the lack of recharge from drought," summarized geographer Dedina, "restricted agriculture to the central and eastern [away from the western] portions of the valley." (Dedina 1991:56)

By 1960 Mexico, ever more dependent on connections to water purification plants in neighboring U.S. cities and watching its border towns sprawl into dangerous floodplains, pushed for implementation of the 1944 water treaty provisions. "In the case of the Tijuana River, adequate flood control measures in Tijuana could not be implemented without the participation of the U.S. who would be receiving upstream waters" (Dedina 1991:57). San Diego also showed interest at the same time in benefits of such a project, but now with a distinct emphasis on decidedly non-agricultural development in the valley, including an upscale yacht marina at the river's entry into the Pacific Ocean.

The City of San Diego requested federal funding to study flood problems in the river valley in 1960. The U.S. Army Corps of Engineers, which conducted the study, recommended channelization of the river. In 1966, Congress passed legislation approving the TFCP [Tijuana Flood Control Project]. The majority of funding for the channel was to be provided by the federal government, with the City of San Diego and the State of California providing approximately 20% of the \$30 million construction costs. The International Boundary and Water Commission [IBWC] formally approved the TFCP in 1967. The channel would extend the length of the valley floor to the Pacific Ocean and permit the valley to be opened up for "...urgently needed commercial, industrial, and residential development..." (Dedina 1991:58)

1.2.2.3.3 DRAMATIC LAND AND USE CHANGES AFTER 1967

Decline in successful farming and the business-inspired U.S. flood-control component caused valley-wide land speculation along the Tijuana River. “By 1965, primarily because of saline soil and ground water conditions, only 30 percent of the valley was under cultivation” (IBWC, U.S. Section 1976). “By 1972 all but 200 acres of the floodplain were owned by investment groups, developers and land speculators,” chronicles Dedina (1991:74). Meanwhile, Mexico moved relatively quickly with its part of Tijuana River flood control, and by 1976 completed a \$48 million 2.7 mile (4.3 kilometer) concrete channelization of the river in Mexico (*San Diego Evening Tribune* 1972). The timing of this unbalanced accomplishment, and a growing reluctance in San Diego and California to construct the connecting U.S. channel of 6 miles (9.7 kilometers) extension through the valley to the ocean, coincided perfectly with the most severe storm to hit Baja California and San Diego Bay since 1916 (IBWC 2004).

Hurricane Kathleen brought the southwest the highest sustained winds ever associated with an eastern Pacific tropical cyclone with sustained winds of 57 mph at Yuma on the 10th. Six to 12 inches of rainfall was observed in the central and southern mountains of southern California on the 10th and 11th. Most of Ocotillo, California was destroyed by flooding and three persons drowned (Williams 2004).

Heavy “el Niño” rains, as now understood by meteorologists, continued for the next two years. “They had come before but had done relatively little damage because, as noted earlier, floodplains had been largely left alone or used for agriculture,” explained the National Science Foundation study of regional flooding.

None had received the massive channelization common on rivers in the Los Angeles Basin. Local planners also were unsure of what to plan for because of the short period of accurate runoff records. Even though 50 to 70 years of records are available, streams of this nature make it difficult to calculate the probable magnitude of a 100-year flood. To underscore the uncertainty factor, in 1976 the estimated 100-year flood size for the San Diego River was recalculated and reduced by the COE [U.S. Army Corps of Engineers] by 50 percent (National Science Foundation 2004).

The resulting damage transformed the landscape-again; before the 1976 flood about 20 percent of the valley, 950 acres, supported saline-resistant crops, plus about 1,000 acres offered grazing for dairy cattle and horses (IBWC, U.S. Section 1976). The latest calamity inspired stronger opposition to the channelization project, now based upon the tremendous costs of repairs and rebuilding there and elsewhere. “The ability of politicians,” wrote Dedina (1991:75), “to justify their opposition to the river valley development due to economic considerations was one of the deciding factors in the eventual preservation of the area.” Indeed, by 1977 the Corps of Engineers redesigned the U.S. part of the project as a “stilling basin configuration” that combines stone-lined surfaces in high-velocity areas with broadly spaced levees downstream and floodplain vegetation to lower velocity. The re-christened International Tijuana River Flood Control Project (ITRFCP) “was completed in 1979,” according to the International Boundary & Water Commission (IBWC 2004).

The channel and bordering levees were constructed pursuant to jointly approved

design criteria and plans to contain a flood of 135,000 cfs (3,823 cms). The levees in the United States tie into high ground on the north to protect the community of San Ysidro and on the south to protect the City of Tijuana.

In 1980 the project safely carried through its structures the highest flood flows in the Tijuana River since at least 1916, averting within the limits of the project property damage and probably life in the United States and Mexico [IBWC 2004].

Developer-package investments in the valley during the 1960s and 1970s, anticipating extensive commercial and residential development after complete canalization of the Tijuana River, all but erased the historic family farm in the valley. Gone were family-farm names such as Gomez, Parma, Satterlee, Spooner, Trussel, Vasquez, and Williams, whose children attended the long-gone one-room Monument School (Manley 1993:3-5).

But the accumulation by investors of large tracts of now-useless development land offered cooperating governments the opportunity to acquire large tracts themselves for estuary preservation. After designation of the Tijuana River Valley as a National Estuarine Sanctuary in 1986 by the National Oceanographic and Atmospheric Administration (NOAA), the U.S. Fish & Wildlife Service, California Department of Parks and Recreation, County of San Diego (County), and City of San Diego agreed to joint acquisition and management of assembled lands. In conjunction with the estuary-focused Border Field State Park—the former bombing range in the west valley—the County “is in the process of purchasing land in the eastern half of the valley in order to create a regional park that would integrate passive recreation, agricultural production, and ecological protection and restoration” (Dedina 1991:76).

As Dedina indicated, growing economic and environmental awareness, a major change in the flood-control project design, and the flooding of 1980 contributed to “the eventual preservation” of the valley. Unfortunately, manmade and natural disasters continue to damage the floodplain and its surviving natural and cultural resources. In the 1990s, an effort to utilize County lands in the valley for “vericomposting” urban waste led to the illegal dumping of 190,000 cubic yards of tires, concrete, wood debris, and other materials over 55 acres. Before the County Department of Parks and Recreation closed the operation, tons of debris lined levees, blocked roads, and littered acres of land throughout the valley. Estimated costs of cleanup ranged upward from a half million dollars (California Integrated Waste Management Board 2004).

Most recently, another powerful flood in 1993 moved the Tijuana River from its existing channel under the Hollister Street bridge north several hundred feet, carving a new channel through the road’s solid embankment. The 1953-rebuilt, 800-foot-long, wooden Hollister Street Bridge remained intact and continued to ford the floodplain and the old river channel now serving as a relief channel. In response, the California Department of Transportation (Caltrans) provided a Bailey Bridge—a World War II-design, portable, telescoping, temporary truss bridge—to span the gap in Hollister Street until construction in 1996 of a new concrete-pier, concrete-deck structure over the new river channel (Rosen 1996).

1.2.2.3.4 BASIS FOR FURTHER RESEARCH

Current Project limitations confined historic property investigation to historic-age resources on or adjacent to (within the Area of Potential Effects) particular isolated land parcels under current study for trails and habitat restoration enhancement in the Tijuana River Valley Regional Park. A number of previous studies have evaluated prehistoric and historic properties throughout the valley, but without a fully developed Historic Context for this cultural landscape. A contextual framework was developed (above) to evaluate the single newly recorded historic-age property (Hollister Street Bridge) identified during the current Project. However, additional research is essential for further evaluation of historic-period Tijuana River Valley lifeways, and associated significance of the cultural landscape and its physical resources. As the Regional Park grows and offers educational context to its visitors, a coherent history of the valley is vital. Holistic interpretation will provide all park visitors and area residents with an understanding of this landscape that evolved through an intriguing mix of private and public ventures, all shaped by geography, weather, commerce, and international relations.

Suggested future research issues and questions include:

- Flood dates (exact days) and statistics (late nineteenth century to present) are needed in one database to chronicle major episodes, which profoundly and continuously influenced land-use patterns in the valley.
- Flood-control structures (berms, channels, drainage structures, etc.) throughout the valley should be charted for dates, origins, designers, financing, and influence on land-use patterns.
- The infamous "green dump" scam of the 1990s should be chronicled and detailed to explain its physical damage to the valley, resulting changes in land use, and presence of enormous volumes of trash materials in berms throughout the floodplain.
- City of San Diego annexation of the valley should be documented for dates, subsequent planning efforts, and political influences on land-use patterns.
- The 1960s Tijuana Flood Control Project should be documented for: dates of various studies, reports, and construction projects; political origins and influences; resulting land ownership changes and corresponding land-use changes; adaptation of original plan into later construction design and execution; etc.
- How much vehicular traffic did Hollister Street facilitate to Mexico in the early to mid twentieth century, through Smugglers Gulch to the Tijuana Racetrack and other destinations?
- What were the historic land management patterns—sizes of farm parcels, sizes of individual farming families, ethnic origins of landowners, number and origin of additional workers, crops and annual statistics, etc.—during the most successful farming era(s) in the valley?
- When and how did the Regional Park idea appear and evolve into a land-management solution for this dynamic landscape that is now shifting from private farming to a public nature preserve?

1.3 METHODS

To better understand past human activities within the TRVRP, SWCA utilized a variety of methods to acquire information. These include reviewing previous studies and historical archives, contacting Native Americans to check for known sacred lands, and conducting field surveys for archaeological and historic architectural resources. In addition to identifying cultural resources, SWCA also formally evaluated one historic architectural resource for eligibility for inclusion on the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP). The methods employed in each line of inquiry are described individually below.

1.3.1 CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM (CHRIS)

SWCA conducted a review of the California Historical Resources Information System (CHRIS) records housed at the South Coastal Information Center (SCIC), at San Diego State University (SDSU) on May 6 and 7, 2004. The records search area included the TRVRP and a 0.25-mile radius around the park boundary. The search included a review of all recorded historic and prehistoric archaeological sites as well as a review of all cultural resources survey and excavation reports filed with the SCIC. The GeoFinder Historical Resource Database, which consolidates various lists of historic architectural resources, was also consulted. Information Center sources reviewed include:

- Information Center's historical resources files (site records).
- *National Register of Historic Places* (NRHP) (US. Dept. of the Interior, National Parks Service, Office of Archaeology and Historic Preservation 1997).
- *California State Historic Resources Inventory* (HRI).
- *California Points of Historical Interest* (California Department of Parks and Recreation 1992).
- *California Historical Landmarks* (California Department of Parks and Recreation 1990).
- USGS Quadrangles: *San Diego* 1872, *San Ysidro* 1943, *Imperial Beach* 1953, *Imperial Beach, Calif.-Baja Calif. Norte* 1967, Photorevised 1975.
- Geofinder Historical Resource Database.

1.3.2 NATIVE AMERICAN CONSULTATION

SWCA contacted the California Native American Heritage Commission (NAHC) on May 28, 2004 requesting identification by the NAHC of any areas or geographic features in the Project area that are listed within the NAHC's Sacred Lands File. SWCA also requested that the NAHC provide a list of Native American groups or individuals listed by the NAHC for San Diego County. Eight NAHC-listed individuals were contacted by SWCA by mail and phone on June 11 and November 10 and 15, 2004, requesting additional information regarding sacred sites and/or traditional cultural properties (TCPs) within the TRVRP.

1.3.3 ARCHIVAL RESEARCH

On May 20, 2004, SWCA archaeologist Kevin Hunt conducted archival research at the office of the San Diego County Historian, Department of Parks and Recreation. County Historian Dr. Lynne Christenson was consulted and materials that were pertinent to the Project area were reviewed.

On August 13, 2004, SWCA architectural historian James Steely visited the research library of the San Diego Historical Society. Their collection holds a number of government reports (U.S. Army Corps of Engineers, International Boundary and Water Commission, etc.), a university study (for the regional park and wetlands), a master's thesis (land-use analysis), newspaper clippings (covering the 1960s-1980s channelization plan), and photographs (including a number of historic aerial images) on the Tijuana River basin in the United States and Mexico.

Historic aerial photographs of the Project area were obtained from the Fairchild Aerial Photograph Collection at Whittier College. Specifically, photographs from 1957 were examined to determine if any existing buildings or structures located within the specific survey areas were historic (i.e. over 45 years of age).

1.3.4 ARCHAEOLOGICAL FIELD SURVEY

SWCA archaeologists used the results of the CHRIS records search and supplemental research to determine which portions of the TRVRP had previously been surveyed within the past ten years (see Figure 1.3.4-1) and where cultural resources had previously been recorded (see Figure 1.3.4-2). Van Dyke, LLP and SWCA identified the portions of the TRVRP to be surveyed by comparing areas potentially subject to Project related ground disturbing activity with areas that had not been surveyed for cultural resources within the last ten years.

1.3.4.1 AREAS SURVEYED FOR CULTURAL RESOURCES BY SWCA

The portions of the TRVRP surveyed for cultural resources were located entirely within the Tijuana River Valley and its floodplain. The terrain was predominantly flat with vegetation varying from planted agricultural fields to riparian zones. The portions of the TRVRP surveyed for the current Project include the following areas⁶:

- 1) Community Garden Area (includes one Future Habitat Restoration area);
- 2) West of Dairy Mart Ponds Proposed Habitat Restoration Area;
- 3) Fallow Agriculture Areas;
- 4) Active Agriculture Areas;
- 5) Proposed Recreational Trail Bridge and New Trail Segment;

⁶In addition to the areas listed, SWCA archaeologist Alex Wesson inspected several pitfall trapping arrays for cultural resources on June 4, 2004, both within the valley and in the highlands to the south. The pitfall trapping arrays, located at different locations throughout the TRVRP, had been previously installed without prior survey for cultural resources. The total area surveyed at these areas amounted to less than one acre. No cultural resources were observed during SWCA's inspection.

- 6) Proposed New Trail Segment (Tomato Trail); and
- 7) Additional Areas Surveyed (subsequently dropped from the Project).

SWCA archaeologists Alex Wesson, Kevin Hunt, Luis Burgos, Matt Tennyson, and Michael Cruz conducted a cultural resources survey of approximately 240 acres of land within the approximately 1,800-acre TRVRP on August 3 -6, 2004 (see Figure 1.3.4-3). The survey was conducted using parallel transects spaced 10-15 meters apart and utilizing compasses and a handheld Global Positioning System (GPS) unit to maintain transect accuracy. These areas had not been previously surveyed for cultural resources in the last ten years and are within areas of the TRVRP that were considered to be potentially affected by the Project at that time, per Van Dyke LLP.

Small portions of several of the survey areas were not investigated due to extremely dense vegetation, which severely limited access and ground visibility (see Results Section). The proposed new trail segments listed above and a revised location for the proposed recreational trail bridge were surveyed by SWCA archaeologists Alex Wesson and Kevin Hunt with senior technical advisor Susan Hector on November 11, 2004.

All cultural resources encountered during the survey were formally recorded. Recordation consisted of locating each resource using a handheld GPS unit, measuring and defining site boundaries based on the surface expression, photographing and sketching the site, and creating detailed descriptions of each site and its elements. No artifacts were collected during the survey.

1.3.4.2 AREAS NOT SURVEYED FOR CULTURAL RESOURCES BY SWCA

Due to limitations in SWCA's scope of work and revisions in Project design subsequent to the completion of survey work, several project components located in areas not surveyed for cultural resources within the past ten years were not surveyed for the Project. With the exception of Project components that are proposed for locations within the survey areas listed above, proposed Project components not surveyed by SWCA include:

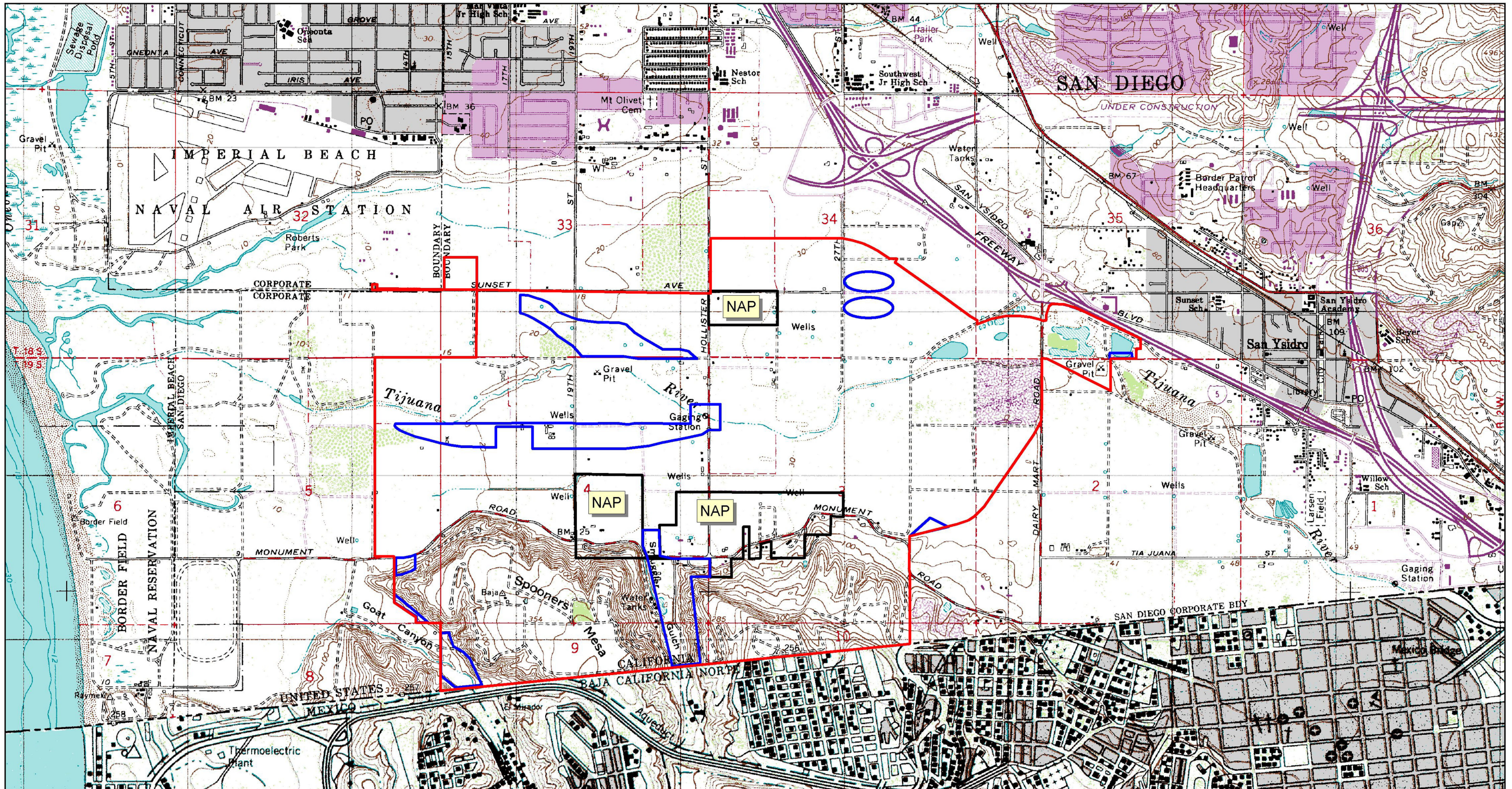
- 1) Existing trails;
- 2) Trail Heads (includes sign with map, hitching post, bike rack, and bench);
- 3) Interpretive Signage;
- 4) Hitching Posts and Bike Racks;
- 5) Benches;
- 6) Bird Observation Blinds;
- 7) Directional Signage;
- 8) Staging Area;
- 9) Corral; and
- 10) Street Crossing with Stop Signs.

In addition, the Future Habitat Restoration areas were not surveyed, with the exception of one such area located in the northwestern portion of the existing Community Garden area.

1.3.4.3 AREAS NEVER SURVEYED FOR CULTURAL RESOURCES

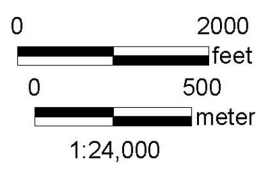
In addition, some Project components are located in areas that, based on the CHRIS records search and supplemental research, have never been surveyed for cultural resources. According to the latest Project design received from Van Dyke LLP on November 23, 2004, the following proposed Project elements are located in areas that have never been surveyed for cultural resources:

- 1) Several existing trails proposed for continued use in the northwestern portion of the TRVRP;
- 2) Westernmost proposed Bird Observation Blind and adjacent bench, interpretative signage, and directional signage;
- 3) Proposed Trail Head (sign with map, hitching post, bike rack, and bench) and interpretive signage at existing Central Staging Area;
- 4) Westernmost proposed Trail Head (sign with map, hitching post, bike rack, and bench); and
- 5) Two proposed Directional Signage locations south of Proposed Recreational Trail Bridge.



SWCA
ENVIRONMENTAL CONSULTANTS

Map Source: USGS 7.5' Quad:
IMPERIAL BEACH
1967, 1975



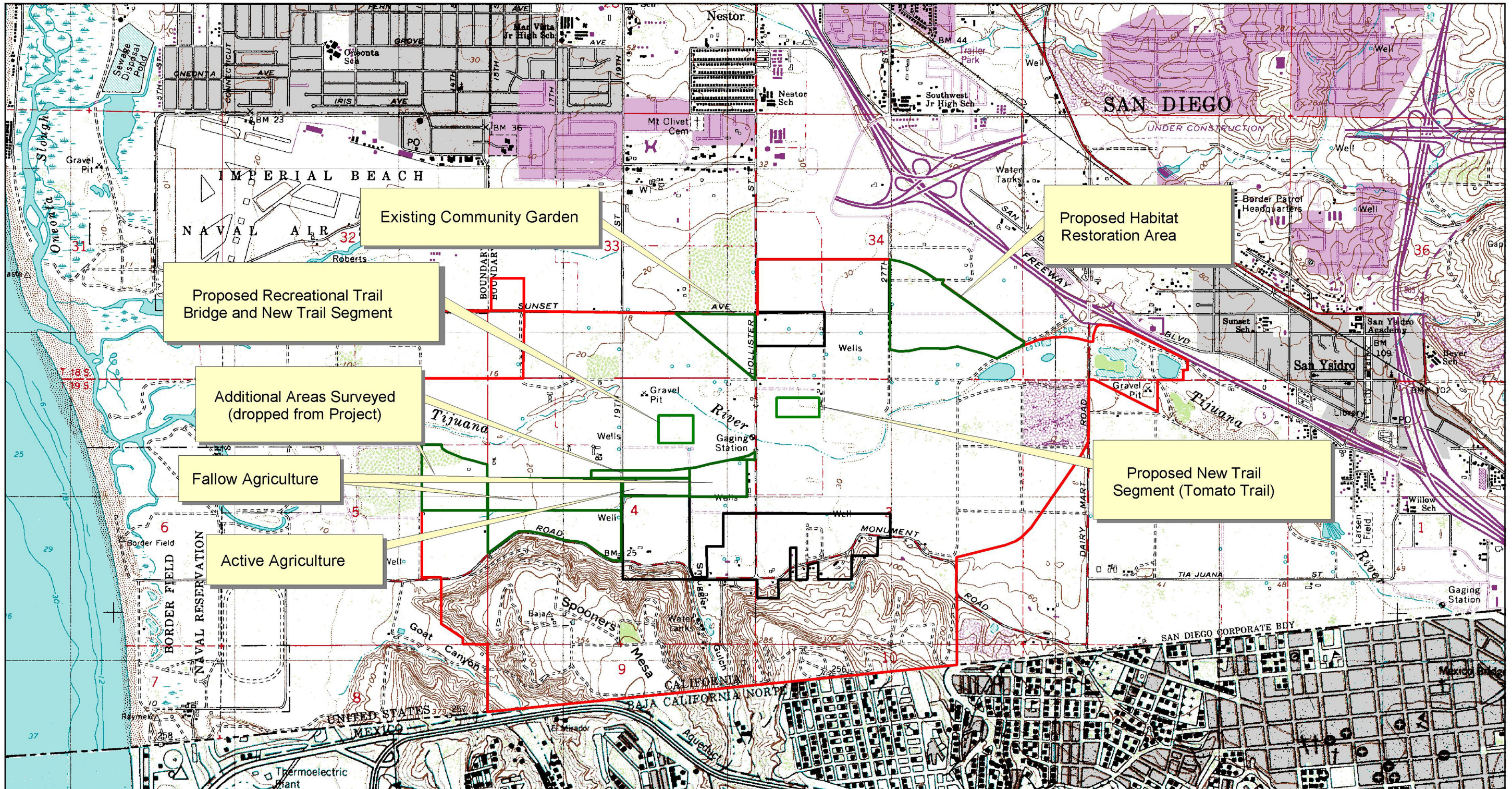
- Tijuana River Valley Regional Park Boundary
- Not a Part of Park (NAP)
- Previously Surveyed Areas

Tijuana River Valley Regional Park
Trails and Habitat Restoration
Enhancement Project

Figure 1.3.4-1 Portions of Park
Previously Surveyed for Cultural
Resources Within the Past 10 Years

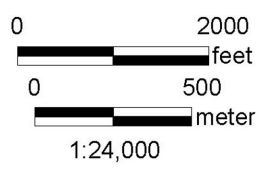
FIGURE 1.3.4-2 REMOVED

— CONFIDENTIAL —



SWCA
ENVIRONMENTAL CONSULTANTS

Map Source: USGS 7.5' Quad:
IMPERIAL BEACH
1967, 1975



- Tijuana River Valley Regional Park Boundary
- Not a Part of Park (NAP)
- Approximate Boundary

Tijuana River Valley Regional Park
Trails and Habitat Restoration
Enhancement Project

Figure 1.3.4-3 Areas Surveyed for
Cultural Resources by SWCA

1.3.5 HISTORICAL AND ARCHITECTURAL SURVEY

On August 12, 2004, SWCA architectural historian James Steely conducted a historic built environment survey of the same portions of the TRVRP surveyed for archaeological resources. Maps of specific study areas for this Project in the river valley were reviewed along with archival information collected to date. Mr. Steely looked for:

- 1) Any obvious individual properties that appeared to pre-date 1960
- 2) Individual properties already identified by SWCA and other consultants, primarily based on pre-1960 aerial photos and USGS maps
- 3) Typical properties outside the study areas representing the historic continuum of land use in the valley
- 4) Any encompassing evidence of a rural historic district, as defined in *Guidelines for Evaluating and Documenting Rural Historic Landscapes* (National Park Service 1999)
- 5) Any encompassing evidence of a “cultural landscape,” as defined in *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (NPS Electronic Document 2004).

1.3.6 EVALUATIONS OF CRHR/NRHP ELIGIBILITY

This study is being conducted under the provisions of CEQA. Public Resources Code SS5024.1, Section 15064.5 of the Guidelines and Sections 21083.2 and 21084.1 of the Statutes of CEQA were used as the basic guidelines for the cultural resources study (Governor’s Office of Planning and Research 1998). Public Resources Code SS5024.1 requires evaluation of historical resources to determine their eligibility for listing on the *California Register of Historical Resources*. The purposes of the register are to maintain listings of the state’s historical resources and to indicate which properties are to be protected from substantial adverse change (California Department of Parks and Recreation 1997). The criteria for listing resources on the California Register were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP, enumerated below in Section 1.3.6.2.

1.3.6.1 STATE MANDATES

Generally, under CEQA a cultural resource is considered a significant “historical resource” if it meets the criteria for listing on the CRHR. Criteria for inclusion on the CRHR are set forth in CEQA, Section 15064.5 and are defined as follows:

- 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 lives of persons important in our past;
- c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- d) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to be considered a “unique archaeological resource” as described under California

Public Resources Code 21083.2, it must be demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource satisfies at least one of the following criteria:

1. Contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;
2. Has a special and particular quality, such as being the oldest of its type or the best available example of its type;
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A nonunique archaeological resource means an archaeological artifact, object, or site that does not meet one of the above criteria.

1.3.6.2 FEDERAL MANDATES

As set forth at 36 Code of Federal Regulations 60.4, in order for a cultural resource to be considered a significant “historic property” under NRHP criteria (i.e. eligible for inclusion on the NRHP), it must be demonstrated that the resource possesses integrity of location, design, setting, materials, workmanship, feeling, and association, and

- a) That it be associated with events that have made a significant contribution to the broad patterns of our history; or
- b) That it be associated with the lives of persons significant in our past; or
- c) That it embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) That it has yielded, or may be likely to yield, information important in prehistory or history.

1.3.6.3 ARCHAEOLOGICAL EVALUATION

No archaeological resources were evaluated for CRHR/NRHP eligibility for the Project. None of the cultural resources identified in the CHRIS records search or during the archaeological survey will be impacted by the Project (see Recommendations Section).

1.3.6.4 HISTORIC ARCHITECTURAL EVALUATION

Review of Tijuana River Valley history related to surviving cultural features shows that most properties can be evaluated for significance under the Historic Context “Agriculture and Flood Control in the Tijuana River Valley of San Diego County, 1916-1967.” The themes of Agriculture and Flood Control represent the major visible land changes and surviving resources (farm houses, pumps, berms, levees and dikes, bridges, etc.); the place of Tijuana River Valley in San Diego County defines a distinct geography where the themes appear to be confined and consistent; and the dates represent the major flood of the early 20th century (1916), that likely

altered land uses and even ownership, and the date of proposal for channelization (1967), which caused the next phase of major land changes, outside of a reasonable “period of significance” for evaluating surviving properties.

SWCA has formally evaluated one historic engineering resource (the Hollister Street Bridge) for eligibility for inclusion on the CRHR and NRHP. The resource evaluated was identified and selected in concert with Project management and County staff and determined to be in an area potentially affected by the Project.

1.4 RESULTS

1.4.1 CHRIS

The CHRIS records search revealed 50 previously recorded cultural resources located within one-quarter mile of the Project area (see Table 1.4.1-1 and Figure 1.3.4-2). Three additional cultural resources were identified in a report not yet in the CHRIS system but made available by the consultant that performed the work (EDAW, Inc., also in Table 1.4.1-1 and Figure 1.3.4-2). In addition, another prehistoric archaeological resource was identified and recorded by County personnel during the same week that SWCA conducted a portion of the current survey. Of the total 54 previously recorded cultural resources, 29 are located entirely within the Tijuana River Valley Regional Park, five have portions within the park, three are immediately adjacent to the park, and 17 are within 0.25-mile of the park.

Four of the 54 previously recorded resources are isolated prehistoric artifacts. Of the remaining 50 cultural resources, 41 sites contain prehistoric components, 12 contain historic components, and three sites are described as having possible ethnographic period components. Two of the three possibly ethnographic sites are recorded as being the possible location of the ethnographic village of *Milejo*. However, of the 41 sites with prehistoric components, only one site record noted the presence of Tizon Brown Ware, a hallmark of the Late Prehistoric period. The artifacts recorded at a majority of the prehistoric sites appear to be typical of the Archaic Period. Assemblages are predominantly comprised of local metavolcanic lithic artifacts and marine shell. Site records provide three mean radiocarbon dates from two sites, these are: 4380 years before present (YBP), 4960 YBP, and 5970 YBP. These dates fall in the middle of the Archaic Period. None of the previously recorded sites possess convincing evidence of the lost village of *Milejo*.

Table 1.4.1-1. Previously Recorded Cultural Resources within the TRVRP or within a 0.25-Mile Radius

| Site Number | Site Description | Recorded or Updated By/Date | Within Park? | NRHP Status* |
|-------------------------------|--|---|---------------------|------------------------|
| SDI-2611 | Prehistoric lithic artifact scatter | J. Moriarty & G. Carter, 07/23/73 | No, but adjacent to | No information |
| SDI-3627 | Historic structures (military) and prehistoric lithic artifact scatter | J. Buysse, D. Pemberton, & M. Waters, 11/17/98; J. Moriarty, 03/24/74 | No | 3S |
| SDI-4933 | Prehistoric lithic artifact scatter with possible hearths | R. Coleman, 07/31/92; R. Collett & S. Wade, 12/25/90; Hanna 1977 | No | 6Y2 |
| SDI-4934C SDM-W-1244 | Sparse prehistoric lithic artifact scatter | R. Collett & S. Wade, 12/25/90; D. Hanna, 01/13/1976 | No | No information |
| SDI-7456 SDM-W-2418 | Sparse prehistoric lithic artifact scatter | K. Polan, 01/12/81; S. Van Wormer, 01/04/80 | Yes | No information |
| SDI-8595 SDM-W-2899 | Historic trash dump/scatter | J. Buysse, D. Pemberton, & M. Waters, 11/18/98; K. Polan, 01/12/81 | Yes | Recommended ineligible |
| SDI-8596 SDM-W-2900 | Sparse prehistoric lithic artifact scatter | J. Buysse, D. Pemberton, & M. Waters, 11/18/98; K. Polan, 01/12/81 | Yes | 6Y2 |
| SDI-8597 SDM-W-2901 | Prehistoric lithic artifact scatter | K. Polan, 01/12/81 | Yes | 6Y2 |
| SDI-8598 SDM-W-2902 | Prehistoric shell and lithic artifact scatter | K. Polan, 01/12/81 | Yes | 6Y2 |
| SDI-8599 SDM-W-2903 | Prehistoric shell and lithic artifact scatter | K. Polan, 01/12/81 | Yes | 6Y2 |
| SDI-8600 SDM-W-2904 | Sparse prehistoric lithic artifact scatter | K. Polan, 01/12/81 | Yes | No information |
| SDI-8601 SDM-W-2905 | Prehistoric lithic artifact scatter | K. Polan, 01/12/81 | Yes | 6Y2 |
| SDI-8602 SDM-W-2906 | Prehistoric lithic artifact scatter | K. Polan, 01/12/81 | Yes, partially | No information |
| SDI-8603 SDM-W-2907 | Prehistoric lithic artifact scatter | K. Polan, 01/12/81 | Yes | 6Y2 |
| SDI-8604 SDM-W-2908 | Prehistoric lithic artifact scatter and quarry | K. Polan, 01/12/81; R. Coleman, 06/23/92; J. Buysse, M. Waters, & D. Pemberton, 11/98; A. Pignoli, 11/14/00 | Yes, partially | 6Y2 |
| SDI-8605A&B SDM-W-388 | Prehistoric lithic artifact scatter | K. Polan, 01/12/81; R. Coleman, 06/19/92; J. Buysse, M. Waters, & D. Pemberton, 11/98 | Yes | 6Y |
| SDI-8773 | Possible ethnographic period site with adobe ruin and possible prehistoric materials | T. Campbell, 1981; J. Buysse, M. Waters, & D. Pemberton, 11/98 | Yes | Recommended ineligible |
| SDI-9183 SDM-W-3647 | Prehistoric shell and lithic artifact scatter | Henry & Brown, 11/27/81; A. Pignoli, 04/14/86 | No | No recommendation |
| SDI-10,486 | Prehistoric shell and lithic artifact scatter | A. Pignoli & L. Christenson, 03/25/86 | No | No information |
| SDI-10,487 plus Loci A & B | Prehistoric shell scatter with at least one flake | R. Collett & S. Wade, 12-25-90; A. Pignoli & L. Christenson, 03/25/86 | Yes, partially | No information |
| SDI-10,488H | Historic wall and foundation with associated trash deposit | A. Pignoli, 03/25/86 | Yes | No information |

| Site Number | Site Description | Recorded or Updated By/Date | Within Park? | NRHP Status* |
|--------------------------|---|---|----------------|----------------|
| SDI-10,669 SDM-W-1140 | Supposed location of ethnographic village of <i>Milejo</i> , site number also used to identify a series of deeply buried isolated prehistoric artifacts as well as at least one archaic period hearth feature | R. Perry, 01/14/92; R. Collett & S. Wade, 12-25-90; F. Shipek, 11/02/76; R. Coleman & M. Bilsbarrow, 02/25/92, 02/28/92, 03/02/92, 03/04/92, 03/06/92, 04/14/92, 04/22/92, 04/29/92 ; C. Lintz & M. Bilsbarrow, 03/19/92, 03/20/92; R. Collett & M. Bilsbarrow, 02/15/92; G. Brown & M. Bilsbarrow, 03/31/92; E. Goldborer & M. Bilsbarrow, 10/28/92, 11/19/92, 12/03/92; M. Bilsbarrow, 11/02/92; 11/09/92 | Yes, partially | No information |
| SDI-10,967 | Possible ethnographic village site of <i>Milejo</i> , however, only small lithic artifact scatter recorded | M. Roeder, 01/22/80 | Yes, partially | No information |
| SDI-11,095H | Historic building debris scatter | S. Van Wormer, 04/20/89 | Yes | 6Y2 |
| SDI-11,096H | Historic house structure with associated outbuildings | S. Van Wormer & R. Coleman, 04/20/89, 06/92, 11/10/94 | No | No information |
| SDI-11,097 | Prehistoric lithic artifact scatter | J. Cook & C. Serr, 03/23/89 | Yes | No information |
| SDI-11,098 | Prehistoric lithic artifact scatter | J. Cook & C. Serr, 03/23/89 | Yes | No information |
| SDI-11,099 | Late Prehistoric lithic artifact, ceramic, and shell scatter and deposit | J. Cook & C. Serr, 03/23/89 | Yes | No information |
| SDI-11,100 | Prehistoric lithic artifact scatter | J. Cook & C. Serr, 03/24/89 | Yes | 6Y2 |
| SDI-11,101 | Sparse prehistoric lithic artifact scatter | J. Cook & C. Serr, 03/24/89 | Yes | 6Y2 |
| SDI-11,544 | Prehistoric lithic artifact and shell scatter | R. Collett & T. Hardin, 11/03/89 | No | No information |
| SDI-11,545 | Prehistoric shell scatter associated with post-historic trash dump with 24 isolated prehistoric lithic artifacts recorded in the vicinity | R. Collett & T. Hardin, 11/03/89; R. Coleman, 06/17/92, 06/09/92, 06/18/92, 06/29/92, 07/29/92, 08/03/92; R. Coleman & M. Bilsbarrow, 06/29/92; E. Goldborer & M. Bilsbarrow, 07/01/92, 07/06/92; K. Adams, 12/13/93 | No | 6Y2 |
| SDI-11,945 | Prehistoric lithic artifact scatter | R. Coleman, 07/13/92, 08/92; F. Ritz & M. Davis, 08/29/90 | Yes | No information |
| SDI-11,946 | Prehistoric lithic artifact scatter | F. Ritz & M. Davis, 08/29/90 | Yes | No information |
| SDI-11,947H | Historic structure foundation | F. Ritz & M. Davis, 10/12/90; R. Coleman, 6/17/92 | Yes | No information |
| SDI-11,948H | Historic stacked cobble terrace walls, cobble-lined walks, and two concrete slabs | F. Ritz & M. Davis, 10/12/90 | Yes | No information |
| SDI-12,023H | Historic farm house and associated outbuildings | R. Collett, S. Wade, and S. Van Wormer, 01-30-90 | No | No information |
| SDI-12,962H | Historic to post-historic | L. Pierson, 11/23/92 | No, but | No information |

| Site Number | Site Description | Recorded or Updated By/Date | Within Park? | NRHP Status* |
|---------------------------------------|---|--|---------------------|------------------------|
| | trash deposit mixed with shell and artifacts registered as SDI-4934 | | adjacent to | |
| P-37-013485** SDI-13,485 | Prehistoric lithic artifact and shell deposit and historic foundation | A. Pignoli, 11/14/00; R. Coleman & E. Goldborer, 07/30/92 | No | 2S2 |
| SDI-13,486 | Prehistoric lithic artifact deposit identified during geotechnical trenching | R. Coleman, 07/30/92 | No | 6Y2 |
| SDI-13,487 | Prehistoric lithic artifact deposit and possible hearth identified during geotechnical trenching | S. Dibble, 12/09/91 | Yes | No information |
| SDI-13,488 | Prehistoric lithic artifact and shell deposit identified during geotechnical trenching | R. Perry, 12/13/91 | Yes | No information |
| SDI-13,527 | Sparse prehistoric lithic artifact and shell scatter | R. Coleman, 07/31/92 | No | 6Y2 |
| P-37-01758 SDI-15099 SDM-W-1376 | Prehistoric lithic artifact scatter | J. Buysse, D. Pemberton, & M. Waters, 11/18/98 | Yes | Recommended ineligible |
| P-37-024059 SDI-16,047 | Prehistoric lithic artifact and shell scatter with historic reservoir, foundation, and water tank | A. Pignoli, 11/14/00, 02/09/01 | No | No information |
| SDI-16,293 | Prehistoric shell midden | A. Pignoli, 06/21/02 | No, but adjacent to | No information |
| P-37-014987 SDI-I-289 | One prehistoric lithic isolate (scraper) | Robbins-Wade, Jacobson, Barrett, & Nelson, 07/16/90 | No | No information |
| P-37-014988 SDI-I-290 | One prehistoric lithic isolate (flake) | Robbins-Wade, Jacobson, Barrett, & Nelson, 07/16/90 | No | No information |
| P-37-015154 SDI-I-456 | One prehistoric lithic core | G. Carter, 02/82; R. Collett & S. Wade, 12/25/90 | No | No information |
| P-37-015395 SDI-I-697 | One prehistoric lithic isolate (flake) | K. Adams, 12/13/93 | No | No information |
| TJ-2 | Sparse prehistoric lithic artifact scatter | Dr. J. Underwood, C. Gregory, S. Diaz, and M. Carroll, 9/17/02 | Yes | No information |
| TJ-3H | Historic pump house | Dr. J. Underwood, C. Gregory, S. Diaz, and M. Carroll, 9/17/02 | Yes | No information |
| TJ-4H | Historic house | Dr. J. Underwood, C. Gregory, S. Diaz, and M. Carroll, 9/17/02 | Yes | No information |
| New Trees Site | Deposit with shell and lithic artifact scatter | Dr. Lynne Christenson, W. C. Kierulff, 8/05/04 | Yes | No information |

*NRHP Status Codes

2S2= Determined eligible for separate listing by a consensus determination

3S = Appears eligible for listing in National Register as a separate property

6Y = Determined ineligible for National Register by consensus

6Y2 = Determined ineligible for National Register by consensus with no potential for any listing

** Primary numbers listed when provided on site records

The 1953 *Imperial Beach* U.S.G.S. topographic quadrangle map shows 36 structures within the Project area, and approximately 21 more within 0.25-mile of the Project area. The Geofinder, an historic database and mapping program incorporating information from the NRHP, CRHR, California State Landmarks, California Points of Historic Interest, and other historic property lists, produced no additional resources within 0.25-mile of the Project area.

A total of 43 cultural resource studies have been conducted within 0.25-mile of the Project area, 32 of which were at least partially in the Project area (see Table 1.4.1-2 and Figure 1.3.4-1). One of these was not identified in the CHRIS records search but was obtained from the consultant who performed the study.

Table 1.4.1-2. Previous Studies within the TRVRP or within a 0.25-Mile Radius

| Author | Date | Study | Within Park? |
|---|-------------|--|---------------------|
| Adams, Kathleen and Christopher A. Turnbow | 1994 | Supplemental Report: Archaeological Survey and Geotechnical Test Monitoring of the International Wastewater Treatment Plant Ocean Outfall Tunnel | Partially |
| ASM Affiliates | 1989 | Archaeological Survey and Significance Evaluation Program for the Border Highlands Project | Yes |
| Baksh, Michael | 1996 | Negative Archaeological Survey Report: The Hollister Street Project | Yes |
| Brown, Gary M. and Howard C. Higgins | 1992 | Work Plan for Archaeological Services at South Bay International Wastewater Treatment Plant and Outfall Facilities | Partially |
| Carrico, Richard L. | 1976 | Archaeological Survey of Border Highland Borrow Pit Site | Partially |
| Carrico, Richard L. | 1976 | Archaeological Survey of the South San Diego Water Treatment Site | Partially |
| Carrico, Richard L. | 1996 | Negative Archaeological Survey Report-Dairy Mart Road Realignment | Yes |
| Carrico, Richard L. | 1996 | Historic Property Survey Report-Negative Findings; Dairy Mart Road Sites CA-SDI-4933 and CA-SDI-12,527 | Yes |
| Carrico, Richard, Robert Case, and Carol Serr | 1996 | Cultural Resources Evaluation for the South Bay Water Reclamation Plant and Dairy Mart Road and Bridge Improvements, San Diego, California | No |
| Carrico, Richard, Robert Case, and Carol Serr | 1996 | Cultural Resources Evaluation within the South Bay Water Reclamation Plant, San Diego, California | No |
| Carrico, Richard L. and John Dietler | 1998 | Cultural Resources Evaluation for the South Bay Reclamation Sewer and Pump Station Project, San Diego County, California | Partially |
| Case, Robert | 1996 | Dairy Mart Road Realignment Project | Partially |
| Cheever, Dayle and Dennis Gallegos | 1987 | Cultural Resource Survey for the Smuggler Gulch Surface Flow Collection Facility, San Diego, California | Partially |
| City of San Diego | 1990 | Appendixes for the Environmental Impact Report for Otay Valley Water Reclamation Facility for the Clean Water Program for Greater San Diego | Partially |
| City of San Diego | 1994 | Public Notice of Proposed Negative Declaration | Partially |
| City of San Diego | 1994 | Public Notice of Proposed Mitigated Negative Declaration International Traders Center Wetlands Restoration | Partially |
| Gallegos, Dennis | 1986 | Cultural Resource Survey and Significance Testing for the International Wastewater Project | Partially |
| Gallegos, Dennis, Andrew Pignoli, and Richard Carrico | 1986 | Cultural Resource Survey and Significance Testing for the International Wastewater Project ⁷ | Partially |
| Hanna, David | 1977 | Supplemental Cultural Resources Inventory for the Tijuana River Flood Control Project Area, San Diego, California | No |
| Hector, Susan | 1991 | Cultural Resource Survey for the Proposed Tijuana River Ballfields, San Diego County, California ⁸ | Yes |
| Higgins, Howard C. | 1994 | Archaeological Investigations at the Proposed International Wastewater Treatment Plant Site: Cultural Resource Identification and Geotechnical Test Monitoring | Partially |
| Higgins, Howard C. | 1994 | Archaeological Monitoring of the International Wastewater Treatment Plant Land Outfall Trench, San Diego County, California | Partially |
| Higgins, Howard C., | 1993 | Archaeological Monitoring of the South Bay Land Outfall | Partially |

⁷ This citation appears nearly identical to the previous one, but is presented as found in the CHRIS records search.

⁸ This report was misidentified in the CHRIS records search; citation provided by author.

| Author | Date | Study | Within Park? |
|---|------|--|--------------|
| Christopher A. Turnbow, Gary M. Brown, Richard W. Coleman, Russell O. Collett, Christopher R. Lintz, and Peter B. Mires | | Trench, San Diego County, California | |
| Higgins, Howard C., Richard W. Coleman, Gary M. Brown, Richard A. Anduze, and Meade F. Kemrer | 1994 | Archaeological Investigations at South Bay International Wastewater Treatment Plant Site and Outfall Facilities, Cultural Resource Identification and Geotechnical Test Monitoring | Partially |
| International Boundary and Water Commission | 1987 | Draft Environmental Assessment International Surface Flow Collection Facility at Smuggler Gulch Baja California, Mexico and San Diego County, California | Yes |
| International Boundary and Water Commission, U.S. Section | 1985 | Draft Environmental Assessment U.S. Section International Boundary and Water Commission IBWC Interceptors San Diego County, California | No |
| Kyle, Carolyn, Roxana Phillips, Susan Carrico, and Dennis Gallegos | 1996 | Cultural Resource Constraint Level Analysis for the San Ysidro Redevelopment Project, San Ysidro, California | No |
| Manley, William | 1993 | Historic Assessment of Properties on 3 Parcels on Monument Road, San Diego, California | Partially |
| Perry, Richard | 1992 | Cultural Resources Survey of 2.65 Miles of the Tijuana River North Levee for the Joint Task Force Six Border Fence Project | No |
| Pignuolo, Andrew | 2001 | Cultural Resource Monitoring Report for the Hollister Bridge Replacement Project, San Diego County, California | Yes |
| Pignuolo, Andrew R. | 2001 | Archaeological Inventory and Trenching Program for the Goat Canyon Enhancement Project Off-Site Biological Mitigation Area, City of San Diego, California ⁹ | No |
| Pignuolo, Andrew, Dennis Gallegos, and Richard Carrico | 1986 | Cultural Resource Survey and Test for Significance of Archaeological Site SDI-9183 at a Proposed Border Patrol Station, Southeast Imperial Beach, California | No |
| Pignuolo, Andrew R., Stephanie Murray, and John Dietler | 2001 | Archaeological Inventory Report for the Goat Canyon Enhancement Project, City of San Diego, California | Partially |
| Polan, Keith | 1981 | An Archaeological Reconnaissance of Border Highlands San Diego, California | Yes |
| Robbins-Wade, Mary, and G. Timothy Gross | 1990 | Historic Properties Inventory for the Southeast Otay Mesa Sludge Processing Facilities and Pipeline (Southern Sludge Processing Facility to Southeast Otay Mesa Sludge Processing Facility), San Diego, California | Partially |
| Robbins-Wade, Mary, and Richard D. Shultz | 1996 | Archaeological Monitoring for the Coral Gate Project, Tijuana River Valley. | No |
| Rosen, Martin | 1996 | Historic Property Survey-Bailey Bridge Hollister Street | Yes |
| Smith, Brian, Larry Pierson, Charles Callahan, Charles Bouscaren, and Riordan Goodwin | 1993 | Results of an Archaeological Survey and Cultural Resources Evaluation for the International Traders Center of San Ysidro | No |
| Turnbow, Christopher A. and David P. Stanley | 1994 | Cultural Resources Work Plan for Archaeological Testing of Four Archaeological Sites: CA-SDI-8605A/B, CA-SDI-13485, CA-SDI-13486, and CA-SDI-13527 | Partially |
| Turnbow, Christopher A., Kathleen A. Adams, John A. Evaskovich, and Howard C. Higgins | 1995 | Archaeological Testing of Three Sites for the International Wastewater Treatment Plant Project, San Diego, California | Partially |

⁹ This report was not found in the CHRIS records search, but identified through site records.

| Author | Date | Study | Within Park? |
|---------------------------------------|-------------|---|---------------------|
| Underwood, Jackson and Carrie Gregory | 2003 | Cultural Resources Survey of the Tijuana River Wetland Mitigation Project, San Diego County, California ¹⁰ | Yes |
| United States Army Corps of Engineers | 1992 | Draft Environmental Assessment for the Joint Task Force Six Operation JT(154D-91) Border Fence Construction | Yes |

¹⁰ This report was not found in the CHRIS records search, but was provided by the consultant who performed the study.

1.4.2 NATIVE AMERICAN CONSULTATION

On May 28, 2004, SWCA requested a record search of the NAHC Sacred Lands File. In a response dated June 2, 2004, the NAHC stated that the record search failed to indicate the presence of Native American cultural resources in the immediate Project area. However, the NAHC also provided a list of contacts in San Diego County who should also be asked about Native American cultural resources in the Project area. A total of eight individuals were listed by the NAHC. These individuals were contacted by SWCA by mail and phone on June 11 and November 10 and 15, 2004, requesting additional information regarding sacred sites and/or TCPs within the TRVRP. None of the respondents provided any additional information regarding Native American cultural resources in or near the Project area. The Native American correspondence is presented in Appendix B.

1.4.3 ARCHIVAL RESEARCH

In addition to the CHRIS and NAHC record searches, an SWCA archaeologist conducted archival research at the San Diego County Department of Parks and Recreation Office of the County Historian on May 20, 2004. After consulting with Dr. Lynne Christenson, the County Historian, about the Project area, all available materials were reviewed. These materials include photographs, newspaper articles and advertisements, journal entries, maps, books, and technical reports. Notes were taken on some materials and others were photocopied. These materials produced information not found in other searches including the presence of historic towns in the vicinity of the Project area that have since disappeared. The County Historian also presented information relevant to the prehistoric, ethnographic, Spanish, Mexican, and early American periods. Of particular note was the wealth of information regarding the Arguello Family and Rancho Ti Juan.

1.4.4 ARCHAEOLOGICAL FIELD SURVEY

The archaeological survey resulted in the identification of four previously unrecorded archaeological sites, three previously unrecorded archaeological isolates, and the update of site records for one previously recorded archaeological site (see Figure 1.4.4-1). One previously recorded archaeological site locus was not relocated. Each resource was formally recorded in the field; SWCA has prepared digital California Department of Parks and Recreation (DPR) forms and maps for each resource (Appendix A). All of the resources were found during the August 2004 survey; the November 2004 survey did not identify any additional resources. Descriptions of the cultural resources encountered are provided on the following pages.

FIGURE 1.4.4-1 REMOVED

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1.4.5 HISTORICAL AND ARCHITECTURAL SURVEY

Two previously identified historic properties within one of the survey areas were revisited, and a previously unrecorded historic-age bridge located adjacent to one of the survey areas was recorded during the historical and architectural survey. These resources are described individually below.

1.4.5.1 TJ-3H (TEMPORARY NUMBER)

This small structural cluster of historic pump house, well, and water storage tank was originally recorded in 2002. TJ-3H is located approximately 0.75-mile west of Hollister Road, just south of the Tijuana River. The date of construction is unknown, but possibly was built earlier than 1928, when a nearby house is visible on the quadrangle map of that year.



Photo 1.4.5.1-1. Resource TJ-3H, facing northwest.

1.4.5.2 TJ-4H (TEMPORARY NUMBER)

This historic house is located within a complex of farm buildings and structures that are newer or moved to this location after 1954. The construction date of this house is unknown, but it does not appear on the 1928 USGS quadrangle map, and has been considerably altered within the last 20 years through additions, siding, doors, and windows.



Photo 1.4.5.2-1. Resource TJ-4H, facing southeast.

1.4.5.3 HOLLISTER STREET BRIDGE (TR-11 [TEMPORARY NUMBER])

This bridge spans one of the Tijuana River's channels and appears to be intact from its original construction. In an initial search of documentation it is officially listed with a 1953 construction date, which places it as a potentially significant structure on an alignment also closely associated with the Tijuana River Valley's twentieth century history.



Photo 1.4.5.3-1. Resource TR-11 (Temporary Number), facing southwest.

1.4.6 EVALUATIONS OF CRHR/NRHP ELIGIBILITY

1.4.6.1 ARCHAEOLOGICAL RESOURCES

The Project, as currently designed, will avoid impacts to all known cultural resources (see Impact Assessments and Recommendations Section). As such, no archaeological resources have been evaluated for eligibility for inclusion on the CRHR/NRHP. Isolates, by nature, are not considered significant. All unevaluated archaeological sites are assumed to be significant (i.e. CRHR/NRHP-eligible).

1.4.6.2 HISTORIC ARCHITECTURAL RESOURCES

One historic architectural resource has been formally evaluated for eligibility for inclusion on the CRHR/NRHP.

1.4.6.2.1 HOLLISTER STREET BRIDGE (TR-11 [TEMPORARY NUMBER])

The Hollister Street Bridge over the Tijuana River has been formally evaluated as eligible for inclusion on the CRHR/NRHP under Criteria A and C, as it is associated with events that have made a significant contribution to the broad patterns of California and United States history and embodies the distinctive characteristics of a type of construction. The resource is significant as a mid-twentieth century engineering structure that represents traditional wood-pile, wood-beam, wood-guardrail bridge construction, and carries a historic road from San Diego south into the valley for farm, school, and international traffic. The bridge is a significant structure within the theme of Agriculture and Flood Control during the period of significance, 1916-1967. The bridge spans one of the Tijuana River's oldest surviving channels and appears to be intact from its original construction, with integrity of location, design, materials, workmanship, feeling, setting, and association.

1.5 IMPACT ASSESSMENTS AND RECOMMENDATIONS

As noted in the previous section, the Project (as currently designed) will avoid impacts to all known cultural resources. With the exception of archaeological isolates, all unevaluated cultural resources are assumed to be significant. Should future projects or changes in Project design involve earth-moving or ground-disturbing construction in areas of known cultural resources, those resources must be formally evaluated for eligibility for inclusion on the CRHR/NRHP to determine if Project related impacts to these resources would be significant under CEQA (or adverse effects under NHPA). Specific recommendations for each resource are provided below, followed by general recommendations for the Project.

1.5.1 RESOURCE-SPECIFIC RECOMMENDATIONS

1.5.1.1 PREVIOUSLY RECORDED CULTURAL RESOURCES

Existing trails run through, or immediately adjacent to 24 of the 34 previously recorded cultural resources located entirely or partially within the TRVRP (Table 1.5.1.1-1). The existing trails running through or immediately adjacent to five of the 24 resources are proposed for continued use as part of the Project; trails within or adjacent to the remaining 19 sites will be closed and restored. Some of the existing trails proposed for continued use may be subject to enhancement work; however, the nature and extent of this work is unknown at the present time.

Table 1.5.1.1-1. Previously Recorded Cultural Resources within the TRVRP with Existing Trails

| Site Number | Site Description | CRHR/NRHP Status* | Trail(s) Proposed for Continued Use? | Within Area Proposed for Future Habitat Restoration? |
|--------------------------|---|---------------------------------|--------------------------------------|--|
| SDI-8595 SDM-W-2899 | Historic trash dump/scatter | Recommended ineligible for NRHP | No | No |
| SDI-8597 SDM-W-2901 | Prehistoric lithic artifact scatter | 6Y2 | No | No |
| SDI-8598 SDM-W-2902 | Prehistoric shell and lithic artifact scatter | 6Y2 | No | No |
| SDI-8600 SDM-W-2904 | Sparse prehistoric lithic artifact scatter | No information | Yes | No |
| SDI-8603 SDM-W-2907 | Prehistoric lithic artifact scatter | 6Y2 | No | No |
| SDI-8605A&B SDM-W-388 | Prehistoric lithic artifact scatter | 6Y | No | No |
| SDI-8773 | Possible ethnographic period site with adobe ruin and possible prehistoric materials | Recommended ineligible for NRHP | No | No |
| SDI-10,487 A&B | Prehistoric shell scatter with at least one flake | No information | Yes | Yes |
| SDI-10,669 SDM-W-1140 | Supposed location of ethnographic village of <i>Milejo</i> , site number also used to identify a series of deeply buried isolated prehistoric artifacts as well as at least one archaic period hearth feature | No information | Yes | No |
| SDI-10,967 | Possible ethnographic village site of <i>Milejo</i> , however, only small lithic artifact scatter recorded | No information | Yes | No |
| SDI-11,095H | Historic building debris scatter | 6Y2 | No | No |
| SDI-11,097 | Prehistoric lithic artifact scatter | No information | No | No |
| SDI-11,098 | Prehistoric lithic artifact scatter | No information | No | No |
| SDI-11,099 | Late Prehistoric lithic artifact, ceramic, and shell scatter and deposit | No information | Yes | Yes |
| SDI-11,100 | Prehistoric lithic artifact scatter | 6Y2 | No | No |
| SDI-11,101 | Sparse prehistoric lithic artifact scatter | 6Y2 | No | No |
| SDI-11,945 | Prehistoric lithic artifact scatter | No information | No | No |
| SDI-11,946 | Prehistoric lithic artifact scatter | No information | No | No |
| SDI-11,947H | Historic structure foundation | No information | No | No |

| Site Number | Site Description | CRHR/NRHP Status* | Trail(s) Proposed for Continued Use? | Within Area Proposed for Future Habitat Restoration? |
|-------------|---|-------------------|--------------------------------------|--|
| SDI-13,487 | Prehistoric lithic artifact deposit and possible hearth identified during trenching | No information | No | No |
| TJ-2 | Sparse prehistoric lithic artifact scatter | No information | No | No |
| TJ-3H | Historic pump house | No information | No | No |
| TJ-4H | Historic house | No information | No | No |

*NRHP Status Codes

6Y = Determined ineligible for NRHP by consensus

6Y2 = Determined ineligible for NRHP by consensus with no potential for any listing

Seven of the 24 previously recorded cultural resources with existing trails within or immediately adjacent to them have been determined ineligible for inclusion on the NRHP. No information is available regarding their CRHR status. No information on the CRHR/NRHP status is available for the remaining 17 previously recorded cultural resources with existing trails within or immediately adjacent to them. Many of the existing trails will be closed and restored as part of the Project, others will continue to be used, and some may be subject to enhancement work.

1.5.1.1.1 CLOSURE OF EXISTING TRAILS THROUGH PREVIOUSLY RECORDED CULTURAL RESOURCES

The passive closure of existing trails that run through previously recorded cultural resources is not considered to result in Project impacts to cultural resources under CEQA, as there would be no substantial adverse change to the resources. Similarly, this would not be considered an adverse effect under NHPA.

However, if closure procedures involve ground disturbing activities associated with restoration efforts and/or installation of signs, barricades, or bollards, project plans should be compared with the locations of known cultural resources locations (Figures 1.3.4-2 and 1.4.4-1) to assess the potential for such activities to impact cultural resources. If ground disturbing activities are planned within a known cultural resource location, and the activities cannot be redesigned to avoid known cultural resources, the CRHR/NRHP status (Tables 1.4.1-1 and 1.5.1.1-1) of the resource(s) should be checked. If a potentially impacted resource has been determined ineligible for NRHP inclusion, the resource should be formally evaluated for eligibility for inclusion on the CRHR. If there is no information available on the CRHR/NRHP status of the resource, it must be formally evaluated for CRHR/NRHP eligibility. If the resource is evaluated as ineligible for CRHR/NRHP inclusion, Project impacts would not be considered significant under CEQA (or adverse effects under NHPA). If the resource is evaluated as eligible for CRHR/NRHP inclusion, Project impacts would be considered significant under CEQA (or adverse effects under NHPA).

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1.5.1.2 NEWLY RECORDED AND UPDATED CULTURAL RESOURCES

1.5.1.2.1 TR-1 (TEMPORARY NUMBER)

Site TR-1 is located in an area that will not be impacted by the Project. If future projects or changes in Project design will potentially impact this site, it should be archaeologically tested and formally evaluated for CRHR/NRHP eligibility to determine if impacts to this resource would be significant under CEQA (or adverse effects under NHPA).

1.5.1.2.2 TR-2 (TEMPORARY NUMBER)

Site TR-2 is located in an area that will not be impacted by the Project. If future projects or changes in Project design will potentially impact this site, it should be archaeologically tested and formally evaluated for CRHR/NRHP eligibility to determine if impacts to this resource would be significant under CEQA (or adverse effects under NHPA).

1.5.1.2.3 TR-3 (TEMPORARY NUMBER)

Site TR-3 is located in an area that will not be impacted by the Project. If future projects or changes in Project design will potentially impact this site, it should be archaeologically tested and formally evaluated for CRHR/NRHP eligibility to determine if impacts to this resource would be significant under CEQA (or adverse effects under NHPA).

1.5.1.2.4 TR-4 (TEMPORARY NUMBER)

This isolate has been formally recorded and does not require any additional cultural resources study, as isolates, by nature, are not eligible for inclusion on the CRHR or NRHP. As such, any Project related impacts to this resource would not be considered significant under CEQA, nor would Project related effects be considered adverse under NHPA.

1.5.1.2.5 TR-5, 6, 10 (TEMPORARY NUMBER)

These four flakes, considered as a single isolate due to their proximity within a highly disturbed context, have been formally recorded. This resource does not require any additional cultural resources study, as isolates, by nature, are not eligible for inclusion on the CRHR or NRHP. As such, any Project related impacts to this resource would not be considered significant under CEQA, nor would Project related effects be considered adverse under NHPA.

1.5.1.2.6 TR-7 (TEMPORARY NUMBER)

This isolate has been formally recorded and does not require any additional cultural resources study, as isolates, by nature, are not eligible for inclusion on the CRHR or NRHP. As such, any Project related impacts to this resource would not be considered significant under CEQA, nor would Project related effects be considered adverse under NHPA.

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1.5.2 GENERAL RECOMMENDATIONS

1.5.2.1 ASSESSMENT OF FINAL PROJECT ELEMENT LOCATIONS

Only the proposed Project was assessed by SWCA; no alternatives were analyzed. Furthermore, several specific elements of the Project were not surveyed by SWCA (i.e. Trail Head, Bench, and Signage locations, etc.). SWCA recommends that all Project elements be installed/constructed within areas that have been previously surveyed for cultural resources. Once the Project design has been finalized (and prior to construction), an archaeologist should assess whether the final proposed locations of specific Project elements are located within areas previously surveyed for cultural resources. If so, and the proposed location is not within or immediately adjacent to a known cultural resource, then construction should proceed with an archaeological monitor. If not, the proposed element should be relocated to an area that has been previously surveyed, or the area must be surveyed for cultural resources prior to construction.

The archaeologist should also assess whether the final proposed location of each specific Project element is located within or immediately adjacent to known cultural resources. If so, the element in question should be relocated to avoid impacts to potentially significant cultural resources. If the proposed element cannot be relocated, the cultural resource must be formally evaluated for eligibility for inclusion on the CRHR and NRHP, if such an evaluation has not already been conducted. Once the CRHR/NRHP eligibility of the resource has been evaluated, the significance of Project related impacts must be assessed. Mitigation measures may be required to reduce Project related impacts to a less than significant level.

1.5.2.2 MONITORING OF GROUND DISTURBING ACTIVITIES

Due to the presence of prehistoric, ethnographic, and historic built environment resources and the potential for buried prehistoric and historic archaeological deposits (i.e. *Milejo*, privies, trash pits, foundations, etc.) within the Project area, archaeological monitoring of all ground-disturbing activities (i.e. brushing, grading, trenching, excavation, etc.) is highly recommended. Full-time archaeological monitoring is recommended for ground disturbing activities associated with the Project related improvements, including, but not limited to:

- new trail construction;
- enhancement of existing trails;
- fence construction/installation;
- bollard construction/installation;
- bench construction/installation;
- bird observation blind construction/installation;
- interpretive/directional signage construction/installation;
- hitching post/bike rack construction/installation;
- trail head improvements (construction/installation of signage, hitching post, bike rack and bench);
- bridge construction; and
- habitat restoration.

Archaeological monitoring should be conducted full-time within 100 feet of known cultural resources; part-time, or “spot-check” monitoring is recommended for ground-disturbing activity in all other portions of the TRVRP. Although the survey was conducted in as thorough a manner as possible, there is always the possibility that previously unidentified archaeological resources could be discovered during Project construction. Daily logs shall be maintained for all monitoring work.

1.5.2.2.1 UNANTICIPATED DISCOVERIES

If previously unrecorded archaeological materials are identified during monitoring, they should be formally recorded on DPR forms. It may be necessary to conduct additional testing to evaluate the significance of the finds. The monitoring archaeologist must be empowered to temporarily divert construction in the event that *in situ* archaeological deposits are exposed. Sufficient time must also be allowed for adequate evaluation and recovery operations to be completed. Further recommendations should be made at that time.

1.5.2.2.2 DISCOVERY OF HUMAN REMAINS

Although it is unlikely, the discovery of human remains is always a possibility; these finds are covered by State of California Health and Safety Code Section 7050.5. This code section states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendent (MLD). The MLD shall complete the inspection of the site within 24 hours of notification, and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

1.5.2.2.3 MONITORING REPORT

Upon completion of archaeological monitoring of ground disturbing activities, a final report summarizing the results of the monitoring program shall be prepared and submitted to the County and the SCIC. The report should include the daily monitoring logs, DPR forms for any newly recorded discoveries, and should discuss any evaluation and/or mitigation work associated with construction discoveries.

1.5.2.3 SURVEY OF ADDITIONAL OR REDESIGNED PROJECT COMPONENTS

Should additional components be added to the Project, those areas potentially affected by these additional components should be surveyed for cultural resources prior to construction, if such areas have not been subject to cultural resources survey within the past ten years. Similarly, if current ground-disturbing Project components are redesigned to include areas not previously surveyed for cultural resources within the past ten years, these areas should be surveyed.

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2.1 INTRODUCTION

This report presents the results of SWCA Environmental Consultants' (SWCA) paleontological resources assessment of the Tijuana River Valley Regional Park in San Diego County, California. The purpose of the assessment was to evaluate if any significant paleontological resources exist within the study area and document their types, abundances, geologic context, and locations. The paleontological resources field survey was conducted from August 3-5, 2004.

2.1.1 PALEONTOLOGICAL RESOURCES

Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms from which they derive no longer exist. Thus, once destroyed, a fossil can never be replaced. Fossils are important scientific and educational resources because they are used to:

- Study the phylogenetic relationships between extinct organisms, as well as their relationships to modern groups.
- Elucidate the taphonomic, behavioral, temporal and diagenetic pathways responsible for fossil preservation.
- Reconstruct ancient environments, climate change, and paleoecological relationships.
- Provide a measure of relative geologic dating which forms the basis for biochronology and biostratigraphy, and which is an independent and supporting line of evidence for isotopic dating.
- Study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time.
- Study patterns and processes of evolution, extinction and speciation.
- Identify past and potential future human-caused effects to global environments and climates.

2.2 RESOURCE ASSESSMENT GUIDELINES

As outlined in the San Diego County Guidelines for Paleontological Resources (Deméré and Walsh 1993), fossils are a limited, non-renewable, scientific and educational resource that is afforded protection under Federal (National Environmental Policy Act [NEPA]), State (California Environmental Quality Act [CEQA]), and local (County of San Diego) laws and regulations. Paleontological resources include the actual fossil remains, the collecting localities, and the geologic formations containing those localities. Negative impacts to such resources are addressed in accordance with CEQA (13 PRC, 2100 et seq), and Public Resources Code, Section 5097.5 (Stats 1965, c 1136, p. 2792). This analysis also complies with guidelines and significance criteria specified by the Society for Vertebrate Paleontology (SVP 1995) and the County of San Diego, California (Deméré and Walsh 1993).

2.2.1 PALEONTOLOGICAL SENSITIVITY

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the rock unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontological sensitivity is derived from the fossil data collected from the entire geologic unit, not just from a specific survey. The following levels of sensitivity, as defined in the San Diego County paleontological resources guidelines (Deméré and Walsh 1993), are listed below:

- High Sensitivity – High sensitivity is assigned to geologic formations known to contain paleontological localities with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleobiology and evolutionary history (phylogeny) of animal and plants groups. Generally speaking, highly sensitive formations produce vertebrate fossil remains or are considered to have the potential to produce such remains.
- Moderate Sensitivity – Moderate sensitivity is assigned to geologic formations known to contain paleontological localities with poorly preserved, common elsewhere, or stratigraphically unimportant fossil material. The moderate sensitivity category is also applied to geologic formations that are judged to have a strong, but unproven potential for producing important fossil remains.
- Low Sensitivity – Low sensitivity is assigned to geologic formations that, based on their relative youthful age and/or high-energy depositional history, are judged unlikely to produce important fossil remains. Typically, low sensitivity formations produce invertebrate fossil remains in low abundance.
- Marginal Sensitivity – Marginal sensitivity is assigned to geologic formations that are composed either of volcanic rocks or high-grade metasedimentary rocks, but which nevertheless have a limited probability for producing fossil remains from certain sedimentary lithologies at localized outcrops.

- Zero Sensitivity – Zero sensitivity is assigned to geologic formations that are entirely plutonic in origin and therefore have no potential for producing fossil remains.

2.3 PROJECT LOCATION AND SETTING

The TRVRP Trails and Habitat Restoration Enhancement Project is located in and along the Tijuana River Valley adjacent to the international border with Mexico in southwestern San Diego County, California. The topography ranges from the relatively flat valley floor to the tall mesas to the south.

The TRVRP is bordered on the west by Border Field State Park, Tijuana River National Estuarine Research Reserve, Tijuana River National Wildlife Refuge, U.S. Navy lands, and City of San Diego lands. The TRVRP extends east nearly to Interstate 5, and to the north is bordered primarily by the City of Imperial Beach and the City of San Diego. The areas surveyed for the Project are predominantly located on the valley floor along both sides of the Tijuana River. Vegetation types present include coastal sage scrub, riparian, active agriculture, and ruderal vegetation.

2.3.1 GEOLOGIC SETTING

The geology of the study area was previously mapped by Kennedy and Tan (1977) at a scale of 1:24,000. The information contained within this and other research publications forms the basis for the following discussion on the regional and site-specific geology of the TRVRP study area. The Tijuana River Valley is west of the Peninsular Ranges in the relatively stable Coastal Plain Province of San Diego County. Over the last 75 million years, thick sequences of Cretaceous and Tertiary sedimentary rocks were deposited by ancient rivers and seas to form the coastal plain (Deméré and Walsh 1993). These sedimentary sequences record the geological evolution of western North America, starting with a trench-arc system that generated magmas of gabbro, tonalite, and granodiorite composition (Gastil and Higley 1977). By Upper Cretaceous time, volcanic activity had ceased and the coastline was dissected into short, steep drainages that produced enormous debris fans and slides.

By Eocene time, a subtropical climate and periods of higher rainfall supported coastal rainforests and a large delta system (Deméré and Walsh 1993). Braided rivers carried cobbles and boulders from hundreds of kilometers inland to the coast, filling the old Cretaceous canyons (Gastil and Higley 1977). Then from the late middle Eocene to the Oligocene, the climate became cooler and drier and semi-arid grasslands replaced the tropical rainforests. These ecological changes reflect the northward drift of the North American plate and a change from a warm tropical climate to a cool temperate one (Lander 1997).

By the middle Miocene, volcanism resumed on the Continental Borderland to the east, in the Los Angeles Basin to the north, and in Baja California to the south of the Coastal Plain while tectonic processes caused great blocks of lithosphere to be upturned, compressed and folded (Gastil and Higley 1977). However, the Coastal Plain itself remained relatively quiet; sandstone and ash from distant volcanism mixed with coarse local detritus to accumulate as shallow lacustrine and fluvial deposits (Gastil and Higley 1977).

During the Pliocene, the coastal area began to subside and ocean waves and nearshore currents reworked Eocene and Miocene deposits to produce a complex sequence of nearshore conglomerates and sandstone (Gastil and Higley 1977). During the Pleistocene, alternating glacial periods and tectonic uplift due to movement along the San Andreas Fault caused sea levels to rise and fall,

exposing and submerging the coastline episodically. Marine terraces were cut when relative levels of land and sea remained still for a few thousand years.

Today, tectonic processes have raised ancient marine rocks up to elevations around 900 feet above sea level and ancient river deposits as high as 1,200 feet (Deméré and Walsh 1993). In the southwestern part of San Diego County, the La Nacion and Rose Canyon fault zones have dissected the sedimentary sequences into distinct fault blocks.

2.4 PROJECT PERSONNEL

Fieldwork for this Project was conducted under the supervision of Cara Corsetti, Qualified Paleontologist. Della Snyder and Paul Murphey conducted the paleontological assessment and prepared the final report.

2.5 METHODS

2.5.1 RECORDS SEARCH

Prior to the field survey, published and unpublished geological and paleontological literature were reviewed and evaluated to develop a baseline paleontological inventory of TRVRP and assess the potential paleontological productivity of stratigraphic units present. The literature review was supplemented by museum locality and specimen database searches to 1) determine whether any previously documented significant fossil localities occur within the Project area; 2) assess the potential for disturbance of these localities as a result of Project implementation; and 3) evaluate the paleontological potential of the rock formations and/or surficial deposits underlying the Project area.

Fossil localities and paleontological database search results were obtained from the San Diego Natural History Museum on June 16, 2004.

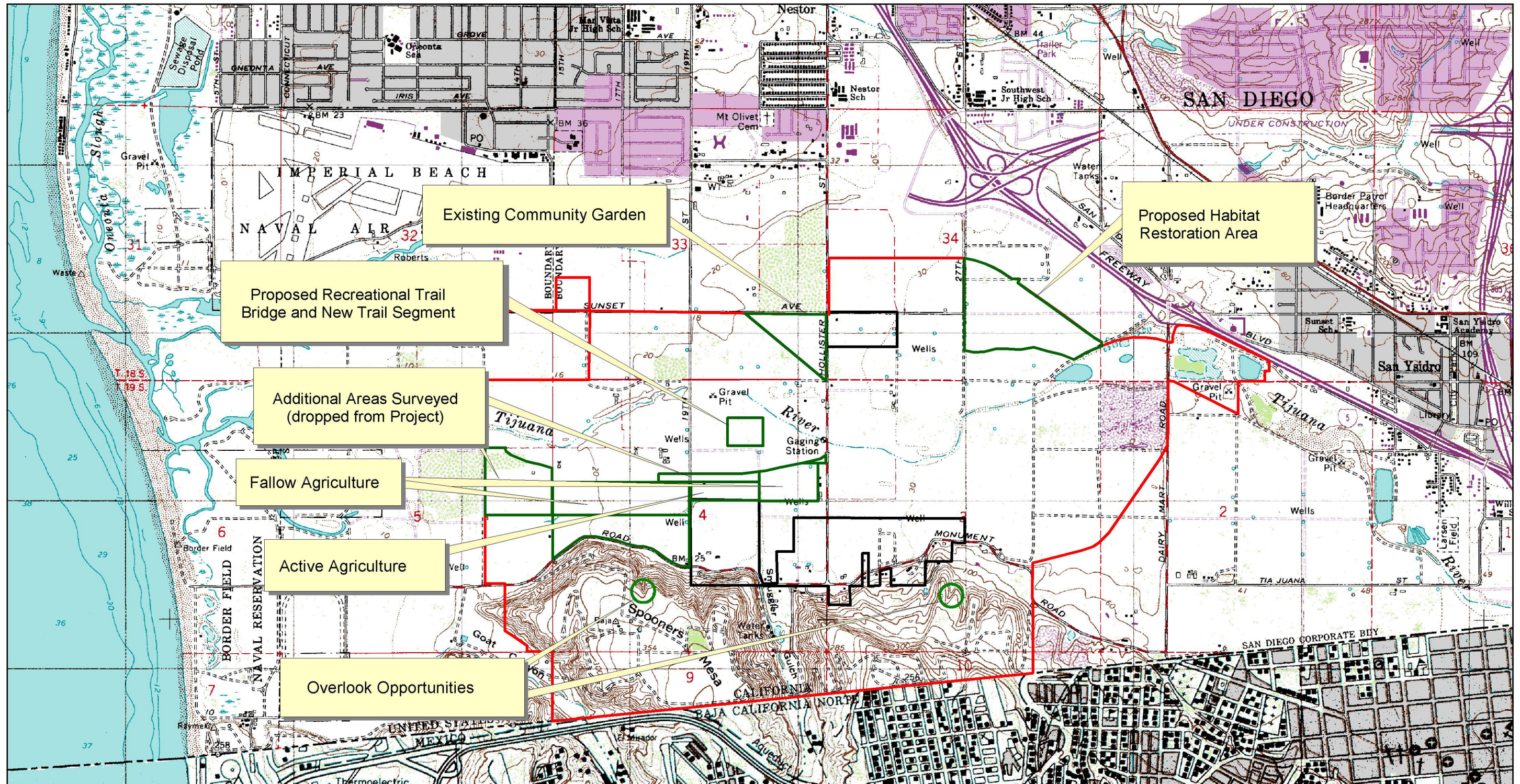
2.5.2 FIELD SURVEY

The field survey portion of the study was conducted August 3-5, 2004. The purpose of the survey was to look for 1) surface fossils, 2) exposures of potentially fossiliferous rocks or surficial sediments, and 3) areas in which fossiliferous rocks or potentially fossiliferous surficial deposits could be exposed or otherwise impacted during implementation of the proposed Project.

The survey consisted of a 100 percent pedestrian inspection of the prioritized Project areas (see Figure 2.5.2-1) selected by the Project management team, as follows:

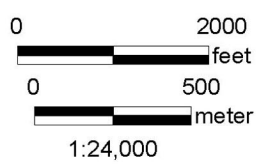
1. Community Garden Area
2. West of Dairy Mart Ponds Proposed Habitat Restoration Area
3. Fallow Agricultural Areas
4. Active Agricultural Areas
5. Proposed Recreational Trail Bridge and New Trail Segment
6. Existing Ranger Station
7. West Overlook Opportunity, South of Monument Road
8. East Overlook Opportunity, South of Monument Road
9. Additional Areas Surveyed (subsequently dropped from Project).

In addition, a thorough inspection of all outcrop exposures located primarily on Spooners Mesa was conducted as part of the field survey.



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Map Source: USGS 7.5' Quad:
IMPERIAL BEACH
1967, 1975



- Tijuana River Valley Regional Park Boundary
- Not a Part of Park (NAP)
- Approximate Boundary

Tijuana River Valley Regional Park
Trails and Habitat Restoration
Enhancement Project

Figure 2.5.2-1 Areas Surveyed for
Paleontological Resources by SWCA

2.6 GEOLOGY AND PALEONTOLOGY

There are three paleontologically sensitive geologic units within the TRVRP study area: marine sedimentary rocks of the late Pliocene (1.5 to 3 million years old) San Diego Formation, the early Pleistocene (500,000 to 1.5 million years old) Lindavista Formation, and the late Pleistocene (220,000 years old) Bay Point Formation (Deméré and Walsh 1993). A map depicting paleontological sensitivity within the Project area is presented in Figure 2.6-1. Geologic units with low or no paleontological sensitivity within the study area include Quaternary alluvium and slopewash deposits and Quaternary landslide deposits.

Quaternary alluvium and slopewash deposits typically consist of stream-deposited cobble to pebble gravel, sand, silt, mud, and clay. This younger alluvium is typically present in low-lying valleys and stream channels. Alluvial deposits less than 5,000 years old are too young to contain fossils, although they may contain cultural and biological remains. Based on the results of the field survey, the Quaternary alluvium is too young geologically to contain fossils, and therefore, is considered to have low paleontological sensitivity.

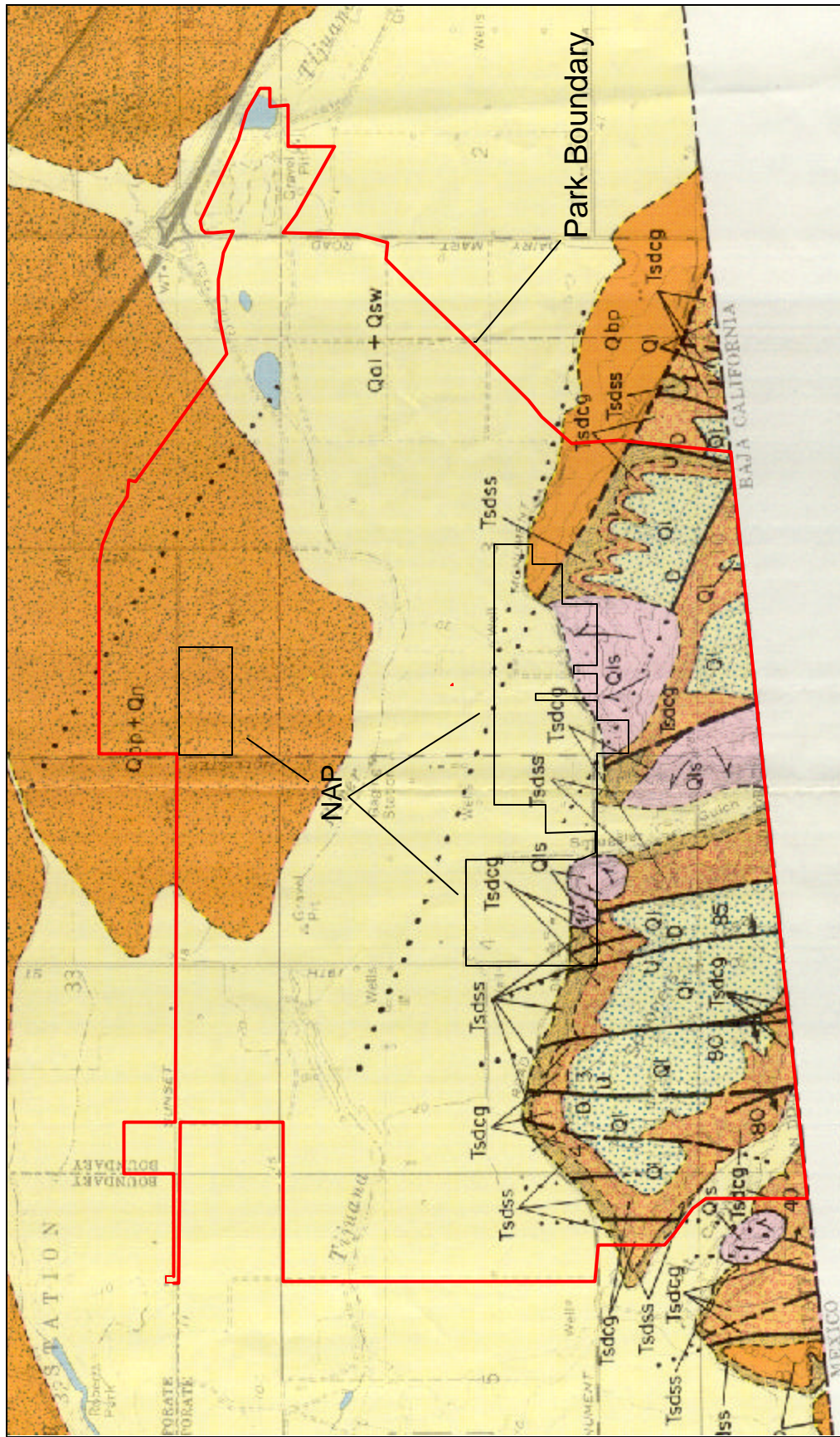
Landslide deposits consist of rock material that has moved under the influence of gravity. Debris flows, debris slides, rockslides, debris slumps, slump earthflows, and earthflows are included in landslide deposits. Lithologies of these deposits vary and are dependent upon the type of source rock. In general, landslides and debris flows are much less likely to contain well-preserved fossils than intact native sediments. Landslide material is often subjected to increased groundwater percolation, which tends to have a negative effect on the preservation of fossils, and gravitationally-induced movements of sediment can also destroy fossil remains through abrasion and breakage. Additionally, when the original stratigraphic position of the sediments is disturbed, there are varying degrees of information loss with the severity of changes to the slide mass. Based on the results of the field survey, landslide deposits are considered too young geologically to contain fossils and therefore, have been assigned low paleontological sensitivity.

The oldest of the three paleontologically sensitive geologic units within the Project boundaries is the San Diego Formation, which is considered to have high paleontological sensitivity because of the abundance and diversity of fossil localities and their fossil assemblages. The San Diego Formation is a marine sedimentary deposit that typically consists of yellowish-gray, fine-grained sandstones with well-sorted, rounded pebble conglomerate lenses (Deméré and Walsh 1993). The rock unit has yielded rich fossil beds of marine invertebrates, such as clams, scallops, snails, crabs, and barnacles, and marine vertebrates including sharks, rays, bony fishes, dolphins, and baleen whales (Deméré and Walsh 1993).

The Lindavista Formation is a marine and/or non-marine terrace deposit that consists of rust-red, coarse-grained, pebbly sandstones and pebble conglomerates (Deméré and Walsh 1993). The marine invertebrate fauna indicate an early Pleistocene age for the formation and do not represent of any single biotic community. Specimens collected from the Linda Vista Terrace in San Diego County suggest two types of habitat: sandy beach and cobble or rocky-bottom (Kennedy 1973). An exposed open coast sandy beach habitat is strongly suggested by the great abundance of Pismo clam *Tivela stultorum* (Kennedy 1973). Most of these specimens were highly fragmented, indicating

mixing and local transport before deposition. Elsewhere in the Lindavista Formation, fossil localities are rare and the fossils collected include nearshore marine invertebrates and sparse remains of shark and baleen whales. Based on the generally low abundance of fossils, it has been assigned moderate paleontological sensitivity (Deméré and Walsh 1993).

The Bay Point Formation is a nearshore marine sedimentary deposit consisting of light gray, friable to partially cemented, fine-to coarse-grained, massive and cross-bedded sandstones (Deméré and Walsh 1993). According to the San Diego County Paleontological Resource Guidelines, it has been assigned a high paleontological sensitivity based on the recovery of large and diverse assemblages of well-preserved marine invertebrate fossils (primarily mollusks), and some fossil marine vertebrates such as sharks, rays, and bony fishes.



Tijuana River Valley Regional
Park Trails and Habitat
Restoration Enhancement Project

Key
 — Not a Part of Park (NAP)
 Qal & Qsw = Alluvium & slope wash, undifferentiated
 Ql = Lindavista Formation
 Tsdcg = San Diego Formation cg = Conglomerate member
 Tsdss = San Diego Formation ss = Sandstone
 Qls = Landslide Deposit
 Qbp = Baypoint Formation

0 feet 2000
 0 meter 500
 1:24,000

SWCA
 ENVIRONMENTAL CONSULTANTS

Figure 2.6-1 Paleontological
Sensitivity Map

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2.8 RECOMMENDATIONS

Ground disturbing activities within areas characterized by imported fill or disturbed alluvium are not considered likely to result in adverse impacts to significant paleontological resources. However, all ground disturbing activities within the San Diego, Bay Point, and Lindavista formations are likely to result in adverse impacts to significant paleontological resources unless proper mitigation measures are implemented. Fossils are an important, nonrenewable scientific resource. The destruction of fossils makes biological records of ancient life unavailable for study by scientists and would thus represent a significant adverse impact on the region's paleontological resources. However, implementation of proper mitigation measures can reduce adverse impacts to these paleontological resources.

2.8.1 ASSESSMENT OF FINAL PROJECT ELEMENT LOCATIONS

Only the proposed Project was assessed by SWCA; no alternatives were analyzed. Furthermore, several specific elements of the Project were not surveyed by SWCA (i.e. Trail Head, Bench, and Signage locations, etc.). SWCA recommends that all Project elements be installed/constructed within areas that have been previously surveyed for paleontological resources. Once the Project design has been finalized (and prior to construction), a paleontologist should assess whether the final proposed locations of specific Project elements are located within areas previously surveyed for paleontological resources. If so, and the proposed location is not within or immediately adjacent to a known paleontological resource, then construction should proceed with a paleontological monitor. If not, the proposed element should be relocated to an area that has been previously surveyed, or the area must be surveyed for paleontological resources prior to construction.

The paleontologist should also assess whether the final proposed location of each specific Project element is located within or immediately adjacent to known surficial paleontological resources. If so, the surficial paleontological resources to be affected by the Project must be salvaged by a qualified paleontologist prior to construction. In addition, construction should be monitored by a qualified paleontological monitor (see below).

2.8.2 MITIGATION MEASURES

The following mitigation measures have been developed to reduce the adverse impacts of Project implementation on paleontological resources to a less than significant level. The measures are consistent with Society of Vertebrate Paleontology (1995) standards and San Diego County guidelines, and meet the paleontological requirements of CEQA. These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely Project completion.

1. A Qualified Paleontologist will be retained to supervise monitoring of construction excavations and to produce a mitigation plan for the proposed Project. Paleontological monitoring will

include inspection of exposed rock units and microscopic examination of matrix to determine if fossils are present. The monitor will have authority to temporarily divert ground disturbing activity away from exposed fossils in order to professionally and efficiently recover the fossil specimens and collect associated data. For Project activities that impact the San Diego and Bay Point formations, both of which are highly likely to contain fossil resources and therefore of high paleontological sensitivity, a qualified paleontological monitor should conduct full-time monitoring of all ground-disturbing activities. Since the Lindavista Formation is considered to have moderate potential to contain fossils, monitoring of construction activities in this unit should be conducted on a part-time or spot-check basis.

2. If microfossils are present, the monitor will collect matrix for processing. In order to expedite removal of fossiliferous matrix, the monitor may request heavy machinery assistance to move large quantities of matrix out of the path of construction to designated stockpile areas. Testing of stockpiles will consist of screen washing small samples (approximately 200 pounds) to determine if significant fossils are present. Productive tests will result in screen washing of additional matrix from the stockpiles to a maximum of 6,000 pounds per locality to ensure recovery of a scientifically significant sample.
3. The Qualified Paleontologist will prepare monthly progress reports to be filed with the client and the lead agency.
4. Recovered fossils will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and repositied in a designated paleontological curation facility: the San Diego Natural History Museum.
5. At each fossil locality, field data forms will record the locality and its stratigraphic provenance and appropriate scientific samples collected and submitted for analysis.
6. The Qualified Paleontologist will prepare a final mitigation report to be filed with the client, the lead agency, and the repository.

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Appendix A
Newly Recorded and Updated Cultural Resources within the TRVRP

ALL ARCHAEOLOGICAL SITE RECORDS REMOVED

— CONFIDENTIAL —

Appendix B
Native American Consultation Correspondence

STATE OF CALIFORNIAArnold Schwarzenegger, Governor**NATIVE AMERICAN HERITAGE COMMISSION**

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June 2, 2004

Kevin Hunt
SWCA Environmental Consultants
3934 Murphy Canyon Road, Suite B104
San Diego Office

Sent by Fax: 858-277-0563
Number of Pages: 3

RE: The Proposed Project Tijuana River Valley Regional Park Trails and Habitat Restoration
Master Plan EIR/EIS; San Diego County.

Dear Mr. Hunt:

A record search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-6251.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carol Gaubatz".

Carol Gaubatz
Program Analyst

NATIVE AMERICAN CONTACTS
San Diego County
June 2, 2004

Barona Group of the Capitan Grande
 Clifford LaChappa, Chairperson
 1095 Barona Road Diegueno
 Lakeside, CA 92040
 (619) 443-6612

Ewiiapaayp Tribal Office
 Harlan Pinto, Chairperson
 PO Box 2250 Kumeyaay
 Alpine, CA 91903-2250
 wrnicklin@leaningrock.net
 (619) 445-6315 - voice
 (619) 445-9126 - fax

Barona Group of the Capitan Grande
 Lucille Richard, EPA Specialist
 1095 Barona Road Diegueno
 Lakeside, CA 92040
 (619) 443-6612

Ewiiapaayp Tribal Office
 James Robertson, Cultural Resources Coordinator
 PO Box 2250 Kumeyaay
 Alpine, CA 91903-2250
 jrobertson@leaningrock.net
 (619) 445-6315 - voice
 (619) 445-9126 - fax

Barona Group of the Capitan Grande
 Steve Banegas, Cultural Resources Coordinator
 1095 Barona Road Diegueno
 Lakeside, CA 92040
 (619) 443-6612

Ewiiapaayp Tribal Office
 Michael Garcia, Environmental Coordinator
 PO Box 2250 Kumeyaay
 Alpine, CA 91903-2250
 michaelg@leaningrock.net
 (619) 445-6315 - voice
 (619) 445-9126 - fax

Barona Group of the Capitan Grande
 Sue Thomas, Tribal Administrator
 1095 Barona Road Diegueno
 Lakeside, CA 92040
 (619) 443-6612

Ewiiapaayp Tribal Office
 Will Micklin, Tribal Administrator
 PO Box 2250 Kumeyaay
 Alpine, CA 91903-2250
 wmicklin@leaningrock.net
 (619) 445-6315 - voice
 (619) 445-9126 - fax

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

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

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed project Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS, San Diego County.

NATIVE AMERICAN CONTACTS
San Diego County
June 2, 2004

Jamul Indian Village
 Leon Acevedo, Chairperson
 P.O. Box 612
 Jamul, CA 91935
 (619) 669-4785
 Fax: (619) 669-4817

Sycuan Band of Mission Indians
 Danny Tucker, Chairperson
 Diegueno/Kumeyaay 5459 Dehesa Road
 El Cajon, CA 92021
 619 445-2613
 619 445-1927 Fax

Diegueno/Kumeyaay

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

Viejas Band of Mission Indians
 Anthony Pico, Chairperson
 Diegueno/Kumeyaay PO Box 908
 Alpine, CA 91903
 (619) 445-3810
 (619) 445-5337 Fax

Diegueno/Kumeyaay

Kumeyaay Cultural Repatriation Committee
 Steve Banegas, Spokesperson
 1095 Barona Road
 Lakeside, CA 92040
 (619) 443-6612
 (619) 443-0681 FAX

Diegueno/Kumeyaay

San Pasqual Band of Mission Indians
 Allen E. Lawson, Chairperson
 PO Box 365
 Valley Center, CA 92082
 (760) 749-3200
 (760) 749-3876 Fax

Diegueno

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This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed project Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS, San Diego County.



San Diego Office
3934 Murphy Canyon Road, Suite B104
San Diego, California 92123
Tel 858.277.0544 Fax 858.277.0563
www.swca.com

11 June 2004

Ms. Sue Thomas
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Ms. Thomas,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

PROJECT NAME: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan (Environmental Impact Report/ Environmental Impact Study).

PROJECT DESCRIPTION & LOCATION: The approximately 1800-acre project area consists of wetlands, grasslands, and mesas and is located in the Tijuana River valley west of the Interstate 5, and north of and adjacent to the international border. A map showing the project area has been included with this letter.

The project area has been subjected to a California Historical Resources Information System (CHRIS) records search at the South Coastal Information Center at the San Diego State University. In addition, the California Native American Heritage Commission (NAHC) was contacted for a review of its Sacred Lands File and to obtain a list of local Native Americans who may have specific knowledge of the area. The NAHC knows of no sacred lands in the area.

If you have any knowledge of traditional cultural properties within the project area, or if you have any comments or questions, please contact Kevin Hunt at (858) 277-0544, khunt@swca.com, or the address above, at your earliest convenience.

We would greatly appreciate hearing from you if you know of any cultural resources or other area of concern that might be within the proposed project area. Thank you for your assistance.

Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



San Diego Office
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www.swca.com

11 June 2004

Mr. James Robertson
Ewiiapaayp Tribal Office
PO Box 2250
Alpine, CA 91903-2250

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Mr. Robertson,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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Sincerely,
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Kevin Hunt
Project Manager—Cultural Resources

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11 June 2004

Ms. Lucille Richard
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Ms. Richard,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

PROJECT NAME: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan (Environmental Impact Report/ Environmental Impact Study).

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Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

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www.swca.com

11 June 2004

Mr. Harlan Pinto
Ewiiapaayp Tribal Office
PO Box 2250
Alpine, CA 91903-2250

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Mr. Pinto,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

PROJECT NAME: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan (Environmental Impact Report/ Environmental Impact Study).

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Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



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Tel 858.277.0544 Fax 858.277.0563
www.swca.com

15 November 2004

Mr. Anthony Pico
Viejas Band of Mission Indians
P.O. Box 908
Alpine, CA 91903

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project; San Diego County, California.

Dear Mr. Pico,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

PROJECT NAME: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project.

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Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



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www.swca.com

11 June 2004

Mr. Will Micklin
Ewiiapaayp Tribal Office
PO Box 2250
Alpine, CA 91903-2250

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Mr. Micklin,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

PROJECT NAME: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan (Environmental Impact Report/ Environmental Impact Study).

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We would greatly appreciate hearing from you if you know of any cultural resources or other area of concern that might be within the proposed project area. Thank you for your assistance.

Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



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www.swca.com

15 November 2004

Mr. Allen E. Lawson
San Pasqual Band of Mission Indians
P.O. Box 365
Valley Center, CA 92082

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project; San Diego County, California.

Dear Mr. Lawson,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

PROJECT NAME: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project.

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We would greatly appreciate hearing from you if you know of any cultural resources or other area of concern that might be within the proposed project area. Thank you for your assistance.

Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



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www.swca.com

11 June 2004

Mr. Clifford LaChappa
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Mr. LaChappa,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

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San Diego, California 92123
Tel 858.277.0544 Fax 858.277.0563
www.swca.com

11 June 2004

Mr. Michael Garcia
Ewiiapaayp Tribal Office
PO Box 2250
Alpine, CA 91903-2250

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Mr. Garcia,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



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San Diego, California 92123
Tel 858.277.0544 Fax 858.277.0563
www.swca.com

15 November 2004

Mr. Ron Christman
Kumeyaay Cultural Historic Committee
56 Viejas Grade Road
Alpine, CA 92001

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project; San Diego County, California.

Dear Mr. Christman,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map



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11 June 2004

Mr. Steve Banegas
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Master Plan EIR/EIS; San Diego County, California.

Dear Mr. Banegas,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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Project Manager—Cultural Resources

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15 November 2004

Mr. Leon Acevedo
Jamul Indian Village
PO Box 612
Jamul, CA 91935

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project; San Diego County, California.

Dear Mr. Acevedo,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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15 November 2004

Mr. Danny Tucker
Sycuan Band of Mission Indians
5459 Dehesa Road
El Cajon, CA 92021

RE: Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project; San Diego County, California.

Dear Mr. Tucker,

As a member of the Native American community, we are sending this letter to inform you of a park improvement project in San Diego County, California. The Native American Heritage Commission provided your name as an appropriate contact for this area. We have enclosed a map showing the project location. We would appreciate hearing from you if you know of any cultural resources or other areas of concern that might be within or immediately adjacent to this location.

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PROJECT DESCRIPTION & LOCATION: The approximately 1800-acre project area consists of wetlands, grasslands, and mesas and is located in the Tijuana River valley west of the Interstate 5, and north of and adjacent to the international border. A map showing the project area has been included with this letter.

The project area has been subjected to a California Historical Resources Information System (CHRIS) records search at the South Coastal Information Center at the San Diego State University. In addition, the California Native American Heritage Commission (NAHC) was contacted for a review of its Sacred Lands File and to obtain a list of local Native Americans who may have specific knowledge of the area. The NAHC knows of no sacred lands in the area.

If you have any knowledge of traditional cultural properties within the project area, or if you have any comments or questions, please contact Kevin Hunt at (858) 277-0544, khunt@swca.com, or the address above, at your earliest convenience.

We would greatly appreciate hearing from you if you know of any cultural resources or other area of concern that might be within the proposed project area. Thank you for your assistance.

Sincerely,
SWCA Environmental Consultants

Kevin Hunt
Project Manager—Cultural Resources

Enclosure: Map

Appendix C
SWCA Fossil Locality Data Forms

APPENDIX C REMOVED

— CONFIDENTIAL —

Appendix D
Photos of Fossil Specimens



Photo 1. Fossil shark tooth at Locality 2004159

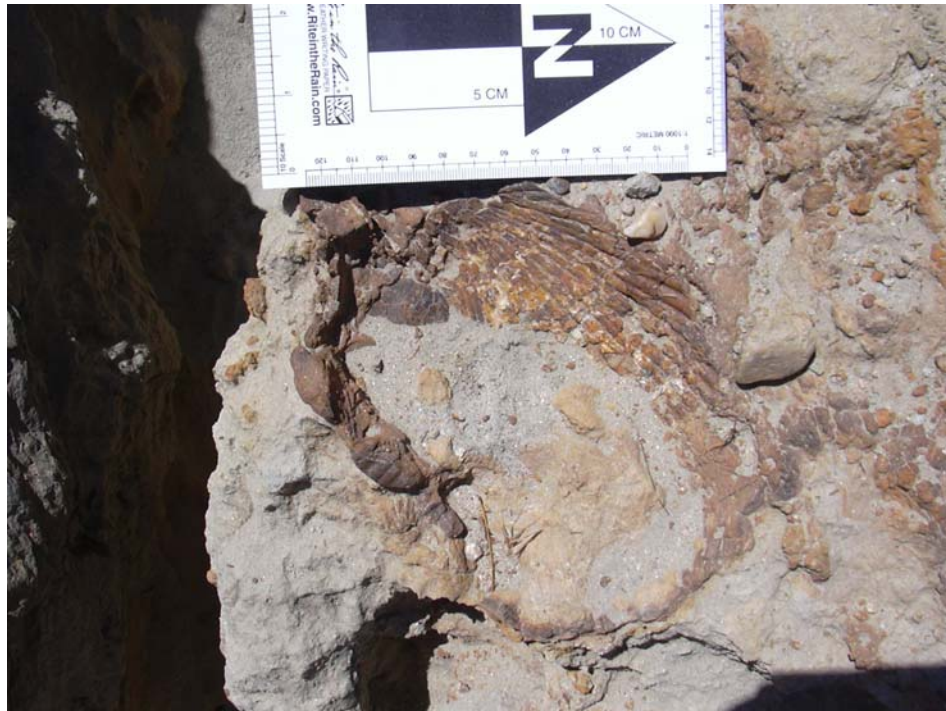


Photo 2. Fossil scallop at Locality 2004159



Photo 3. Fossil scallop with preserved shell material at Locality 2004160



Photo 4. Scallop impression with smaller scallop at Locality 2004160