

APPENDIX B

CLASS III CULTURAL RESOURCE INVENTORY (PUBLIC DRAFT)

THIS PAGE INTENTIONALLY LEFT BLANK

**Class III Cultural Resource Inventory for the
USMCA Mitigation of Contaminated Transboundary Flows
Project in the Tijuana Watershed in San Diego, California**

Public Version with Confidential Figures Redacted

EPA Contract No. 68HERH19D0033

Task Order No. 53

Revised Draft | May 2022

Prepared for:

Patrick Goodwin
Eastern Research Group, Inc.
14555 Avion Parkway, Suite 200
Chantilly, Virginia 20151

Submitted to:

United States Environmental Protection Agency
Office of Wastewater Management
1200 Pennsylvania Avenue, NW
Washington DC 20460

Prepared by:

James T. Daniels, Jr., M.A., RPA
Zaira Marquez, M.Sc., RPA
and
Mark S. Becker, Ph.D., RPA



2034 Corte del Nogal
Carlsbad, California 92011
(760) 804-5757

ASM Project Number 36320

**Class III Cultural Resource Inventory for the
USMCA Mitigation of Contaminated Transboundary Flows Project
in the Tijuana Watershed in San Diego, California**

Public Version with Confidential Figures Redacted

**EPA Contract No. 68HERH19D0033
Task Order No. 53**

Prepared for:

Patrick Goodwin
Eastern Research Group, Inc.
14555 Avion Parkway, Suite 200
Chantilly, Virginia 20151

Submitted to:

United States Environmental Protection Agency
Office of Wastewater Management
1200 Pennsylvania Avenue, NW
Washington DC 20460

Prepared by:

James T. Daniels, Jr., M.A., RPA
Zaira Marquez, M.Sc., RPA
and
Mark S. Becker, Ph.D., RPA

ASM Affiliates
2034 Corte Del Nogal
Carlsbad, California 92011

USGS 7.5' Quadrangle Imperial Beach
336-acres

Keywords: Imperial Beach, Township 18 and 19 South, Range 2 West, Survey, Tijuana River, San Diego, USMCA, CA-SDI-4933, CA-SDI-8604, CA-SDI-8605, CA-SDI-11096H, CA-SDI-11948H, CA-SDI-13486

PN 36320
May 2022

TABLE OF CONTENTS

Chapter	Page
LIST OF ABBREVIATIONS AND ACRONYMS	iv
MANAGEMENT SUMMARY	v
1. INTRODUCTION	1
PROJECT DESCRIPTION	1
KEY PERSONNEL	5
REGULATORY FRAMEWORK	5
National Historic Preservation Act	5
National Register of Historic Places Significance Criteria	6
2. SETTING	9
ENVIRONMENT	9
Geological Context	9
Climate	10
Vegetation	10
Fauna	12
CULTURAL BACKGROUND	12
Prehistoric Archaeology	12
Ethnographic Evidence	15
History	16
RECORDS SEARCH RESULTS	17
NATIVE AMERICAN CONTACT PROGRAM	19
3. FIELD METHODS	25
SURVEY METHODS	25
4. REPORT OF FINDINGS	27
PREVIOUSLY RECORDED SITES	27
CA-SDI-4933	27
CA-SDI-8604	29
CA-SDI-8605	31
CA-SDI-11096H	35
CA-SDI-11948H	39
CA-SDI-13486	43
CA-SDI-23075	46
PREVIOUSLY RECORDED ISOLATES	48
P-37-034104	48
NEWLY RECORDED SITES	48
P-37-39926	48
5. MANAGEMENT CONSIDERATIONS	51
RECOMMENDATIONS	55
REFERENCES	56
APPENDICES	65
APPENDIX A	67

Records Search Results	67
APPENDIX B.....	69
NAHC Consultation.....	69
CONFIDENTIAL APPENDIX C (BOUND SEPARATELY).....	71
Site Records and Site Record Updates.....	71
CONFIDENTIAL APPENDIX D (BOUND SEPARATELY).....	73
Confidential Report Figures	73

LIST OF FIGURES

	Page
Figure 1. Vicinity map of USMCA Mitigation of Contaminated Transboundary Flows in the Tijuana Watershed Project Area.....	2
Figure 2. Location map of USMCA Mitigation of Contaminated Transboundary Flows in the Tijuana Watershed Project Area on the USGS 7.5-minute quadrangle of Imperial Beach.....	3
Figure 3. Records search results showing GIS site boundaries from the SCIC and SHPO for the Tijuana River Valley.....	21
Figure 4. Previously recorded sites intersecting the Project APE.....	23
Figure 5. Sketch map of previously defined site boundary for SDI-4933 from SCIC.....	28
Figure 6. Overview of SDI-4933, taken during pedestrian survey, showing current site conditions.....	29
Figure 7. Sketch map showing previously defined boundary of SDI-8604 and the proposed Project APE.....	30
Figure 8. The cut bank along the Goat Canyon drainage shows modern refuse and heavy sedimentation.....	31
Figure 9. Sketch map showing SCIC-provided GIS boundary of SDI-8605 in relation to current Project area.....	33
Figure 10. Sketch map from Mariah Associates, Inc., overlaid on 2019 aerial showing more accurate depiction of the location they tested for Locus A of SDI-8605. The inset shows how the sketch was georeferenced using aerial imagery from 1995.....	34
Figure 11. Sketch map showing the newly defined boundary of SDI-11096H and the associated artifacts and features identified during the pedestrian survey.....	36
Figure 12. The retaining wall associated with SDI-11096H is located along an existing dirt road south of the previous location of the shotgun-style house.....	37
Figure 13. Newly defined CA-SDI-11096H site boundary and location of demolition debris overlaid on 1953 aerial. The debris coincides with the locations of other structures behind the shotgun-style house.....	38
Figure 14. Sketch map showing the revised boundary of SDI-11948H and results of the pedestrian survey.....	40
Figure 15. Wire winch wheel and motor with concrete foundation inscribed with the words “Baxter and Peterson,” located near the site’s north end.....	41
Figure 16. The retaining wall is located on Smuggler’s Gulch’s west bank near the northern end of SDI-11948H.....	41
Figure 17. Newly defined site boundary for SDI-11948H overlaid on 1964 aerial imagery showing previous structures, no longer existing, associated with the site.....	42
Figure 18. Sketch map by Mariah Associates, Inc., from the evaluation effort at SDI-13486, overlaid on 2019 aerial imagery showing the smaller extent of the site compared to the SCIC site boundary (Turnbow et al. 1995:146).....	44
Figure 19. Sketch map of the SCIC-provided GIS boundary for SDI-13486 in relation to the current Project APE and existing built environment.....	45
Figure 20. Sketch map showing the previously defined boundary of CA-SDI-23075 in relation to Project APE.....	47

Figure 21. Overview of CA-SDI-23075 from the north end of site looking southwest.....	48
Figure 22. Sketch map showing the extent of cobble wall and entrance to former Windover Ranch, designated as P-37-39926.	49
Figure 23. Overview of eastern portion of Windover Ranch cobble wall as it appears today.....	50
Figure 24. Historic photo of entrance to Windover Ranch (photo credit to Schoenherr 2016).	50
Figure 25. Map showing the proposed Project's APE and those sites previously evaluated and recommended not eligible for listing in the NRHP and those sites not yet formally evaluated but preliminarily recommended not eligible.	53

LIST OF TABLES

	Page
Table 2.1 Previous Cultural Resource Studies Intersecting the Project APE.....	17
Table 2.2 Previously Recorded Cultural Resources Intersecting the Project APE.....	19

LIST OF ABBREVIATIONS AND ACRONYMS

ft.	foot/feet
in.	inch
m	meter
cm	centimeter
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
APTP	Advanced Primary Treatment Plant
ARPA	Archaeological Resources Protection Act
ASM	ASM Affiliates, Inc.
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
EPA	Environmental Protection Agency
ERG	Eastern Research Group, Inc.
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
ITP	International Wastewater Treatment Plant
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
RPA	Register of Professional Archaeologists
RECON	Regional Environmental Consultants
SCIC	South Coastal Information Center
SHPO	State Historic Preservation Office(r)
USGS	United States Geological Survey
USMCA	United States-Mexico-Canada Agreement

MANAGEMENT SUMMARY

ASM Affiliates, Inc., (ASM) was contracted by Eastern Research Group, Inc., (ERG) to conduct a Class III pedestrian inventory of 336 acres for the United States-Mexico-Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project (Project) in the Tijuana River watershed in San Diego County, California in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The Project is located on City, County, and Federal lands in the Tijuana River Valley near the community of San Ysidro in the City of San Diego and will consist of a series of projects to mitigate the persistent transboundary wastewater flows in the Tijuana River watershed. The Class III inventory included a records search at the South Coastal Information Center (SCIC) at San Diego State University of the Tijuana River Valley and Estuary and an intensive pedestrian survey of the Area of Potential Effect (APE).

The results of the SCIC records search identified a total of 97 previous cultural resources studies within the Tijuana River Valley, 34 of which intersect the Project APE. The records search also indicated that 115 cultural resources were previously recorded within the Tijuana River Valley; seven of those cultural resources intersect the APE and include four prehistoric sites, two historic sites, and one prehistoric isolate. During conversations with the State Historic Preservation Office, one recently identified multicomponent site (CA-SDI-23075) with prehistoric and historic artifacts was brought to our attention. The site was identified along Dairy Mart Road and intersects a small portion of this Project's APE. Because it was recently recorded, it is not yet included in the records at the SCIC.

The intensive pedestrian survey of the APE was conducted by a crew of four archaeologists and one Native American monitor from Viejas from November 8 to 10, 2021. During the survey, ASM did not identify any artifacts associated with the previously recorded prehistoric sites. A few historic artifacts and cobble wall features were found in association with the two previously recorded historic sites. One new, historic-period cultural resource, P-37-39926, was identified and consists of a low cobble wall associated with the Windover Ranch, in operation beginning as early as 1928.

Based on previous investigations, all four prehistoric sites (CA-SDI-4933, CA-SDI-8604, CA-SDI-8605, and CA-SDI-13486) were determined ineligible for listing in the National Register of Historic Places (NRHP) and will thus not be adversely affected by the Project. The three historic-period sites (CA-SDI-11096H, CA-SDI-11948H, and P-37-39926) and the multicomponent site (CA-SDI-23075) are preliminarily recommended not eligible for listing in the NRHP as they do not appear to have the potential to meet any of the eligibility criteria. However, avoidance is recommended. If avoidance is not feasible, a formal evaluation should be conducted for these resources.

1. INTRODUCTION

ASM Affiliates, Inc., (ASM) was contracted by Eastern Research Group, Inc., (ERG) to conduct a Class III pedestrian inventory of 336 acres for the United States-Mexico-Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project (Project) in the Tijuana River watershed, located in the City of San Diego, San Diego County, California (Figure 1). The Class III inventory was conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) to identify all cultural resources within the proposed Area of Potential Effect (APE). This inventory included a records search conducted at the South Coastal Information Center (SCIS) and a pedestrian survey of the Project APE. The Project may be located on the Imperial Beach, 7.5-minute (1980) United States Geological Survey 7.5-Minute Series Topographic Quadrangles within Township 19 South, Range 2 West, Sections 1–4 and 9–11 (Figure 2).

PROJECT DESCRIPTION

The Project will be funded by the Office of Water pursuant to provisions of the Clean Water Act, USMCA implementing legislation, and other agreements concerning U.S.-Mexico Border Water Infrastructure Project development.

A preliminary APE of approximately 336 acres is considered for this Class III cultural resource inventory. It encompasses areas in the U.S. that could potentially experience disturbance during the construction, operation, and maintenance of the following infrastructure being considered under the USMCA Mitigation of Contaminated Transboundary Flows Project:

- Expansion of treatment capacity at the South Bay International Wastewater Treatment Plant (ITP)
- Construction of a new Advanced Primary Treatment Plant (AFTP) immediately adjacent to the ITP
- Construction of a new river diversion upstream of Dairy Mart Road to divert flows to the AFTP
- Installation of new buried pipelines in Smuggler’s Gulch and along Monument Road to convey sewage from Mexico to the ITP
- Installation of new buried pipelines near the U.S.-Mexico border to convey diverted river water to the AFTP
- Installation of a trash boom across the Tijuana River upstream of Dairy Mart Road
- Modification of the canyon flow diversion structures in Goat Canyon and Smuggler’s Gulch to reduce border patrol agent exposure to contaminated transboundary flows

1. Introduction



Figure 1. Vicinity map of USMCA Mitigation of Contaminated Transboundary Flows in the Tijuana Watershed Project Area.

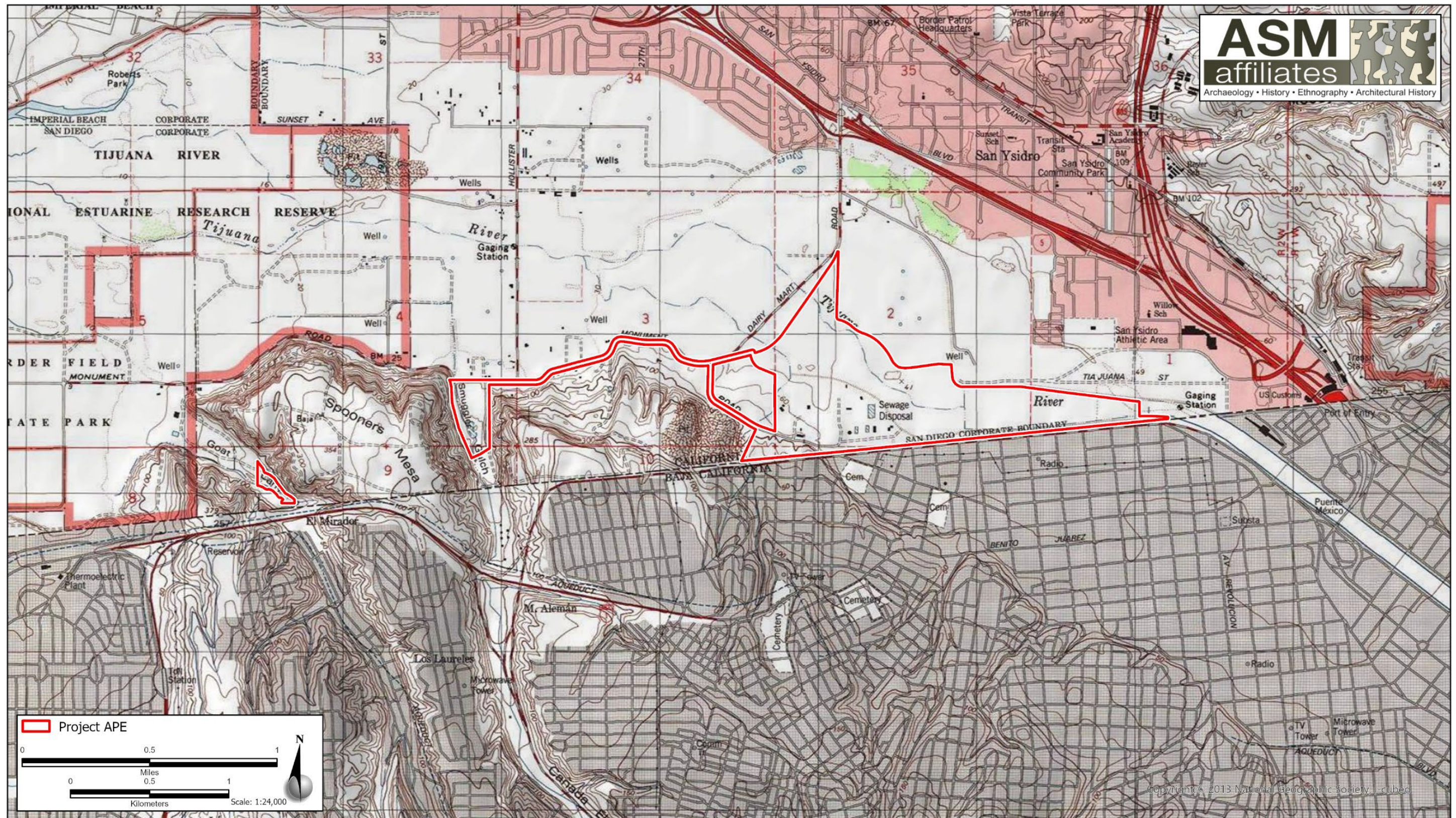


Figure 2. Location map of USMCA Mitigation of Contaminated Transboundary Flows in the Tijuana Watershed Project Area on the USGS 7.5-minute quadrangle of Imperial Beach.

KEY PERSONNEL

Individuals involved in developing and implementing this investigation meet the qualification requirements for professional education and experience as defined in Title 36 of the Code of Federal Regulations Part 800 (36 CFR 800) of the NHPA. Individuals meeting all applicable federal regulations and guidelines performed professional services under the *Secretary of the Interior's Professional Qualifications Standards* (*Federal Register Notice* Vol. 48, No. 190, pp. 44738-44739, 1983). The Class III cultural resources inventory was conducted in compliance with Section 106 of the NHPA of 1966, the Archaeological Resources Protection Act (ARPA), and the California Environmental Quality Act (CEQA). It was performed under the direct supervision of a member of the Register of Professional Archaeologists (RPA). The Principal Investigator for the Class III inventory was James T. Daniels, M.A., RPA, and Dr. Mark S. Becker was the Project Manager. Associate archaeologist Zaira Marquez was the field director and co-author of the report.

REGULATORY FRAMEWORK

Federal laws and policy directives that apply to the management of cultural resources on federal lands include the Antiquities Act of 1906, the NHPA of 1966, the National Environmental Policy Act (NEPA) of 1969, and the ARPA of 1979, as amended. While the Antiquities Act and the ARPA protect cultural resources on federal lands through civil and criminal penalties, the NHPA, NEPA, and the Federal Land Policy and Management Act (FLPMA) of 1976 are directed at federal agencies and help guide how cultural resources are managed on federal lands.

This Class III cultural resources inventory was conducted in adherence to directives outlined in *Archeology and Historic Preservation: Secretary of Interior's Standards and Guidelines* (Federal Register, Vol. 48, No. 190, 44716-44742); *Instructions for Recording Historical Resources* (California Office of Historic Preservation 1995a, 1995b); and by the President's Advisory Council on Historic Preservation (ACHP).

National Historic Preservation Act

The NHPA was passed on October 15, 1966, declaring that the preservation of historic properties that reflect America's historical and cultural foundation is in the public interest and serves to maintain and enrich the benefits of our shared, irreplaceable heritage. The NHPA established the National Register of Historic Places (NRHP) and the ACHP and provided that states may establish State Historic Preservation Officers (SHPOs) to carry out some of the functions of the NHPA. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the NHPA directs that “[t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP.” Section 106 also affords the ACHP a reasonable opportunity to comment on the undertaking (54 USC 306108).

Title 36 CFR 800 implements Section 106 of the NHPA. Section 106 defines the steps necessary to identify and evaluate historic properties (those cultural resources listed in or eligible for listing in the NRHP), to determine whether or not historic properties may be adversely affected by a proposed undertaking, and to establish a process for resolving adverse effects if effects cannot be avoided or minimized. The Section 106 process requires the involvement of the SHPO and relevant Consulting Parties who have a demonstrated interest in the undertaking due to their legal or economic interests or their interest in the effect on historic

properties. Relevant consulting parties include federally recognized Native American tribes who may attach religious or cultural significance to historic properties possibly affected by the undertaking.

National Register of Historic Places Significance Criteria

Managed by the National Park Service (NPS), the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. The NRHP is the official list of the nation's historic places worthy of preservation.

Title 36 CFR Part 60.4 (36 CFR 60.4) outlines the criteria for determining eligibility for listing in the NRHP. The criteria are based on the concepts of significance and integrity. The federal guidelines for assessing site integrity, as defined in the NHPA and published in the Federal Register [November 16, 1981, 46(220):50189], state that:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody 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 have yielded, or may be likely to yield, information important in prehistory or history.

Integrity Considerations

The NRHP recognizes seven aspects of integrity, each relating to whether and how much a property retains the identity for which it is significant. An evaluation of integrity must be grounded in understanding a property's significance and its essential physical features. Determining which of the seven integrity aspects are most important to a property requires knowing why, where, and when a property is significant.

To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

Location is the place where the historic property was constructed or the place where the historic event occurred. The relationship between the property and its location is often important to understanding why the property was created or why something happened.

Design is the combination of elements that create the form, plan, space, structure, and style of a property. It results from conscious decisions made during the original conception and planning of a property (or its significant alteration), and applies to activities as diverse as community planning, engineering, architecture, and landscape architecture. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.

Setting is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can either be natural or human-made, including vegetation, paths, fences, and relationships between other features or open space.

Materials are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.

Workmanship is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory. It is the evidence of artisans' labor and skill in constructing or altering a building, structure, object, or site. Workmanship can apply to the property as a whole or to its individual components.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.

Association is the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, the association requires the presence of physical features that convey a property's historic character.

Because *feeling* and *association* depend on individual perceptions, their retention alone is never sufficient to support the eligibility of a property for listing in the NRHP.

2. SETTING

This chapter reviews the Project's environmental setting and the prehistoric, ethnohistoric, and historic cultural sequence. It summarizes how pertinent investigations in the general region have contributed to the current reconstructions of cultural history. This review summary is not intended to be an exhaustive account of all research conducted in the area.

ENVIRONMENT

The physical environment is briefly described below. This description is intended as a general overview of the salient natural characteristics; it applies only to the current landscape. Much of the information in this section—the geology, climate, vegetation, and fauna—is a summary based on Pryde (2004).

Geological Context

Western San Diego County is divisible into two geomorphic provinces based on surface geology and relief: the Peninsular Range Province, and the Coastal Province (Pryde 2004:17-23). A series of marine terraces, or mesas, are the predominant relief element of the Coastal Province. The three major terraces in the San Diego region are the La Jolla Terrace, the Linda Vista Terrace, and the Poway Terrace. The La Jolla Terrace occurs between the elevations of 50 and 70 feet (ft.) above sea level and is best developed around the seaward flanks of Mt. Soledad and near Mission Bay. The Linda Vista Terrace occurs at elevations between 300 and 500 ft. above sea level and is the most apparent and extensive of the three terraces. The surface of the Linda Vista Terrace has been considerably fragmented by stream incision, and it includes most of the familiar mesas of the San Diego metropolitan area, such as Kearny Mesa, Clairemont Mesa, and Mira Mesa. The Poway Terrace is between 800 and 1,200 ft. above sea level. Only remnants of the Poway Terrace remain because of extensive erosion on the once-continuous surface of the mesa. Other similar terraces occur throughout the Coastal Province, including Otay Mesa and Avondale Terrace. All of these terraces exhibit considerable surface relief and are dissected by canyon systems. The degree of dissection increases with the age of the terrace. The elevation of a terrace relative to sea level and its underlying bedrock's relative lack of strength result in canyon cutting through stream erosion. The Linda Vista Terrace demonstrates a prime example of this in Mission Valley and its tributary valleys.

Sediments and sedimentary rocks underlie the Coastal Province, whereas mostly plutonic rocks underlie the Peninsular Range Province. The sedimentary rocks that flank the upland zone consist of materials originally supplied by upland erosion. Metavolcanic rocks (transformed or metamorphosed volcanic rocks) occur along the western boundary of the plutonic rocks near San Miguel Mountain.

The geology of the current Project APE consists entirely of young alluvial flood-plain deposits formed during the Holocene to late Pleistocene. The predominant soil type of the Project area is tidal flats with pockets of Chino silt loam, and of course, coastal beaches. The Tijuana River Estuary was formed when continental drift shifted North America toward the west, creating a steep coastline and narrow continental shelf. Marine terraces were gradually carved along the shores. Tectonic uplift during the Cenozoic created alluvial terraces up to several hundred feet above modern sea levels. The Tijuana River then cut through these terraces, although the narrow floodplain suggests that flows were not consistently large.

In the Holocene, rising sea levels began to reclaim the exposed margins of the coastal shelf. As longshore drift created sandy barriers along the coast, rivers were drowned, and lagoons formed, making this a bar-built estuary shaped by underlying tectonic factors. With flooding, most of the coastal embayments filled with sediment. Without continuous river flow and scouring, their mouths closed between flood seasons.

2. Setting

Recent geologic factors that have shaped the estuary are the competing forces of rising sea level, which promotes inland migration of the estuary, and tectonic uplift, which reverses that trend. The location of the shore and the configuration of the mouth are additional variables that influence the size and condition of the estuary.

Climate

The local climate is usually influenced by the proximity of the subtropical high pressure of the north Pacific (Griner and Pryde 2004:29-36). Although this system occasionally weakens, strengthens, or shifts location, it is generally found near southern California, displaced a little to the north in summer and to the south in winter. In high-pressure systems such as this, dry air moves toward the earth from higher altitudes and spreads out in a mild, clockwise wind pattern when it reaches the surface. This dry air keeps southern California in sunshine most of the time. The high pressure is sometimes centered as far inland as Nevada in the fall and winter. This produces periods of two or three days of arid, subsiding winds from the east, which are locally known as the Santa Anas. Santa Ana winds often produce the area's annual high temperatures in August or September and can rapidly spread wildfire through the dry brush.

The San Diego area experiences infrequent and highly seasonal rainstorms between October and April. During these months, the high-pressure system occasionally weakens or moves farther south, thus allowing major storms from the Pacific to reach southern California. On average, between 10 and 20 such storms reach San Diego County each winter, with the heaviest ones dropping 1 to 2 inches (in.) of rain in the metropolitan area. Seasonal precipitation varies throughout the county in accordance with the major landform and elevational differences. The coastal areas receive, on average, between 10 and 12 in. of rainfall annually. The coastal mesas receive 2 to 4 in. more rainfall than coastal valleys and up to twice as much as the beaches. Summer thunderstorms occasionally occur in the foothills and less frequently on the coast. Temperatures also vary with elevation. Coastal areas are generally mild, with occasional winter frost. A few days reach 100° F in summer and fall. Yearly temperature variation increases inland. Coastal valleys have frequent winter frost, and some weeks each summer have temperatures over 100° F.

Vegetation

The area's vegetation communities are closely related to its natural climatic and soil conditions (Griner and Pryde 2004:39-45). Coastal sage scrub vegetation was initially the dominant vegetation along the seashore, the southern coastal mesas, and the coastal valleys. Significant areas of chaparral are found on the northern coastal mesas. The drier-adapted chamise chaparral grows on the more exposed sites, while mixed chaparral grows on the moister sites. Oak woodlands generally exist in two forms: a coastal canyon form that extends into the mountains, and the more open form of foothill mesas. Riparian woodlands are located in nearly all of the major geographic formations in San Diego County, growing in streambeds and riverbeds where soil moisture is close to the surface. However, vegetation communities are not distinct in many areas but blend in broad bands or ecotones at their borders. The discussions below cover the typical associations representing the plant communities in San Diego County.

The Torrey pine woodland occurs on the Torrey Pines Bluffs just north of La Jolla. The Torrey pine is associated with a unique coastal form of mixed chaparral. The presence of this woodland is suspected to relate to the occurrence of summer fog from offshore upwelling of cold water. Oak woodlands in the area include both dense and sparse phases. Coast live oak woodland is the most common type of oak woodland in the lower elevations.

Riparian woodlands are composed chiefly of winter-deciduous trees that require water near the soil surface. In this community, willow, white alder, California sycamore, ash, and cottonwood form dense woodlands in moist canyons and drainage bottoms. Plants associated with these small- to medium-sized trees include mugwort, false indigo, mule-fat, stinging nettle, and wild grape. Riparian woodlands are important as a

wildlife habitat, particularly for birds and other animal species. These woodlands occur in relatively small canyons in the mountains, on the eastern slopes of the mountains, and in local small cismontane creek beds, but their primary development was originally in the large coastal river valleys that once covered large areas. The large tracts of riparian woodland that remain or that have been restored in the county occur in the San Diego River Valley west of Santee and east of Interstate 805, the Old Mission Dam area, and the area upstream of Sweetwater Reservoir into Sloane Canyon on the Sweetwater River, the Otay River Valley, and the Tijuana River.

Most southern California natural vegetation was originally composed of woody shrubs. Summer drought and periodic fires are major factors influencing the structure, morphology, and physiology of vegetation in the region. The three major shrub community types in coastal San Diego are coastal sage scrub, chamise chaparral, and mixed chaparral. Coastal sage scrub is found in the driest areas with chamise chaparral, and in moister areas with mixed chaparral. Where the communities come into contact, they often intergrade with one another. Coastal sage scrub consists primarily of summer drought-deciduous, aromatic shrubs, and sub-shrubs. This community is dominated by only a few species of shrubs that form a low, somewhat uniform vegetative cover in most areas. Coastal sage scrub grows in areas that receive between 9 and 15 in. of rainfall each year. This is the vegetation community that has been most impacted by urbanization.

Coastal bluff areas, such as Torrey Pines and Point Loma, contain a maritime succulent scrub community that includes sage scrub and many succulent species. Typical coastal sage scrub species are mixed with succulents and cacti.

Chamise chaparral grows in areas similar to those of coastal sage scrub but that receive greater rainfall, or rainfall augmented by fog drip. Rainfall in areas of chamise chaparral ranges from about 12 to 25 in. This plant community is found on the coastal mesas surrounding the Tijuana Estuary.

Coastal salt marsh exists primarily in areas with tidal influence, although the community is occasionally found several miles upstream from such influence. Coastal salt marshes are often inundated with water during very high tides and strong winter storms. Most of the plants occurring in this community type are low-growing, salt-tolerant succulents. Presently, large areas of coastal salt marsh only occur in the Tijuana River Valley; the south end of San Diego Bay near the mouths of the Otay River, Sweetwater River, and Paradise Creek; the San Diego River flood control channel; and the northeastern part of Mission Bay. The mouths of Peñasquitos Creek and the Santa Margarita River have coastal salt marsh vegetation mixed in with salt flats. Numerous other small salt marshes are located around portions of the major coastal lagoons and estuaries on the northern coast of San Diego County. Historic landfills have replaced the salt marshes that once existed where Point Loma and Lindbergh Field are now located.

Freshwater marsh is emergent vegetation that grows in fresh standing water. Large areas of freshwater marsh are uncommon in San Diego County. They exist at San Elijo Lagoon, Buena Vista Lagoon, Guajome Marsh, the lower portion of the San Diego River, and the eastern part of Sweetwater Lake.

Native grasslands have become very rare in San Diego County and are now considered sensitive due to past and ongoing disturbances. Most grasslands found throughout the county today exist in a primarily nonnative state and are made up mostly of weedy species of Mediterranean origin. This replacement of native, perennial grassland species with exotic, annual species is primarily the result of overgrazing that occurred over the past two centuries. Native grasslands are found in the mountains, foothills, and coastal regions of the county.

Fauna

A range of small mammals, birds, reptiles, and insects were indigenous terrestrial fauna exploited by prehistoric hunters and gatherers of the region. Among the mammals that occur in the area are several species of mice and bats, desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), desert wood rat (*Neotoma lepida*), bobcat (*Felis rufus*), coyote (*Canis latrans*), and mule deer (*Odocoileus hemionus*). Waterfowl, such as grebes, gulls, and ducks, also occur in the region. Herds of now-extinct pronghorn antelope (*Antilocapra americana*) occupied the coastal grassland until historic times. Even black bear (*Ursus americanus*) and mountain lion (*Felis concolor*) occurred at the higher elevations and occasionally visited the coastal zone. Marine mammals include harbor seal (*Phoca vitulina*), California sea lion (*Zalophus californianus*), northern fur seal (*Callorhinus ursinus*), and sea otter (*Enhydra leutris*).

Four major marine littoral habitats each support different invertebrate communities. Three of these habitats comprise the most common species occurring in archaeological sites: exposed sandy beaches, with California bean clam (*Donax gouldii*) and Pismo clam (*Tivela stultorum*); exposed rocky shoreline, with abalone (*Haliotis* spp.), California mussels (*Mytilus californianus*), and wavy turban (*Astraea undosa*); and muddy or sandy-bottomed enclosed bays and estuaries, with scallop (*Argopecten* spp.), venus clam (*Chione* spp.), giant egg cockle (*Laevicardium elatum*), and native oyster (*Ostrea lurida*). Numerous species of bony fish, sharks, and rays were available for prehistoric occupants of the region from several marine habitats, including rocky intertidal zones, kelp beds, offshore muddy shallows, soft sandy bottoms and inshore areas, shallow surf zones, and pelagic or open water environments (Gallegos and Kyle 1988).

CULTURAL BACKGROUND

The prehistoric and historic cultural setting for the Project's region is briefly outlined below. For its wider context, see more detailed discussions of prehistoric archaeology (Jones and Klar 2007; Moratto 1984), ethnography (Heizer 1978; Kroeber 1925), and history (Pourade 1960-1977; Pryde 2004). For more narrowly focused discussions of the local issues and evidence, see, for example, the historic properties background study for metropolitan San Diego (Carrico 2008; McDonald and Eighmey 2008; Schaefer and Van Wormer 2008; Warren et al. 2008).

Prehistoric Archaeology

Archaeological investigations in coastal southern California have documented a diverse range of human adaptations extending from the late Pleistocene until European contact (e.g., Erlandson and Colten 1991; Erlandson and Glassow 1997; Erlandson and Jones 2002; Jones and Klar 2007; Moratto 1984). To describe and discuss this diversity, local investigators have proposed various chronologies and conceptual categories (periods, horizons, stages, phases, traditions, cultures, peoples, industries, complexes, and patterns), often with confusingly overlapping or vague terminology.

The prehistory of San Diego County is most frequently divided chronologically into three or four major periods. An Early Man stage, perhaps dating back tens of thousands of years, has been proposed. More generally accepted divisions include the following:

- Terminal Pleistocene/Early Holocene period (ca. 12,000–6000 B.C.) (Paleo-Indian stage; Clovis and San Dieguito patterns)
- Middle/Late Holocene period (ca. 6000 B.C. –A.D. 800) (Archaic stage; La Jolla, Millingstone, or Encinitas pattern)
- Late Prehistoric period (ca. A.D. 800–1769) (Archaic stage; Yuman, Cuyamaca, Patayan, or Hakataya pattern).

Hypothetical Early Man (pre-ca. 12,000 B.C.)

The antiquity of human occupation in the New World has been the subject of considerable interest and debate for more than a century. At present, the most widely accepted model is that humans first entered portions of the western hemisphere lying to the south of Alaska between about 15,000 and 12,000 B.C., either along the Pacific coastline or through an ice-free corridor between the retreating Cordilleran and Laurentide segments of the continental glacier in Canada, or along both routes. While there is no generally accepted evidence of human occupation in coastal southern California prior to about 11,000 B.C., ages estimated at 48,000 years and even earlier sometimes have been reported (e.g., Bada et al. 1974; Carter 1980). However, despite intense interest and the long history of research, no widely accepted evidence of human occupation of North America dating prior to about 12,000 B.C. has emerged.

Local claims for Early Man discoveries have generally been based either on the apparent crudeness of the lithic assemblages encountered or on the finds' apparent Pleistocene geological contexts (Carter 1957, 1980; Minshall 1976, 1989; Reeves et al. 1986). The amino acid racemization technique was used in the 1970s and early 1980s to assign Pleistocene ages to several coastal San Diego sites (Bada et al. 1974). However, the technique's findings have been discredited by more recent accelerator mass spectrometry radiocarbon dating (Taylor et al. 1985).

Terminal Pleistocene/Early Holocene Period (ca. 12,000–6000 B.C.)

The Clovis pattern is the earliest chronologically distinctive archaeological pattern recognized in most of North America. Dated to around 11,500 B.C., Clovis assemblages are distinguished by fluted projectile points and other large bifaces, as well as extinct large mammal remains. At least three isolated fluted points have been reported within San Diego County, but their occurrence is very sparse, and their dating and contexts are uncertain (Davis and Shutler 1969; Kline and Kline 2007; Rondeau et al. 2007).

The most widely recognized archaeological pattern within this period is termed San Dieguito and has been dated from at least as early as 8500 B.C. to perhaps around 6000 B.C. (Rogers 1966; Warren 1966; Warren et al. 2008). Proposed characteristics to distinguish San Dieguito flaked lithic assemblages include large projectile points (Lake Mojave, Silver Lake, and other, less diagnostic forms), bifaces, crescents, scraper planes, scrapers, hammers, and choppers. The San Dieguito technology involved well-controlled percussion flaking and some pressure flaking.

Malcolm Rogers (1966) suggested that three successive phases of the San Dieguito pattern (San Dieguito I, II, and III) could be distinguished in southern California, based on evolving aspects of lithic technology. However, subsequent investigators have generally not been able to confirm such changes, and the phases are not now generally accepted.

A key issue has concerned ground stone, which was originally suggested as having been absent from San Dieguito components but has subsequently been recognized as occurring infrequently within them. It was initially suggested that San Dieguito components, like other Paleoindian manifestations, represented the products of highly mobile groups that were organized as small bands and focused on the hunting of large game. However, in the absence of supporting faunal evidence, this interpretation has increasingly been called into question, and it has been suggested that the San Dieguito pattern represented a more generalized, Archaic-stage lifeway, rather than a true Paleoindian adaptation.

A vigorous debate has continued for several decades concerning the relationship between the San Dieguito pattern and the La Jolla pattern that succeeded it and that may have also been contemporaneous with or even antecedent to it (e.g., Gallegos 1987a; Warren et al. 2008). The initial view was that San Dieguito and La Jolla represented the products of distinct ethnic groups and/or cultural traditions (e.g., Rogers 1945; Warren 1967, 1968). However, as early Holocene radiocarbon dates have been obtained for site components

2. Setting

with apparent La Jolla characteristics (shell middens, milling tools, and simple cobble-based flaked lithic technology), an alternative interpretation has gained some favor: that the San Dieguito pattern represents a functional pose related in particular to the production of bifaces, and that it represents activities by the same people who were responsible for the La Jolla pattern (e.g., Bull 1987; Hanna 1983).

Middle/Late Holocene Period (ca. 6000 B.C.–A.D. 800)

Archaeological evidence from this period in the coastal San Diego region has been characterized as belonging to the Archaic stage, Millingstone horizon, Encinitas tradition, or La Jolla pattern (Moratto 1984; Rogers 1945; Wallace 1955; Warren 1968; Warren et al. 2008). During this period, adaptation apparently emphasized gathering, particularly the harvesting of shellfish and hard plant seeds, rather than hunting. Distinctive characteristics of the La Jolla pattern include extensive shell middens, portable ground stone metates and manos, crudely flaked cobble tools, occasional large expanding-stemmed projectile points (Pinto and Elko forms), and flexed human burials.

Investigators have called attention to the apparent stability and conservatism of the La Jolla pattern throughout this long period, as contrasted with less conservative patterns observed elsewhere in coastal southern California (Hale 2009; Sutton 2010; Sutton and Gardner 2010; Warren 1968). However, distinct chronological phases within the pattern have also been suggested, based on changes in the flaked lithic and ground stone technologies, the shellfish species targeted, and burial practices (Harding 1951; Moriarty 1966; Rogers 1945; Shumway et al. 1961; Sutton and Gardner 2010; Warren 1964; Warren et al. 2008). The decline of this adaptation has sometimes been linked to the siltation of coastal lagoons along the central San Diego County coastline (e.g., Gallegos 1987b; Warren 1964).

Late Prehistoric Period (ca. A.D. 800–1769)

A Late Prehistoric period in coastal San Diego County has been distinguished, primarily based on three major innovations: the use of small projectile points (Desert Side-notched, Cottonwood triangular, and Dos Cabezas forms), associated with the adoption of the bow and arrow in place of the atlatl as a primary hunting tool and weapon; brownware pottery, presumably supplementing the continued use of basketry and other containers; and the practice of human cremation in place of inhumation. Uncertainty remains concerning the exact timing of these innovations, and whether they appeared simultaneously or sequentially (e.g., Griset 1996; Laylander 2011; Yohe 1992).

Labels applied to the archaeological manifestations of this period include Yuman, Cuyamaca, Patayan, and Hakataya (Rogers 1945; True 1970; Schroeder 1978; Waters 1982). These remains have generally been associated with the ethnohistorically known Kumeyaay (Diegueño, Tipai, Ipai) and have been seen as perhaps marking the initial local appearance of that group in a migration from the Lower Colorado River region. Traits characterizing the Late Prehistoric period include the following:

- A shift toward greater use of inland rather than coastal settlement locations.
- Greater reliance on acorns as an abundant but labor-expensive food resource.
- A greater emphasis on hunting of both large and small game (particularly deer and rabbits).
- A greater amount of interregional exchange (seen notably in more use of obsidian).
- More elaboration of nonutilitarian culture (manifested in the more frequent use of shell beads, decorated pottery, and, in areas farther inland, the distinctive Rancho Bernardo and La Rumorosa rock art styles).
- Denser regional populations (Christenson 1990; McDonald and Eighmey 2008).

Whether settlement became more or less sedentary during this period is uncertain compared with the preceding period.

Ethnographic Evidence

In ethnohistoric times, central and southern San Diego County was occupied by speakers of Yuman-Cochimí family of languages including the Delta-California Yuman languages of Kumeyaay, Cocopah, Tipai, and Ipai. Kumeyaay speaker territory extended from south of Agua Hedionda Lagoon, Escondido, and Lake Henshaw to some distance south of Ensenada in northern Baja California, and east nearly as far as the lower Colorado River. Linguistic evidence (e.g., Golla 2007; Laylander 2010) suggests that the Yuman-Cochimí families of languages may have been affiliated with a widespread Hokan phylum, represented by scattered languages and families around the periphery of California and extending south into Mexico, and probably dating back at least as far as the early Holocene. Subsequent separations within the Yuman-Cochimí group may represent territorial expansions or migrations such as:

- the separation of Yuman and central Baja California's Cochimí (ca. 2000 B.C.?);
- the differentiation of Core Yuman from Kiliwa (ca. 1000 B.C.?);
- the separation of Core Yuman into Delta-California, River, and Pai branches (ca. A.D. 1?);
- the separation of Delta-California Yuman into Diegueño and Cocopa (ca. A.D. 500?);
- and the division of Diegueño into Kumeyaay proper, Ipai, Tipai, and Ku'ahl languages or dialects (ca. post-A.D. 1000?).

The boundary between Ipai and Kumeyaay proper (or Tipai) languages or dialects on the San Diego coast has generally been put just south of the San Diego River (Luomala 1978).

While Kumeyaay cultural patterns, as recorded subsequent to European contact, cannot necessarily be equated with Late Prehistoric patterns, at a minimum they provide indispensable clues to cultural elements that would be difficult or impossible to extract unaided from the archaeological record alone. A few important ethnohistoric accounts are available from Hispanic-period explorers and travelers, Spanish administrators, and Franciscan missionaries (Fages 1937; Geiger and Meighan 1976; Laylander 2000). Many accounts by ethnographers, primarily recorded during the early twentieth century, are available (Almstedt 1982; Drucker 1937, 1941; Gifford 1918, 1931; Hicks 1963; Hohenthal 2001; Kroeber 1925; Laylander 2004; Luomala 1978; Shipek 1982, 1991; Spier 1923; Waterman 1910).

The Kumeyaay inhabited a diverse environment that included littoral, valley, foothill, mountain, and desert resource zones. Because of the early incorporation of coastal Kumeyaay into the mission system, most of the available ethnographic information relates to inland groups that lived in the Peninsular Range or the Colorado Desert. There may have been considerable variability among the Kumeyaay in settlement and subsistence strategies and in social organization (Laylander 1991, 1997; Luomala 1978; Spier 1923; but cf. Shipek 1982). Acorns were a key resource, but a wide range of other mineral, plant, and animal resources were exploited, including coastal fish and shellfish (Hedges 1986; Shipek 1991; Wilken 2012). Pre-contact practices of land management and agriculture west of the Colorado Desert have been suggested but not confirmed (Shipek 1993; cf. Laylander 1995). Some degree of residential mobility seems to have been practiced, although its extent and nature (e.g., within patterns of community fission and fusion) may have varied considerably among different communities and settings. The fundamental Kumeyaay social unit above the family was the *šimul* (patrilineage) and the residential community or band, to the extent that those two units were not identical. Leaders performed ceremonial, advisory, and diplomatic functions, rather than judicial, redistributive, or military ones. There seems to have been no national level of political unity and perhaps little sense of commonality within the language group (but cf. Shipek 1982).

Kumeyaay material culture was effective, but it was not highly elaborated. Structures included houses with excavated floors, ramadas, sweathouses, ceremonial enclosures, and acorn granaries. Hunting equipment included bows and arrows, curved throwing sticks, nets, and snares, as well as nets and hooks of bone and

2. Setting

shell for fishing. Processing and storage equipment included a variety of flaked stone tools, milling implements, ceramic vessels, and baskets.

Nonutilitarian culture was not neglected. A range of community ceremonies were performed, with particular emphases placed on marking individuals' coming of age and on death and mourning. Oral literature included, in particular, an elaborate creation myth that was shared with other Yuman groups as well as with Takic speakers (Luiseño, Cupeño, Cahuilla, and Serrano) to the north (Kroeber 1925; Laylander 2001; Waterman 1909).

History

European exploration of the San Diego area began in 1542 with the arrival of a maritime expedition under Juan Rodriguez Cabrillo, followed by a similar reconnaissance in 1602 by Sebastián Vizcaíno (Pourade 1960). It is possible that additional brief, unrecorded contacts with the crews of the Manila galleons may have occurred during the following century and a half, and that other influences, such as an awareness of alien technologies or the introduction of diseases, may have reached the region overland from earlier outposts of the Spanish empire in Baja California or Sonora.

The historic period proper did not begin until 1769, when multiple seaborne and overland expeditions under the leadership of the soldier Gaspar de Portolá and the Franciscan missionary Junípero Serra reached the region from Baja California and passed northward along the coastal plain to seek Monterey. In that year, a royal presidio and the Misión San Diego de Alcalá were founded, and the incorporation of local Kumeyaay into the mission system was begun. Shortly after the mission had been moved a short distance to the east from the presidio, a Kumeyaay uprising in 1775 resulted in the burning of the mission and the killing of one of its Franciscan missionaries (Carrico 1997). However, the uprising was soon suppressed.

As Spanish attention was consumed by the Napoleonic wars in Europe, California and its government and missions were increasingly left to their own devices. In 1821, Mexico consummated its independence from Spain, and the region became more open to outside visitors and influences (Pourade 1961). The European Franciscans' loyalty to Mexico was considered to be in doubt, and private secular interests clamored for a greater share of the region's resources. The missions were secularized by act of the Mexican Congress in 1833. Native Americans released from the San Diego mission returned to their native villages, moved east to areas lying beyond Mexican control, or sought work on ranchos or in the town of San Diego. Numerous large land grants were issued to private owners during the Mexican period, including Otay, La Nación, La Misión de San Diego de Alcalá, Los Peñasquitos, San Dieguito, and Las Encinitas in coastal San Diego County (Pourade 1963).

The conquest and annexation of California by the United States in the Mexican-American War between 1846 and 1848 ushered in many more changes (Pourade 1963, 1964, 1965, 1967, 1977; Pryde 2004). Faced with debts and difficulties in confirming land grants, many Californio families lost their lands to outsiders. Cultural patterns that were brought by immigrants from the eastern U.S. gradually supplanted old Californio customs.

The region experienced cycles of economic and demographic booms and busts, with notable periods of growth in the mid-1880s, during World Wars I and II, and on a more sustained basis throughout the postwar decades. Aspects of development included the creation of transportation networks based on port facilities, railroads, highways, and airports; more elaborate systems of water supply and flood control; grazing livestock and growing a changing array of crops; limited amounts of manufacturing; and accommodating visitors and retirees. The region also developed several military facilities including the Border Field Auxiliary Naval Air Station's Aerial Target Bombing/Gunnery Range within the Border Field State Park, which was in operation between 1912 to 1961. After false starts, San Diego converted itself into a

substantial city, and then into a metropolis, with exceptionally wide civic boundaries encompassing such suburbs as Ocean Beach, Pacific Beach, Clairemont, and La Jolla. Other cities were incorporated in the coastal region, including National City (1887), Coronado (1891), Chula Vista (1911), Imperial Beach (1956), Del Mar (1959), Solana Beach (1986), and Encinitas (1986) (Pryde 2004).

RECORDS SEARCH RESULTS

ASM conducted a records search of the California Historical Resources Information System (CHRIS) at the SCIC located at San Diego State University (Appendix A). The search was conducted to identify previous cultural resources studies and previously recorded cultural resources within and immediately surrounding the Project APE. The records search was conducted for an area of approximately 4,500 acres in the Tijuana River Valley on December 3, 2020 (Figure 3). At the time of the records search, the boundaries of the Project APE were uncertain, as different candidate projects were assessed for feasibility. The search area included the entirety of the Tijuana River National Estuarine Research Reserve and the Tijuana River Valley north of the U.S.-Mexico border. The CHRIS search included a review of the NRHP, the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list.

The SCIC records search identified 97 previous cultural resource investigation reports within the Tijuana River Valley, 34 of which intersect the current Project APE (Table 2.1).

Table 2.1 Previous Cultural Resource Studies Intersecting the Project APE

SCIC Report Number	Author	Year	Title	Firm
SD-00790	Cheever, Dayle, and Dennis Gallegos	1987	Cultural Resource Survey for the Smuggler Gulch Surface Flow Collection Facility, San Diego, California	WESTEC Services, Inc.
SD-02885	Higgins, Howard C.	1994	Archaeological Investigations at the Proposed International Wastewater Treatment Plant Site: Cultural Resource Identification and Geotechnical Test Monitoring	Howard C. Higgins, Principal Investigator
SD-03282	Manley, William	1993	Historic Assessment of Properties on 3 Parcels on Monument Road, San Diego California	William Manley Consulting
SD-03462	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	Brian F Mooney Associates
SD-03607	Pignuolo, Andrew R. and Michael Baksh	1999	Archaeological Survey Report for the Model Marsh Soil Stockpile and Quarry Restoration Project, City of San Diego, California	Tierra Environmental Services
SD-03646	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. Submitted to: International Boundary and Water Commission	Howard C. Higgins
SD-03710	Turnbow, Christopher A.	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	Mariah Associates, Inc.
SD-03713	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 County, California	International Boundary and Water Commission, U.S. Section
SD-03766	Carrico, Richard L. and Carol Serr	1996	Cultural Resources Evaluation for the South Bay Water Reclamation Plant and Dairy Mart Road and Bridge Improvements, San Diego County, California	City of San Diego

2. Setting

SCIC Report Number	Author	Year	Title	Firm
SD-04225	Cook, John R.	1989	Archaeological Survey and Significance Evaluation Program for the Border Highlands Project	ASM Affiliates
SD-04396	Case, Robert	1996	Dairy Mart Road Realignment Project	Robert Case
SD-04608	City of San Diego	1994	Public Notice of Proposed Negative Declaration	City of San Diego
SD-05291	Carrico, Richard, Robert Case, and Carol Serr	1996	Cultural Resources Evaluation within The South Bay WATER Reclamation Plant San Diego County, California	Brian F Mooney Associates
SD-05507	Wade, Sue, Stephen R. Van Wormer, and Dayle M. Cheever	1990	Historic Properties Inventory for Secondary Treatment, Clean Water Program for Greater San Diego, San Diego, California (DEP No. 89-0744)	RECON
SD-05933	USAC03	1992	Draft Environmental Assessment for the Joint Task Force Six Operation JT (154D-91) Border Fence Construction	US Army Corps of Engineers
SD-05934	Polan, Keith	1981	An Archaeological Reconnaissance of Border Highlands San Diego	Heritage Environmental Services
SD-05935 SD-01021	Gallegos, Dennis, Andrew Pignolo, and Richard Carrico	1986	Cultural Resource Survey and Significance Testing for the International Wastewater Project	WESTEC Services, Inc.
SD-06641	Carrico, Richard	1996a	Negative Archaeological Survey Report-Dairy Mart Road Realignment	Richard Carrico
SD-06880	Widell, Cherilyn	1996	South Bay Water Reclamation Plant Project, San Diego County	San Diego County
SD-06967	Widell, Cherilyn	1994	International Wastewater Treatment Plant Final Archaeological Report & Confidential Appendices	Department of Parks and Recreation
SD-07136	SWCA Environmental Consultants	2004	Final Cultural and Paleontological Resource Study for the Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project, San Diego County, California	SWCA Environmental Consultants
SD-07219	Carrico, Richard	1996b	Historic Property Survey Report - Negative Findings; Dairy Mart Road Sites CA-SDI-4933 and CA-SDI-12,527.	Richard Carrico
SD-07358	Pignolo, Andrew R., Stephanie Murray, and John Dietler	2001	Archaeological Inventory Report for the Goat Canyon Enhancement Project, City of San Diego, California	Tierra Environmental
SD-08458	Cook, John R., Sinead Ni Ghabhlain, and Alice Brewster	2003	Appendix C; Historical Resource Analysis of The Metropolitan Canyon Sewer Programs, San Diego, CA	ASM Affiliates
SD-10423	Hector, Susan M.	2006	Cultural Resources Survey of the Tijuana River Valley Channel Dredging Project	ASM Affiliates
SD-12853	Berryman, Judy A. and Seth Rosenberg	2010a	Cultural Resources Survey Report Proposed RVSS Tower W-9 at Russian Hill	HDR/E2M
SD-12854	Berryman, Judy A. and Seth Rosenberg	2010b	Cultural Resources Survey Report Proposed RVSS Towers W-9 and W-15 at BP Hill	HDR/E2M
SD-13064	Becker, Mark S.	2011	A Negative Archaeological Survey Report for the Tijuana River Pilot Channel Maintenance Dredging Project, San Diego Project, San Diego, California	ASM Affiliates
SD-13741	Whitaker, James E.	2011	ETS #21610, Cultural Resources Survey for the Pole Brush, P88024, Monument Road Project, San Diego County, California	HDR
SD-15764	Wilson, Stacie, Theodore Cooley, and Spencer Bietz	2014	Cultural Resources Study in Support of the Tijuana River Valley Regional Park Trails and Habitat Enhancement Project, Tijuana River Valley Regional Park, San Diego, California	AECOM
SD-17258/SD-12898	Hughes, Charles W.	2010	An Historical Overview Border Field and its Environs in the 20th Century	CWH & Associates
SD-17736	Foglia, Alberto B.	2018	Archaeological Monitoring for CMP Pole Inspection of P84499 and P737739, San Diego, San Diego County, California (SDG&E ETS # 39996, PANGIS Project # 1401.111)	PANGIS
SD-18030	Anaya, Gilbert	2019	Section 106 Consultation for the Rehabilitation of the Levee System of the Tijuana River Flood Control Project in San Diego County, California	International Boundary and Water Commission United States and Mexico

SCIC Report Number	Author	Year	Title	Firm
SD-18345	Tennesen, Kristin	2018	ETS #37987, CBP South Levy Border Lights Project, San Ysidro, San Diego County, California	HDR

The SCIC records search conducted for the Tijuana River Valley identified 115 previously recorded cultural resources. Seven resources intersect the Project APE (Figure 4 and Table 2.2). Four of the sites are prehistoric and were recommended ineligible for listing in the NRHP and the CRHR. Two of the cultural resources are historic-period sites not yet formally evaluated, and one of the seven resources is an isolated shell fragment. An additional multicomponent site, CA-SDI-23075, was brought to attention during a discussion with the SHPO, and also intersects the APE along Dairy Mart Road. The site was recorded during a 2020 investigation by SWCA and had not yet been submitted to the SCIC for a permanent site number. ASM submitted a site update for the resource, and it was subsequently assigned the primary number P-37-039462 and the trinomial of CA-SDI-23075.

Table 2.2 Previously Recorded Cultural Resources Intersecting the Project APE

Primary No.	Trinomial No.	Reports	Site Type	NRHP Eligibility Status
P-37-004933	CA-SDI-4933	Higgins 1994; Carrico et al. 1996; Higgins et al. 1994; Widell 1994; Carrico and Serr 1996; Case 1996; Carrico et al. 1996b; Widell 1996; Polan 1981; Gallegos et al. 1986; Carrico 1996a; Carrico 1996b; SWCA 2004; Wilson et al. 2014; Anaya 2019	AP2 (Lithic scatter); AP15 (Habitation debris)	Recommended Ineligible for NRHP and CRHR
P-37-008604	CA-SDI-8604	ASM Affiliates 1989; Higgins 1994; Pignoli and Baksh 1999; Higgins et al. 1994; USAC03 1992; Gallegos et al. 1986; Pignoli et al. 2001; SWCA 2004; Wilson et al. 2014	AP2 (Lithic scatter)	Recommended Ineligible for NRHP and CRHR
P-37-008605	CA-SDI-8605	Cheever and Gallegos 1987; ASM Affiliates 1989; Higgins 1994; Higgins et al. 1994; Turnbow 1994; Turnbow et al. 1995; USAC03 1992; Polan 1981; Gallegos et al. 1986; Cook et al. 2003; SWCA 2004; Hector 2006; Becker 2011; Wilson et al. 2014; Foglia 2018	AP2 (Lithic scatter)	Recommended Ineligible for NRHP and CRHR
P-37-011096	CA-SDI-11096H	ASM Affiliates 1989; Manley 1993; City of San Diego 1994; Higgins 1994; Higgins et al. 1994; SWCA 2004; Hector 2006; Becker 2011; Wilson et al. 2014; Foglia 2018	HP2 (Single-family property)	Destroyed/Ineligible
P-37-011948	CA-SDI-11948H	Higgins 1994; Higgins et al. 1994; Widell 1994; Cook et al. 2003; SWCA 2004; Becker 2011; Hector 2006; Wilson et al. 2014	AH2 (Foundations); AH11 (Wall/fence)	Unevaluated
P-37-013486	CA-SDI-13486	Higgins 1994; Higgins et al. 1994; Turnbow 1994; Turnbow et al. 1995; Cook et al. 2003; SWCA 2004; Berryman and Rosenberg 2010a; Berryman and Rosenberg 2010b; Whitaker 2011; Wilson et al. 2014; Tennesen 2018; Anaya 2019	AP2 (Lithic scatter)	Recommended Ineligible for NRHP and CRHR
P-37-034104		Hennessey and Bigney 2013	AP16 (Other) Isolate shell	Ineligible for NRHP and CRHR
P-37-039462	CA-SDI-23075	Sayre and Wesson 2020	AP2 (Lithic scatter); AH16 (Other)	Unevaluated

NATIVE AMERICAN CONTACT PROGRAM

An email request was sent to the California Native American Heritage Commission (NAHC) on November 30, 2020, to request a search of its Sacred Lands File. The NAHC responded on December 2, 2020, and

2. *Setting*

indicated the presence of Native American traditional places in the vicinity of the proposed Project area. The NAHC provided a list of Native American contacts who might have an interest or concern regarding the proposed Project. On March 30, 2021, letters were mailed to local tribal contacts provided by the NAHC and the EPA tribal liaison, seeking early engagement and requesting that these contacts share any knowledge of cultural resources in the USMCA Project areas and any potential concerns regarding the Project and its potential for adverse effects on cultural resources.¹ Tribes with available email addresses were provided electronic copies of the outreach as well on April 2, 2021. The Rincon Band of Luiseño Indians (“Rincon Band”) responded in a letter dated April 28, 2021, stating that they have no additional information to provide concerning potential impacts to cultural resources. The Rincon Band recommended that EPA coordinate with the Kumeyaay Nation to address and mitigate impacts to cultural resources and requested to be included on future correspondence for the USMCA Project. No other tribal contacts responded to EPA’s outreach letter. Separately, in response to the Notice of Intent to prepare an EIS (see Section 5.5 of the EIS [Public Engagement and Review]), the Viejas Band of Kumeyaay Indians (“Viejas”) commented on April 8, 2021, that the USMCA Project site has cultural significance or ties to Viejas and requested that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities. NAHC and Native American contact correspondence documentation is provided in Appendix B.

Native American participation was included as part of the pedestrian survey. During the pedestrian survey, Deangelo Espinoza from the Viejas Band of Kumeyaay Indians served as the tribal monitor.

¹ A separate version of this outreach letter was mailed to Carmen Lucas of the Kwaaymii Laguna Band of Mission Indians on April 20, 2021.

Confidential Figure Removed
See Confidential Appendix D

Figure 3. Records search results showing GIS site boundaries from the SCIC and SHPO for the Tijuana River Valley.

Confidential Figure Removed
See Confidential Appendix D

Figure 4. Previously recorded sites intersecting the Project APE.

3. FIELD METHODS

The Secretary of the Interior has issued standards and guidelines for identifying and evaluating historic properties, *Archeology and Historic Preservation: Secretary of Interior's Standards and Guidelines* (Federal Register, Vol. 48, No. 190, 44716-44742). These standards and guidelines are used to ensure that the procedures utilized are adequate and appropriate. The identification and evaluation of historic properties depend on the relationship of individual properties to other similar properties (NPS and ACHP 1998:18-20). Information about properties regarding their prehistory, history, architecture, and other aspects of culture must be collected and organized to define these relationships (NPS 2009), which is the intent of the Class III cultural resources inventory.

The current inventory consisted of an intensive pedestrian survey to adequately identify and describe specific cultural resources in the defined APE. Intensive pedestrian surveys are used to precisely document the cultural resources within a given area or when information is needed for particular properties for later evaluation and treatment decisions. Such surveys entail the documentation of the types of properties present, the precise locations and boundaries of all identified properties, the method of survey (including the extent of survey coverage), and data on the appearance, significance, and integrity of each property (NPS 2009). Full-coverage (100 percent) systematic surveys with 15-meter (m) transect intervals were performed for this Class III cultural resources inventory.

SURVEY METHODS

The Class III inventory conducted for the Project was completed by four archaeologists and one Native American monitor during November 8–10, 2021. The crew of archaeologists included: Zaira Marquez, Joakim Lamoy, Michael Buxton, and Louis Piazza, along with a Native American representative from the Viejas Band of Kumeyaay Indians, Deangelo Espinoza. All of the participants met the applicable Secretary of the Interior qualification standards and the guidelines set forth by the California SHPO. Standard transect spacing was 15 m, although spacing was reduced to 3 to 5 m within identified archaeological sites to define and characterize the resources adequately.

Coordination with federal and county agencies was essential to enter survey areas, usually restricted to the public. Access was granted to the International Boundary & Water Commission property by Mr. Morgan Rogers, the area operations manager. Supervisory Border Patrol Agent from the Imperial Beach Station, John B. Easter, was notified of the survey. He then connected the survey crew with Border Patrol Agent Martin Rosales, who served as an escort while the crew was surveying along the border wall. To access the Tijuana River Valley Regional Park, Permit No.: TRVRP 2021-11-08 was filed with the County of San Diego Department of Parks and Recreation, and ASM notified Supervising Park Ranger Mike Verderber of the survey performed in Smuggler's Gulch and Goat Canyon.

Before starting fieldwork, a map was created in ArcGIS Online consisting of the Project APE and previously recorded site boundaries. PDFs of the associated site records were digitally attached to the site boundaries. GIS feature classes, including point, line, and polygon features, were established to collect data in the field. The maps were then downloaded in ESRI's Field Maps app on Apple iPad mini tablets and coupled via Bluetooth with a Trimble R1 GPS receiver with submeter accuracy. The field crews used the tablets and GPS units to accurately locate and survey the Project APE, relocate previously recorded sites, and map newly discovered cultural resources. After the fieldwork, this information was imported into ESRI's ArcGIS Pro to create the digital maps presented in this report. Copies of the Class III cultural resources inventory shapefiles will be provided to the EPA upon request.

3. Field Methods

The Class III inventory was a non-collection survey. ASM archaeologists recorded artifacts in the field using appropriate descriptions, drawings, and photos to facilitate interpretations of site character. All historic resources were recorded using California Department of Parks and Recreation (DPR) 523 series forms to California Office of Historic Preservation standards. Site recording included the definition of site boundaries, features, and formed artifacts. Detailed sketch maps demonstrating the relationship of the location of each site to topographic features and other landmarks were prepared in ArcGIS Pro. Digital photographs documented the environmental associations, specific features, and general character of the survey area and archaeological sites.

Daily survey forms were completed on the progress, conditions, and survey findings. These forms included a description of vegetation cover (including contextual photographs), as well as estimates of ground surface visibility, rated as poor (0–25 percent), fair (26–50 percent), well (51–75 percent), or excellent (76–100 percent). Evidence for buried cultural deposits was opportunistically sought by inspecting natural or artificial erosional exposures and the spoils from rodent burrows. In the daily survey notes, the Field Director assessed the potential for buried sites based on geomorphology. For instance, the potential would rate high in large alluvial valleys and low in shallow bedrock areas.

4. REPORT OF FINDINGS

During the pedestrian survey, ASM revisited the eight previously recorded cultural resources intersecting the Project APE identified in the records search with the SCIC and through discussions with the SHPO. One new cultural resource was identified during the survey. The following discussion will summarize the previous work conducted at the sites and the results and conditions of the sites as encountered during the Class III inventory pedestrian survey. A California DPR 523 series site record update was completed for each of the revisited sites and the newly recorded site; these can be found in Appendix C of this report. The isolate shell fragment, P-37-034104, was found in the same condition as previously reported and noted to be likely the result of secondary deposition; no site record update was necessary.

PREVIOUSLY RECORDED SITES

CA-SDI-4933

Previous Work

The first available site record for CA-SDI-4933 was completed by David Hanna of San Diego State University in 1976 (Hanna 1976, 1977). He states that Ronald May first identified the site and reported it in David D. Smith & Associates' report for the Army Corps of Engineers in 1974 as part of the Tijuana River Flood Control Project. Hanna describes the site as consisting of flake and core materials of mostly green felsite and approximately 12 shell fragments. The site was again visited by Regional Environmental Consultants (RECON) in 1990 (Wade et al. 1990, 1991) and then again by Mariah Associates, Inc., in 1992 (Higgins et al. 1994a), who described the site as having flakes, cores, thermally altered rock (some concentrated in possible hearth features), and one cobble pile that was suggestive of a possible shrine. Brian F. Mooney Associates evaluated the site in 1996 with a series of 15 shovel test pits and three 1-by-1-m units, which yielded a modest assemblage of prehistoric artifacts, including debitage, cores, a utilized flake, unifacial scrapers, and a ground stone tool, along with some shell and animal bone (Carrico et al. 1996). A small sample of the shell was submitted for radiocarbon dating and yielded a calibrated date range of AD 370 to 635. The site was recommended not eligible for listing in the CRHR or the NRHP.

Survey Results

ASM revisited CA-SDI-4933 on November 8, 2021, for the current survey. No artifacts were identified on the surface as most of the previously mapped site boundary had been developed in association with the construction of the South Bay Water Reclamation Plant, which began in 1997. The current SCIC-provided GIS site boundary contains part of Monument Rd., a landscaped curve, and part of the reclamation plant facility (Figures 5 and 6).

Confidential Figure Removed
See Confidential Appendix D

Figure 5. Sketch map of previously defined site boundary for SDI-4933 from SCIC.



Figure 6. Overview of SDI-4933, taken during pedestrian survey, showing current site conditions.

CA-SDI-8604

Previous Work

Polan first recorded CA-SDI-8604 in 1981 as a sizeable prehistoric quarry site with numerous hammerstones, cores, and other lithic tools. It was situated on a terrace on the east bank of the Goat Canyon drainage, with portions of the site exhibiting archaeological deposits up to 90 cm in depth based on erosional and cut banks (Polan 1981). Polan estimated that approximately 25 percent of the site was destroyed by sand and gravel extraction from the area. WESTEC Services, Inc., conducted test excavations and a surface collection in 1986 as part of initial studies for the International Wastewater Project. Based on the results of their work, they recommended that the site is not eligible for listing in the CRHR under CEQA criteria (Gallegos et al. 1986). RECON revisited the site in 1991 for the International Water Treatment Plant Environmental Impact Report and was unable to relocate the surface remains of the site (Wade et al. 1991). The site was again tested by Mariah Associates, Inc., in 1992, who recommended the site ineligible for listing in the NRHP or the CRHR (Higgins et al. 1994a,b:71). The site's eligibility status was again confirmed in 2001 by Tierra Environmental Services based on the results of the archaeological inventory for the Goat Canyon Enhancement Project (Pignuolo et al. 2001).

Survey Results

ASM surveyed the portions of CA-SDI-8604 that intersect the Project APE on November 10, 2021 (Figure 7). No archaeological material was identified. Portions of the site were previously disturbed by the construction of the canyon collection system infrastructure, built as part of the 2009 Secondary Border Fence Project. This infrastructure includes a diversion structure and culvert immediately north of the secondary fence and trash booms and sediment capture basins in the drainage beyond (County of San Diego 2020). As a result of the trash booms and sediment capture basins, copious amounts of modern trash and sediment obscure visibility along most of the drain. Along the banks of the drainage, dense vegetation obscures visibility. Considerable sediment buildup was observed in some areas, with modern trash eroding out of the cut banks at up to 4 ft. in depth below the current surface (Figure 8). The northeastern boundary of the survey area is also disturbed by a wide dirt road, which continues through CA-SDI-8604, transecting it NW–SE. An additional minor dirt road was observed running N–S in the central portion of the site.

Confidential Figure Removed
See Confidential Appendix D

Figure 7. Sketch map showing previously defined boundary of SDI-8604 and the proposed Project APE.



Figure 8. The cut bank along the Goat Canyon drainage shows modern refuse and heavy sedimentation.

CA-SDI-8605

Previous Work

Mike Poe initially recorded CA-SDI-8605 in 1970 as a prehistoric quarry site and lithic scatter consisting of two loci, CA-SDI-8605A and CA-SDI-8605B, situated on the bed and banks of the seasonal stream running through Smuggler's Gulch. He collected a small assemblage of artifacts, including one scraper, several cores, and approximately 100 metavolcanic flakes, reported to be housed at the Museum of Us in Balboa Park. The site was evaluated for listing in the CRHR in 1987 by WESTEC Services, Inc., who identified only a few artifacts and noted that the area had been heavily impacted by flooding and recent channelization of the stream course (Gallegos et al. 1986). They also suggested that the site's integrity and context are questionable due to its location in a stream bed, subject to seasonal flooding. Based on the paucity of artifacts and the site's location in a stream bed, subsurface testing was not conducted, but WESTEC recommended CA-SDI-8605 as not significant under CEQA. The California Office of Historic Preservation determined the site neither significant under CEQA nor eligible for listing in the NRHP. However, during geotechnical testing for the ITP site, a scraper plane was recovered from 0.6 m below the surface in a geotechnical trench near SDI-8605 Locus A, and, as a result, Mariah Associates, Inc., recommended archaeological test excavations for the evaluation of the site (Higgins et al. 1994a,b). In 1995, Mariah Associates, Inc., conducted test excavations, including eight backhoe trenches and three manual excavation units. Trenching revealed a stratigraphic sequence consisting of shallow overbank and alluvial fan strata on thick channel lag deposits. Just seven pieces of chipped stone debitage were recovered from between 0.1 m and 1.5 m below ground surface in the manual excavation units. Based on their depositional context, these pieces of debitage were considered redeposited from upstream in the canyon. Mariah Associates, Inc., found that other parts of the site had been disturbed. In 1992, a landslide resulted in massive deposition over the site's northern half between the time of the recommendation and the test excavation in 1995. The construction of the border fence, road, and bridge disturbed a large area in the site's southern portion.

Additionally, sand mining and levee construction had buried portions of the site area under meters of cobbles and destroyed other areas. Based on the results of the evaluation effort, the site was determined to have no potential to address regional research questions since it lacked integrity, and it was thus again

4. Report of Findings

recommended as not significant under CEQA and not eligible for listing in the NRHP (Turnbow et al. 1995). The site location was revisited in 1998 by Geo-Marine, Inc., (Buysse, Waters, and Pemberton 1998) and in 2019 by PanGIS (Foglia 2019). During those last two visits, no archaeological artifacts were identified within the site boundaries.

Survey Results

ASM revisited the site on November 10, 2021, and could not relocate any of the components described in the earlier investigation reports (Figure 9). The southern locus, Locus A, has been destroyed by the construction of a border fence, road, and the Smuggler's Gulch Diversion Structure, all associated with the 2009 Secondary Border Fence Project (County of San Diego 2020). The southern end of the northern locus, Locus B, is now also transected by a cobble road running NW/NNW–SE/SSE, stemming from the same construction project. The remainder of the southern half of the locus is covered in tall and dense vegetation and could thus not be surveyed by ASM. The northern part is heavily impacted by Monument Road, a parallel fence line, and two large, graded clearings and associated dirt roads. Historic aerials show that disturbances in the northern half have been considerable since the original 1970 recordation, particularly in the years following the last successful relocation in 1995 (HistoricAerials.com).

Additionally, the site boundaries supplied by the SCIC seem to differ from some of the sketch maps and descriptions of the sites in the previous reports. Locus B in the north, was recorded along the drainage associated with Smuggler's Gulch. Locus A, in the south, should be shifted further east based on the sketch map of the site in Turnbow et al. (1995:48) (Figure 10). However, no artifacts were identified in the area surrounding CA-SDI-8605 within the APE, and no map from any previous reports was found to better define Locus B, so an update to the SCIC-provided GIS boundaries was not submitted to the SCIC.

It should be mentioned that the evaluation map of CA-SDI-8605A from Mariah Associated, Inc., shown as an overlay in Figure 10, also shows a site, CA-SDI-11947H, that was not listed in the sites in the SCIC records search results. SCIC also does not have a GIS boundary for the site in its database. Based on the available information in the three Mariah Associates, Inc., reports (Higgins et al. 1994a,b; Turnbow et al. 1995), RECON initially recorded this site in 1990 and described it as the remains of a post-1940 cement block structure, including standing concrete walls, concrete slabs, a trough, car parts, and metal fragments (Wasde et al. 1991:20). The structure was interpreted to have been a slaughterhouse. When the site was revisited in 1992 by Mariah Associates, Inc., it was heavily impacted by vandalism and slopewash off Spooners Mesa (Higgins et al. 1994a,b). The structure walls had been knocked down along, and the cement troughs and pad were no longer visible, possibly obscured by the slopewash deposits and vegetation. Modern trash, broken glass, graffiti, a burned-out automobile, and a discarded washing machine were identified littering the site. Geo-Marine, Inc visited the site location in 1998 but was unable to relocate it. They presumed that CA-SDI-11947H was destroyed when dirt was extracted from the area to be used for fill to construct the raised road, which provides access to the border during flooding events (Buysse and Largent 1999). Since the site is presumably outside of this Project's APE, no further archaeological investigations at the site location are recommended

Confidential Figure Removed
See Confidential Appendix D

Figure 9. Sketch map showing SCIC-provided GIS boundary of SDI-8605 in relation to current Project area.

Confidential Figure Removed
See Confidential Appendix D

Figure 10. Sketch map from Mariah Associates, Inc., overlaid on 2019 aerial showing more accurate depiction of the location they tested for Locus A of SDI-8605. The inset shows how the sketch was georeferenced using aerial imagery from 1995.

CA-SDI-11096H

Previous Work

CA-SDI-11096H was first recorded in 1989 as a single-story shotgun-style house with associated outbuildings. The house was built sometime before 1902, as seen on the United States Geological Survey (USGS) San Diego Quadrangle of that year. It is shown on the 1901 government survey and aerial photographs of the property. Plat maps indicate that the land was owned by C. R. Trussel in 1896 and was purchased by J. Lewis in 1898 (Cook 1989). According to a bulletin put out by the South Bay Historical Society, Joseph C. Satterlee purchased the property in 1912 and then occupied the house (Schoenherr 2015). The Satterlee family dug 10 wells to bring spring water to a water tank found on a hill southeast of the current SCIC-provided GIS boundary outside the Class III inventory survey area. Joseph C. and Ellen Satterlee then began to sell water to community residents. A review of 1953 aerial imagery and historic topographic maps shows multiple structures immediately south of the shotgun-style house (NETR Online 2021).

In 1962, Charles Hart Satterlee, the son of Joseph and Lorena Satterlee established the Emerald Water Company from this address (Imperial Beach Star-News 1962). The remains of the bottling company were evaluated in 1993 by William Manley Consulting, who determined that the building had no historical importance, and these remains were later demolished (Manley 1993).

Survey Results

ASM revisited the site on November 10, 2021. The area was surveyed extensively, with no house or housing debris found within the SCIC-provided GIS site boundary. However, a push pile approximately 23 m south of the SCIC-provided GIS boundary contained concrete slabs, concrete steps, cinder blocks, and miscellaneous metals (Figure 11). Approximately 20 m southeast of the SCIC provided GIS site boundary is a cobble retaining wall that borders the dirt road (Figure 12). The debris appears consistent with the location and period of the bottling company structures, evaluated in 1993.

The sketch map of the survey findings shows the locations of the historic and possibly modern debris and the cobble and mortar wall likely related to mid-to late-twentieth-century occupations of this area overlaid on the aerial from 1953 (Figure 13). ASM revised the SCIC-provided GIS site boundary to encompass the previous location of the shotgun house and the remnant features and debris associated with the structures visible in the aerial from 1953. The remaining features identified south of the newly defined site boundary are not included, given their distance from the former house location and the lack of historic artifacts encountered between them. These consist of a capped artesian well, some cut lumber and chicken wire, a metal pipe, and a couple of old telephone poles no longer connected to the grid.

Confidential Figure Removed
See Confidential Appendix D

Figure 11. Sketch map showing the newly defined boundary of SDI-11096H and the associated artifacts and features identified during the pedestrian survey.

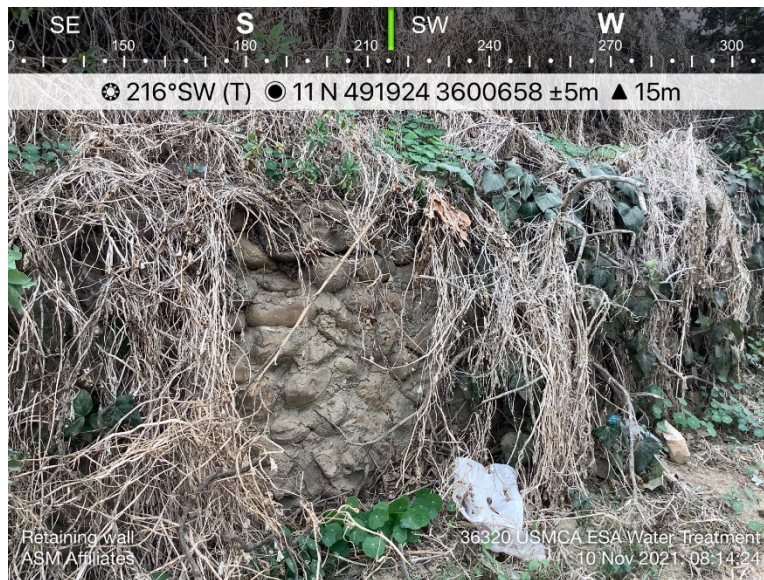


Figure 12. The retaining wall associated with SDI-11096H is located along an existing dirt road south of the previous location of the shotgun-style house.

Confidential Figure Removed
See Confidential Appendix D

Figure 13. Newly defined CA-SDI-11096H site boundary and location of demolition debris overlaid on 1953 aerial. The debris coincides with the locations of other structures behind the shotgun-style house.

CA-SDI-11948H

Previous Work

This site, which sits on the terrace above Smuggler's Gulch, was initially recorded in 1990 by Frank Ritz and Mac Davis of RECON as 14 or more cobble-walled terraces, two concrete slabs, and cobble-lined walkways with associated historic debris such as machine and car parts, metal fragments, glass, wire, and wood (Ritz and Davis 1990). A 10-x-20-ft. hut was also shown on the sketch map of the site and the cobbled terrace walls. The site was revisited by Mariah Associates, Inc., for the ITP Site in 1994 but was determined to be outside the APE. The SCIC does not have a record of the resource ever having been evaluated for listing in the NRHP or the CRHR.

Survey Results

ASM revisited the site during the survey for this Project on November 10, 2021. The site was relocated in fair condition, with vegetation obscuring the area. The hut recorded in the original DPR form was not relocated, nor were any of the car parts, glass, wire, or wood. However, several portions of the cobble-walled terraces and a cobble set of stairs were identified during the survey (Figure 14). A wire winch wheel and motor with an approximately 1.5-x-1.5-x-1.0-m concrete foundation inscribed with the words "Baxter and Peterson" was identified approximately 30 m northeast of the previously defined boundary. A 4-in. galvanized pipe was also found, leading to the winch (Figure 15). The concrete base can be seen on the 2019 aerial imagery of the area. Another cobble and mortar retaining wall was located 15 m northeast of the wire winch wheel along the edge of Smuggler's Gulch. The wall includes two corners forming a C shape facing the gulch and measures approximately 8 m in total length (Figure 16).

The site continues to be impacted by erosion and partially by the river mitigation measures to contain water flow in the area, as cobbles were placed along the east portion of the site to retain water from the diversion structures. A piece of abalone shell was identified near the southernmost cobble structure.

Aerials from 1953 and 1964 show several structures on the terrace overlooking Smuggler's Gulch. The cobble-walled terrace structures can also easily be seen in the 1964 aerial (Figure 17). Based on the results of the pedestrian survey and a review of the historic aerial imagery, the SCIC-provided GIS site boundary was modified to encompass the features recorded on the original sketch map that correspond to those in the historical aerials and those identified during the survey. A preliminary search of historic documents did not provide any additional information on the exact purpose of the structures and terraces associated with this site; however, they may be related to the Windover Ranch discussed below under the Newly Recorded Sites section.

Confidential Figure Removed
See Confidential Appendix D

Figure 14. Sketch map showing the revised boundary of SDI-11948H and results of the pedestrian survey.



Figure 15. Wire winch wheel and motor with concrete foundation inscribed with the words “Baxter and Peterson,” located near the site's north end.



Figure 16. The retaining wall is located on Smuggler's Gulch's west bank near the northern end of SDI-11948H.

Confidential Figure Removed
See Confidential Appendix D

Figure 17. Newly defined site boundary for SDI-11948H overlaid on 1964 aerial imagery showing previous structures, no longer existing, associated with the site.

CA-SDI-13486

Previous Work

CA-SDI-13486 was first recorded in 1992 by Mariah Associates, Inc., as a sparse scatter of stone tools and marine shells. It was discovered during archaeological monitoring of geotechnical test pits (Higgins et al. 1994b). The trench dimensions were 3 ft. wide, 15 ft. long, and 11.5 ft. deep (0.9 x 4.6 x 3.5 m), and the artifacts were recovered from the first meter of deposits. The artifacts consisted of a unidirectional felsite core, three felsite flakes, and one piece of thermally altered rock. Since then, at least three evaluation programs have evaluated portions of the site (Berryman and Rosenberg 2010a, b; Higgins et al. 1994a; Turnbow et al. 1995).

The first evaluation effort, conducted by Mariah Associates, Inc., for the construction of the ITP, included the excavation of nine backhoe trenches, three 1-x-1-m test units, and 14 auger test holes. Just 45 pieces of debitage and 7.9 grams of shell were recovered, mixed with modern refuse. Turnbow et al. (1995) stated that the results of the archaeological testing at CA-SDI-13486 indicate that the site was redeposited by natural erosion with material removed from its original contexts. No indication of occupation zones, features, or intact cultural strata was encountered. They recommended the site as not eligible for listing in the NRHP.

Berryman and Rosenberg (2010) identified one scraper, two granite manos, one core, and two flakes just southwest of the site boundary during a survey for the RVSS W-9 Tower Project. They then excavated 12 shovel test pits and one excavation unit within the new site extension. Their excavation results also identified a highly disturbed context with artifacts intermixed with modern refuse and that the site lacks contextual integrity. They echoed the recommendation that the site is not eligible for listing in the NRHP.

Based on a review of the previous reports and evaluation efforts, it is unclear how the site boundary currently defined in the SCIC GIS database was established. The boundary does not seem to match the descriptions of where the site was first identified by Mariah Associates, Inc., nor the extent of test excavations they conducted (Figure 18). The SCIC-provided GIS site boundary appears to have been drawn to match the general size of the project area for the construction of the ITP. Mistaking project boundaries for site boundaries has often occurred during the digitization of early site records and at the SCIC, where the project boundaries are often used for the sites encountered during the investigations.

Survey Results

On November 8, 2021, ASM revisited the eastern portion of CA-SDI-13486 that falls within the APE for the Project (Figure 19). The portion of the site within the APE also intersects the existing ITP. No artifacts were identified during the survey, and the construction of the water treatment plant destroyed the portion of the site that intersects the APE.

Confidential Figure Removed
See Confidential Appendix D

Figure 18. Sketch map by Mariah Associates, Inc., from the evaluation effort at SDI-13486, overlaid on 2019 aerial imagery showing the smaller extent of the site compared to the SCIC site boundary (Turnbow et al. 1995:146).

Confidential Figure Removed
See Confidential Appendix D

Figure 19. Sketch map of the SCIC-provided GIS boundary for SDI-13486 in relation to the current Project APE and existing built environment.

CA-SDI-23075

Previous Work

SWCA Environmental Consultants recorded a site in 2020 on the east side of Dairy Mart Road that intersects the Project APE (Sayre, Wesson, & Dietler 2020). The site has not yet received a permanent trinomial from the SCIC. The site was identified during subsurface testing for the Tijuana River Flood Control Rehabilitation of the North and South Levee Project. Seven shovel test pits were positive for cultural resources, including eight prehistoric lithic flakes, two historical artifacts (a glass bottle fragment and a white porcelain fragment), a mammal bone fragment, an avian bone fragment, and several fragments of marine shell that may have been imported with road and levee fill. SWCA recommended that additional testing be conducted to better define the resource's nature, extent, and integrity and recover additional information to make a formal recommendation for listing in the NRHP.

Survey Results

On November 9, 2021, ASM conducted an intense pedestrian survey of the previously recorded site boundary. No archaeological material was observed during the survey despite low vegetation coverage (5–10 percent) and excellent surface visibility (Figures 20 and 21). The site is located on an altered flood plain. Consequently, the area has been subject to multiple disturbances throughout the years, including periodical flooding from the Tijuana River, past and present agricultural plowing, utility installations, and construction of the current Dairy Mart Road along the northwestern boundary in 1999 and 2000, as well as the establishment of a flood levee to the south of CA-SDI-23075.

The subsurface deposits identified by SWCA in 2020 are located along the foot of the artificial berm underlying the current Dairy Mart Road, and both this berm and the flood levee appear to have been constructed using local soil. There is thus considerable potential that both may include secondary deposits of additional cultural material.

Confidential Figure Removed
See Confidential Appendix D

Figure 20. Sketch map showing the previously defined boundary of CA-SDI-23075 in relation to Project APE.



Figure 21. Overview of CA-SDI-23075 from the north end of site looking southwest.

PREVIOUSLY RECORDED ISOLATES

P-37-034104

This prehistoric isolate consists of a single *Chione sp.* shell fragment recorded by ASM in 2013 during a pole brushing survey for SDG&E at pole P80188. The shell fragment was relocated during the current survey, and the shell was likely redeposited during past flooding events. Isolated resources are categorically not eligible for listing in the NRHP, and P-37-034104 does not require further consideration.

NEWLY RECORDED SITES

P-37-39926

During the survey of CA-SDI-11096H, the survey crew identified a low cobblestone and mortar wall, approximately 10 in. high and topped with a modern chain link fence, intersecting the northwest corner of the previously defined site boundary of CA-SDI-11096H (Figures 22 and 23). The wall runs parallel to Monument Road with a break near the center of its extent, where two cobblestone pillars stand at 40 in. tall, presumably a previous driveway entry (Figure 24). A large Peruvian pepper tree is growing between the two pillars that once marked the previous entrance to the ranch. An examination of the 1953 aerial shows that the driveway once led to a house structure. Topographic maps and plat maps indicate that the house was built in 1904 and was occupied by the Jaussand and Parma families into the 1920s. According to an article in the South Bay Historical Society Bulletin, the ranch was purchased in 1928 by Emil Burhmeier, who established the Windover Ranch, specializing in growing avocados, raising chickens, and selling spring water (Schoenherr 2016). The property was modified to include seven wells, agricultural fields, a windmill, and the cobblestone wall at the entrance. After Emil Burhmeier died, his family remained on the property until 1966, when the threat of flooding caused them to sell. The ranch and its associated structures were visible on aerials until 1998 when, presumably, they were demolished. No other evidence of the ranch was encountered during the survey.

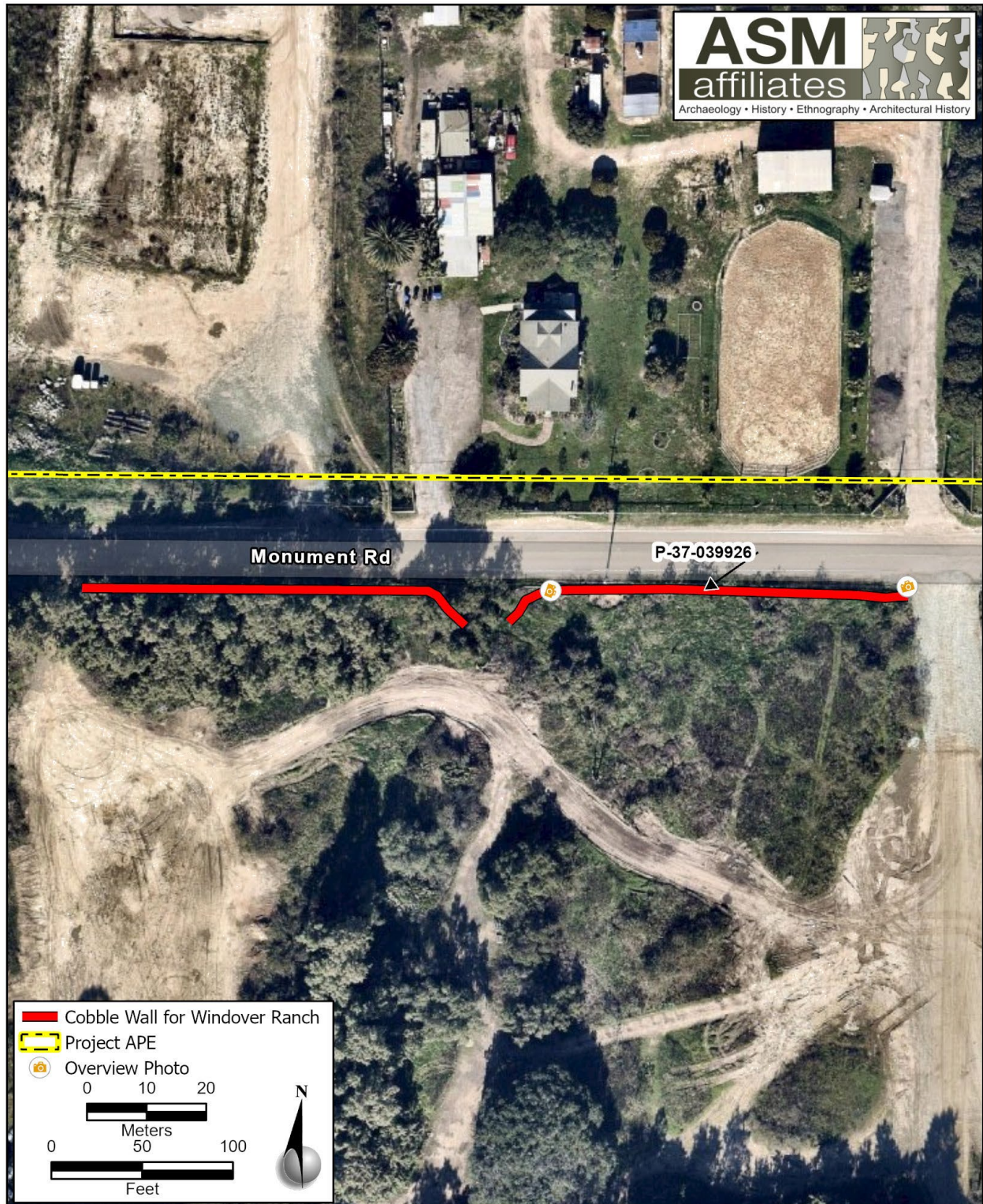


Figure 22. Sketch map showing the extent of cobble wall and entrance to former Windover Ranch, designated as P-37-39926.

4. Report of Findings



Figure 23. Overview of eastern portion of Windover Ranch cobble wall as it appears today.

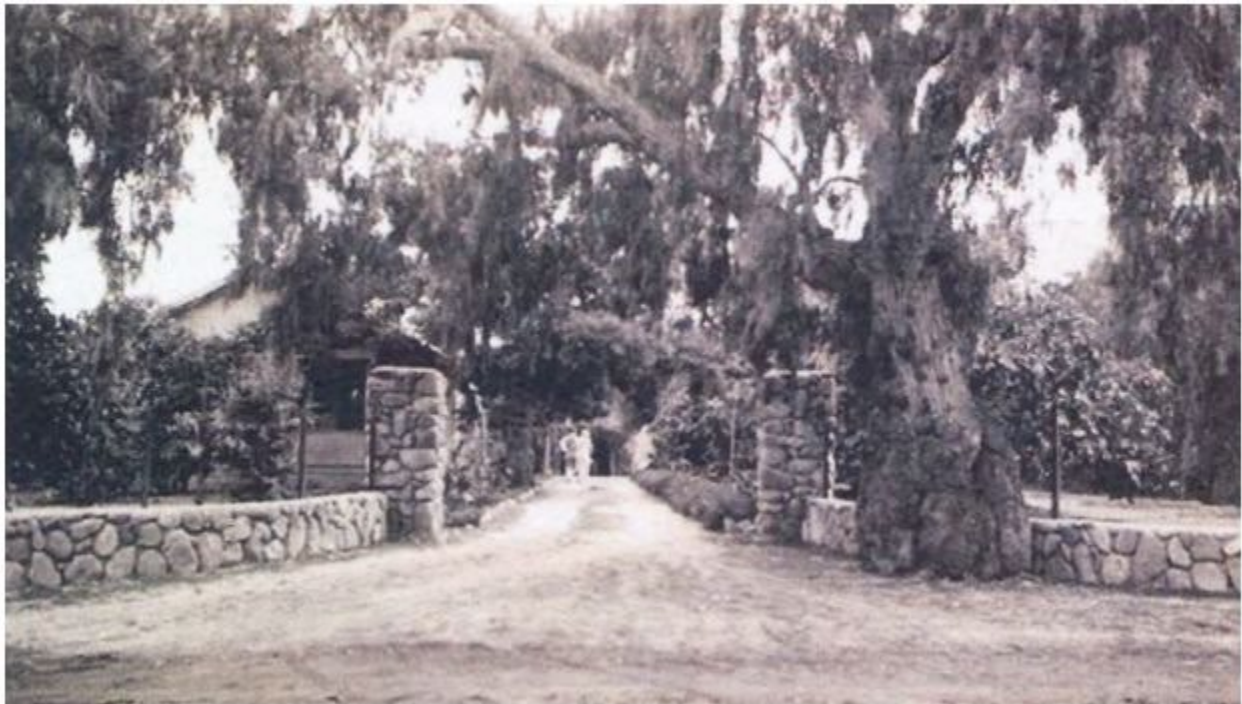


Figure 24. Historic photo of entrance to Windover Ranch (photo credit to Schoenherr 2016).

5. MANAGEMENT CONSIDERATIONS

An intensive Class III archaeological inventory was completed for the USMCA Mitigation of Contaminated Transboundary Flows Project. The inventory covered a total of 336 acres in the City of San Diego, San Diego County, California. The study involved a records search from the SCIC, a Sacred Lands File search at the NAHC, and an intensive pedestrian inventory. The SCIC records search indicated that a total of seven previously recorded cultural resources intersect the proposed APE, including four prehistoric sites (CA-SDI-4933, CA-SDI-8604, CA-SDI-8605, and CA-SDI-13486), two historic sites (CA-SDI-11096H and CA-SDI-11948H), and one prehistoric isolate (P-37-034104). Additionally, during early conversations with the SHPO, ASM was notified of a newly recorded possibly multicomponent site (CA-SDI-23075) identified by SWCA Environmental Consultants.

During the intensive pedestrian field survey, no artifacts were encountered within or immediately surrounding the previously defined boundaries of the four prehistoric sites or the multicomponent site. The four prehistoric sites have been formally evaluated for listing in the NRHP; they were recommended not eligible and have received SHPO concurrence. The multicomponent site, CA-SDI-23075, underwent subsurface testing as part of a previous project, but the testing was intended to determine the presence or absence of cultural deposits in that project's APE and was not considered sufficient to formally evaluate the site for NRHP eligibility.

ASM did identify some historic artifacts and features associated with CA-SDI-11096H that were not previously noted. The historic features and artifacts were recorded outside the previously defined boundaries and correspond with now-demolished structures visible in the area's historic aerials. ASM modified the site boundary to reflect the actual location of the shotgun house previously recorded, a cobble wall, and historic/modern-period demolition debris. ASM also relocated multiple cobble wall sections associated with CA-SDI-11948H that had previously been recorded and a wire winch wheel and motor with a concrete foundation. The site boundary for CA-SDI-11948H was also revised to encompass the distribution of historic-period features more accurately. Formal evaluations of these sites have not yet been conducted.

One new cultural resource was identified just east of CA-SDI-11096H, consisting of a low cobble and mortar wall with two 4-ft.-tall pillars near the center that had served as the entrance to the Windover Ranch during the early to mid-twentieth century. A primary record for the resource was submitted to the SCIC and was assigned the permanent designation of P-37-39926. No other features or artifacts were identified in association with this resource.

The prehistoric isolate shell fragment, P-37-034104, was relocated during the pedestrian survey and was in the same condition as previously recorded. The shell was likely redeposited during previous flooding events. Isolated resources are categorically not eligible for listing in the NRHP, and P-37-034104 does not require any further consideration.

A formal evaluation for NRHP eligibility has not been conducted for the multicomponent site (CA-SDI-23075), the two historic-period sites (CA-SDI-11096H and CA-SDI-11948H), or the newly identified historic resource (P-37-39926). Given that these resources have not yet been formally evaluated, avoidance is the preferred method of mitigation (Figure 25). However, based on the available records and the results of the pedestrian survey, our preliminary eligibility recommendations for the four unevaluated resources are that Sites CA-SDI-11096H, CA-SDI-11948H, CA-SDI-23075, and P-37-39926 are not associated with important historical events (Criterion A) or individuals (Criterion B); they do not represent distinctive examples of structural types or works of master craftsmen (Criterion C); and they lack integrity and research

5. Management Considerations

potential (Criterion D). The sites are thus preliminarily recommended as not eligible for listing in the NRHP.

Confidential Figure Removed
See Confidential Appendix D

Figure 25. Map showing the proposed Project's APE and those sites previously evaluated and recommended not eligible for listing in the NRHP and those sites not yet formally evaluated but preliminarily recommended not eligible.

RECOMMENDATIONS

The proposed USMCA Mitigation of Contaminated Transboundary Flows Project APE intersects four prehistoric sites (CA-SDI-4933, CA-SDI-8604, CA-SDI-8605, and CA-SDI-13486) that have been previously evaluated as not significant and recommended as not eligible for listing in the NRHP. Thus, the proposed Project will not have an adverse effect on the sites. The Project APE also intersects four formally unevaluated cultural resources. The cultural resources consist of one heavily disturbed but inadequately defined multicomponent site (CA-SDI-23075), and three historic sites whose built components have all been destroyed except for a few remnants of cobble walls. Based on the current survey results and previous investigations, these sites are preliminarily recommended as not significant and, therefore, not eligible for listing in the NRHP. Avoidance of these resources is likely feasible given the present Project plans. Thus, the proposed Project will not have an adverse effect on the sites. Should the Project plans change, creating a situation where avoidance is not feasible, a formal evaluation for eligibility to the NRHP is recommended for these resources prior to their destruction.

REFERENCES

Almstedt, Ruth

- 1982 Kumeyaay and Iipay. In *APS/SDG&E Interconnection Native American Cultural Resources*, edited by Clyde Woods, pp. 6-20. Wirth Associates, San Diego.

Bada, Jeffrey, Roy Schroeder, and George Carter

- 1974 New Evidence for the Antiquity of Man in North America Deduced from Aspartic Acid Racemization. *Science* 184:791-793.

Bull, Charles S.

- 1987 A New Proposal: Some Suggestions for San Diego Prehistory. In *San Dieguito – La Jolla: Chronology and Controversy*, edited by Dennis R. Gallegos, pp. 35-42. San Diego County Archaeological Society Research Paper No. 1.

Becker, Mark S.

- 2011 *A Negative Archaeological Survey Report for the Tijuana River Pilot Channel Maintenance Dredging Project, San Diego Project, San Diego, California*. ASM Affiliates, Carlsbad, California.

Berryman, Judy A., and Seth Rosenberg

- 2010a *Cultural Resources Survey Report Proposed RVSS Tower W-9 at Russian Hill*. HDR E2M, San Diego, California.
2010b *Cultural Resources Survey Report Proposed RVSS Towers W-9 and W-15 at BP Hill*. HDR E2M, San Diego, California.

Buysee, J. L., and B. B. Largent, Jr.

- 1999 *A Cultural Resources Survey and Relocation of Resources for the Immigration and Naturalization Service Border Road, Fence, and Lighting Project along the International Border, San Diego, California*. Geo-Marine, Inc., Plano, Texas.

Buysee, J., Waters, M. and Pemberton D.

- 1998 P-37-008605/CA-SDI-08605 California DPR Site Form. Geo-Marine, Inc., Plano, Texas.

Carrico, Richard L., Robert Case, and Carol Serr

- 1996 *Cultural Resource Evaluation for the South Bay Water Reclamation Plant and Dairy Mart Road and Bridge Improvements, San Diego County, California*. Brian F. Mooney Associates, San Diego, California.

Carrico, Richard L.

- 1997 Sociopolitical Aspects of the 1775 Revolt at Mission San Diego de Alcalá: An Ethnohistorical Approach. *Journal of San Diego History* 43:143-157.

Carter, George F.

- 1957 *Pleistocene Man at San Diego*. Johns Hopkins Press, Baltimore, Maryland.
1980 *Earlier Than You Think: A Personal View of Man in the Americas*. Texas A&M University, College Station.

- Christenson, Lynne Elizabeth
1990 The Late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence System. Unpublished Ph.D. dissertation, University of Arizona, Tempe.
- Coleman, Richard
1994 *P-37-011096/CA-SDI-11096 California DPR Site Form*. Mariah Associates, Inc., Albuquerque, New Mexico.
- Cook, John
1989 *Archaeological Survey and Significance Evaluation Program for the Border Highlands Project*. ASM Affiliates, Inc., Carlsbad, California.
- Cook, John R., Sinead Ni Ghabhlain, and Alice Brewster
2003 Appendix C; Historical Resource Analysis of The Metropolitan Canyon Sewer Programs, San Diego, CA. ASM Affiliates, Carlsbad, California.
- County of San Diego
2020 *Tijuana River Valley Needs and Opportunities Assessment*. San Diego, California.
- Davis, Emma Lou, and Richard Shutler, Jr.
1969 Recent Discoveries of Fluted Points in California and Nevada. *Nevada State Museum Anthropological Papers* 14:154-169. Carson City.
- Drucker, Philip
1937 Culture Element Distributions: V, Southern California. *Anthropological Records* 1:1-52. University of California, Berkeley.
1941 Culture Element Distributions: XVII, Yuman-Piman. *Anthropological Records* 6:91-230. University of California, Berkeley.
- Erlandson, Jon M., and Roger H. Colten (editors)
1991 *Hunter Gatherers of Early Holocene Coastal California*. Perspectives in California Archaeology No. 1. Institute of Archaeology, University of California, Los Angeles.
- Erlandson, Jon M., and Michael Glassow (editors)
1997 *Archaeology of the California Coast during the Middle Holocene*. Perspectives in California Archaeology No. 4. Institute of Archaeology, University of California, Los Angeles.
- Erlandson, Jon M., and Terry L. Jones
2002 *Catalysts to Complexity: Late Holocene Societies on the California Coast*. Perspectives in California Archaeology No. 6. Institute of Archaeology, University of California, Los Angeles.
- Fages, Pedro
1937 *A Historical, Political, and Natural Description of California (1775)*. Translated by Herbert Ingram Priestly. University of California Press, Berkeley.
- Foglia, A.B.
2019 *Archaeological Monitoring for CMP Pole Inspection of P84499 and P737739, San Diego, San Diego County, California*. PanGIS, Inc., Carlsbad.

References

- Gallegos, Dennis, Andrew Pigniolo, and Richard Carrico
1986 *Cultural Resource Survey and Significance Testing for The International Wastewater Project*. WESTEC Services, Inc., San Diego, California.
- Gallegos, Dennis R.
1987a (editor) *San Dieguito – La Jolla: Chronology and Controversy*. San Diego County Archaeological Society Research Paper No. 1.
1987b A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis R. Gallegos, pp. 23-34. San Diego County Archaeological Society Research Paper No. 1.
- Gallegos, Dennis R., and Carolyn Kyle
1988 *Five Thousand Years of Maritime Subsistence at Ballast Point Prehistoric Site SDI-48 (W-164) San Diego*. WESTEC Services, San Diego. Submitted to U.S. Department of the Navy.
- Geiger, Maynard, and Clement W. Meighan
1976 *As the Padres Saw Them: California Indian Life and Customs As Reported by the Franciscan Missionaries, 1813-1815*. Santa Barbara Mission Archive Library, Santa Barbara, California.
- Gifford, Edward W.
1918 Clans and Moieties in Southern California. *University of California Publications in American Archaeology and Ethnology* 14:155-219. Berkeley.
1931 *The Kamia of Imperial Valley*. Smithsonian Institution Bureau of American Ethnology Bulletin No. 97. U.S. Government Printing Office, Washington, D.C.
- Golla, Victor
2007 California Archaeology and Prehistory after Moratto: Linguistic Prehistory. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 71-82. AltaMira Press, Lanham, Maryland.
- Griner, E. Lee, and Philip R. Pryde
2004 Climate, Soils, and Vegetation. In *San Diego: An Introduction to the Region*, edited by Philip R. Pryde, pp. 29-46. Kendall/Hunt Publishing Company, Dubuque, Iowa.
- Griset, Suzanne
1996 Southern California Brown Ware. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
- Hale, Micah Jeremiah
2009 Santa Barbara and San Diego: Contrasting Adaptive Strategies on the Southern California Coast. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
- Hanna, David C.
1976 Archaeological site forms for SDI-4933 on file at the San Diego State University South Coastal Information Center.
1977 Supplemental Cultural Resources Inventory for the Tijuana River Flood Control Project Area, San Diego State University.
1983 A Major Challenge to “San Dieguito” and “La Jolla.” *Cultural Resource Management Casual Papers* 1(3):76-102. Department of Anthropology, San Diego State University.

Harding, Mabel

1951 La Jollan Culture. *El Museo* 1(1):10-11, 31-38.

Hedges, Ken

1986 *Santa Ysabel Ethnobotany*. San Diego Museum of Man Ethnic Technology Notes No. 20.

Hicks, Frederic Noble

1963 Ecological Aspects of Aboriginal Culture in the Western Yuman Area. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.

Higgins, Howard C., Richard W. Coleman, Gary M. Brown, Richard A. Anduze, and Meade F. Kemrer

1994a *Archaeological Investigations at South Bay International Wastewater Treatment Plant Site and Outfall Facilities: Cultural Resource Identification and Geotechnical Test Monitoring*. Mariah Associates, Inc., Albuquerque, New Mexico.

1994b *Archaeological Investigations at the Proposed International Wastewater Treatment Plant Site: Cultural Resource Identification and Geotechnical Test Monitoring*. Mariah Associates, Inc., Albuquerque, New Mexico.

Imperial Beach Star News

1962 Mountain-Fresh Fluorinated Spring Water Ad. *Imperial Beach Star News*. May 31, 1962.

NETR Online

2021 Historical Aerials of Smuggler's Gulch from 1953-2019. *HistoricalAerials*. Accessed November 11, 2021.

Hohenthal, William D., Jr.

2001 *Tipai Ethnographic Notes: A Baja California Indian Community at Mid-Century*. Ballena Press Anthropological Papers No. 48. Novato, California.

Jones, Terry L., and Kathryn A. Klar (editors)

2007 *California Prehistory: Colonization, Culture, and Complexity*. AltaMira Press, Lanham, Maryland.

Kline, George E., and Victoria L. Kline

2007 Fluted Point Recovered from San Diego County Excavation. *Proceedings of the Society for California Archaeology* 20:55-59.

Kroeber, A. L.

1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin No. 78. Washington, D.C.

Laylander, Don

1991 Organización comunitaria de los yumanos occidentales: Una revisión etnográfica y prospecto arqueológico. *Estudios Fronterizos* 24/25:31-60.

1995 The Question of Prehistoric Agriculture among the Western Yumans. *Estudios Fronterizos* 35/36:187-203.

1997 Inferring Settlement Systems for the Prehistoric Hunter-Gatherers of San Diego County, California. *Journal of California and Great Basin Anthropology* 19:179-196.

2000 *Early Ethnography of the Californias, 1533-1825*. Coyote Press Archives of California Prehistory No. 47. Salinas, California.

References

- 2001 The Creation and Flute Lure Myths: Regional Patterns in Southern California Traditions. *Journal of California and Great Basin Anthropology* 23:155-178.
- 2004 *Listening to the Raven: The Southern California Ethnography of Constance Goddard DuBois*. Coyote Press Archives of California Prehistory No. 51. Salinas, California.
- 2010 Linguistic Prehistory and the Archaic-Late Transition in the Colorado Desert. *Journal of California and Great Basin Anthropology* 30:141-155.
- 2011 Diversity of Prehistoric Burials and Cemeteries in the Western Yuman Region. *California Archaeology* 3:159-176.
- Luomala, Katherine
- 1978 Tipai and Ipai. In *California*, edited by Robert F. Heizer, pp. 592-609. Handbook of the North American Indians, Vol. 8, edited by William C. Sturtevant. Smithsonian Institution, Washington, D.C.
- Manley, William
- 1993 Historic assessment of properties on 3 parcels on Monument Road, San Diego, California. William Manley Consulting. Report on file at the South Coastal Information Center at San Diego State University.
- McDonald, Meg, and James D. Eighmey
- 2008 Late Period Prehistory in San Diego. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*, pp. 109-169. ASM Affiliates, Carlsbad, California.
- Minshall, Herbert L.
- 1976 *The Broken Stones*. Copley Books, San Diego.
- 1989 *Buchanan Canyon: Ancient Human Presence in the Americas*. Slawson Communications, San Marcos, California.
- Moratto, Michael J.
- 1984 *California Archaeology*. Academic Press, Orlando, Florida.
- Moriarty, James R., III
- 1966 Cultural Phase Divisions Suggested by Typological Change Coordinated with Stratigraphically Controlled Radiocarbon Dating at San Diego. *Anthropological Journal of Canada* 4:20-30.
- National Park Service
- 2009 Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines [As Amended and Annotated]. Electronic document, http://www.nps.gov/history/local-law/arch_stnds_0.htm, accessed March 19, 2009.
- National Park Service (NPS) and the Advisory Council on Historic Preservation (ACHP)
- 1998 *The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act*. USDI National Park Service.
- Pigniolo, Andrew R., Stephanie Murray, and John Dietler
- 2001 *Archaeological Inventory Report for the Goat Canyon Enhancement Project, City of San Diego, California*. Tierra Environmental Services, San Diego, California.

Polan, H. Keith

- 1981 *An Archaeological Reconnaissance of Border Highlands*. Unpublished manuscript on file at San Diego State University.

Pourade, Richard F.

- 1960 *The Explorers*. The History of San Diego Vol. 1. Union-Tribune Publishing, San Diego.
1961 *Time of the Bells*. The History of San Diego Vol. 2. Union-Tribune Publishing, San Diego.
1963 *The Silver Dons*. The History of San Diego Vol. 3. Union-Tribune Publishing, San Diego.
1964 *The Glory Years*. The History of San Diego Vol. 4. Union-Tribune Publishing, San Diego.
1965 *Gold in the Sun*. The History of San Diego Vol. 5. Union-Tribune Publishing, San Diego.
1967 *The Rising Tide*. The History of San Diego Vol. 6. Union-Tribune Publishing, San Diego.
1977 *City of the Dream*. The History of San Diego Vol. 7. Union-Tribune Publishing, San Diego.

Pryde, Philip R.

- 2004 *San Diego: An Introduction to the Region*. Sunbelt Publications, San Diego.

Reeves, Brian, John M. D. Pohl, and Jason W. Smith

- 1986 The Mission Ridge Site and the Texas Street Question. In *New Evidence for the Pleistocene Peopling of the Americas*, edited by Alan Lyle Bryan, pp. 65-80. Center for the Study of Early Man, University of Maine, Orono.

Ritz, Frank, and Mac Davis

- 1990 *P-37-011948/CA-SDI-11948 California DPR Site Form*. Mariah Associates, Inc., Albuquerque, New Mexico.

Rogers, Malcolm J.

- 1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1:167-198.
1966 *Ancient Hunters of the Far West*. Union-Tribune, San Diego.

Rondeau, Michael F., Jim Cassidy, and Terry L. Jones

- 2007 Colonization Technologies: Fluted Projectile Points and the San Clemente Island Woodworking/Microblade Complex. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 63-70. AltaMira Press, Lanham, Maryland.

Sayre, David K., Alex Wesson, and John Dietler

- 2020 *Cultural Resource Survey of 10 Acres for the Tijuana River Flood Control Rehabilitation of the North and South Levee Project, San Diego County, California*. SWCA Environmental Consultants, Pasadena, California.

Schoenherr, Steven

- 2015 The Tijuana River Valley Historic Sites. *South Bay Historical Society Bulletin*. July 2015 Issue No. 9. <http://sunnychv.com/history/bulletin/09.pdf>
2016 Bruhlmeier's Good Drinking Water. *South Bay Historical Society Bulletin*. February 2016 Issue No. 11. <http://sunnychv.com/history/bulletin/11.pdf>

Schroeder, Albert H.

- 1978 Prehistory: Hakataya. In *Southwest*, edited by Alfonso Ortiz, pp. 100-107. Handbook of North American Indians, Vol. 9, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

References

Shipek, Florence

- 1982 Kumeyaay Socio-Political Structure. *Journal of California and Great Basin Anthropology* 4:296-303.
- 1991 *Delfina Cuero: Her Autobiography, an Account of Her Last Years, and Her Ethnobotanic Contributions*. Ballena Press, Menlo Park, California.
- 1993 Kumeyaay Plant Husbandry: Fire Water, and Erosion Management Systems. In *Before the Wilderness: Environmental Management by Native Californians*, edited by Thomas C. Blackburn and Kat Anderson, pp. 378-388. Ballena Press, Menlo Park, California.

Shumway, George, Carl L. Hubbs, and James R. Moriarty

- 1961 Scripps Estates Site, San Diego, California: A La Jolla Site Dated 5460 to 7370 Years before the Present. *Annals of the New York Academy of Sciences* 93:37-132.

Spier, Leslie

- 1923 Southern Diegueno Customs. *University of California Publications in American Archaeology and Ethnology* 20:295-358. Berkeley.

Sutton, Mark Q.

- 2010 The Del Rey Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(2):1-54.

Sutton, Mark Q., and Jill K. Gardner

- 2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

Taylor, R., L. Payen, C. Prior, P. Slota, R. Gillespie, J. Gowlett, R. Hedges, A. Hull, T. Zabel, D. Donahue, and R. Berger

- 1985 Major Revisions in the Pleistocene Age Assignments for North American Human Skeletons by C14 Accelerator Mass Spectrometry: None Older Than 11,000 C14 Years B.P. *American Antiquity* 50:136-140.

True, Delbert L.

- 1970 *Investigation of a Late Prehistoric Complex in Cuyamaca Rancho State Park, San Diego County, California*. Archaeological Survey Monographs No. 1. University of California, Los Angeles.

Turnbow, Christopher A.

- 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*. Mariah Associates, Inc., Albuquerque, New Mexico.

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 County, California*. Mariah Associates, Inc., Albuquerque, New Mexico.

Wade, Sue A., Charles S. Bull, Stephen R. Van Wormer, and Frank Ritz

- 1991 *Historic Properties Inventory for the International Boundary Water Commission, International Water Treatment Plant Environmental Impact Statement*. RECON, San Diego. Submitted to

- the Environmental Protection Agency, Region IX, Water Management Division, San Francisco.
- Wade, Sue A., Stephen R. Van Wormer, and Dayle Cheever
 1990 *Historic Properties Inventory for Secondary Treatment, Clean Water Program for Greater San Diego, San Diego, California*. RECON, San Diego.
- Wallace, William J.
 1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.
- Warren, Claude N.
 1964 Cultural Change and Continuity on the San Diego Coast. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.
 1966 (editor) *The San Dieguito Type Site: M. J. Rogers' 1938 Excavation on the San Dieguito River*. San Diego Museum of Man Papers No. 5.
 1967 The San Dieguito Complex: Review and Hypothesis. *American Antiquity* 32:168-185.
 1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by Cynthia Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1(3). Portales.
- Warren, Claude N., Gretchen Siegler, and Frank Dittmer
 2008 Paleo-Indian and Early Archaic Periods. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*, pp. 13-107. ASM Affiliates, Carlsbad, California.
- Waterman, Thomas T.
 1909 Analysis of the Mission Indian Creation Story. *American Anthropologist* 11:41-55.
 1910 The Religious Practices of the Diegueño Indians. *University of California Publications in American Archaeology and Ethnology* 8:271-358. Berkeley.
- Waters, Michael R.
 1982 The Lowland Patayan Ceramic Tradition. In *Hohokam and Patayan: Prehistory of Southwestern Arizona*, edited by Randall H. McGuire and Michael B. Schiffer, pp. 275-297. Academic Press, New York.
- Widell, Cherylin
 1994 *International Wastewater Treatment Plant Final Archaeological Report & Confidential Appendices*. Department of Parks and Recreation, San Diego, California.
 1996 *South Bay Water Reclamation Plant Project, San Diego County*. San Diego County, San Diego, California.
- Wilken, Michael Alan
 2012 An Ethnobotany of Baja California's Kumeyaay Indians. Unpublished Master's thesis, Department of Anthropology, San Diego State University.
- Yohe, Robert M., II
 1992 A Reevaluation of Western Great Basin Cultural Chronology and Evidence for the Timing of the Introduction of the Bow and Arrow to Eastern California Based on New Excavations at the Rose Spring Site (CA-INY-372). Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

APPENDICES

APPENDIX A
Records Search Results



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

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM CLIENT IN-HOUSE RECORDS SEARCH

Company: ASM Affiliates
Company Representative: Nick Doose
Date: 12/3/2020
Project Identification: ERG Tijuana River #36320

Search Radius: within project area only

Historical Resources: SELF

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

Previous Survey Report Boundaries: SELF

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

Historic Addresses: SELF

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

Historic Maps: SELF

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

Copies: 287

Hours: 1.5

APPENDIX B
NAHC Consultation



November 30, 2020

Steven Quinn
California Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
nahc@nahc.ca.gov

Re: Cultural Resources Constraints Investigation for the USMCA Mitigation of Transboundary Wastewater Flows in the Tijuana River Watershed

Dear Mr. Quinn,

ASM Affiliates, Inc. (ASM) is conducting a cultural resource constraints investigation for the US-Mexico Canada Agreement (USMCA) Mitigation of Transboundary Wastewater Flows in the Tijuana River Watershed Project in the Tijuana River National Estuarine Research Reserve and Tijuana River Valley in Imperial Beach and San Diego, California. The cultural resources constraints investigation will be conducted in compliance with Section 106 of the National Historic Preservation Act. The proposed project, at present, aims to initiate a facilitated stakeholder process to identify and implement comprehensive and coordinated technical solutions to address persistent transboundary wastewater flows in the Tijuana River watershed. ASM's client, ERG and a team of subcontractors will provide facilitation, communication, and technical alternatives analysis support to identify, assess, and assist with the selection of infrastructure projects for funding on behalf of potential grantees to address transboundary water quality issues in the Tijuana River Watershed, focusing specifically on project options in the San Diego-Tijuana area. The intended outcome of this project is the implementation of a transparent and inclusive process to identify and assess water infrastructure project options that support selection of projects for funding.

ASM has requested a records search with the South Coastal Information Center and is currently waiting on the results. I am writing to request a search of the Sacred Lands File and to inquire if you have registered any cultural resources, traditional cultural properties, or areas of heritage sensitivity within this proposed project area.

We would also like to request a list of Native American tribes that may have knowledge of cultural resources in the project area or who may wish to be notified of the investigation. Please submit your response to me via e-mail at jdaniels@asmaffiliates.com.

Sincerely,



James T. Daniels, Jr. MA, RPA
Senior Archaeologist
jdaniels@asmaffiliates.com

Your Requested Information:

County – San Diego
USGS Quad – Imperial Beach
Townships – 18 and 19 South
Ranges – 2 West
Section – In Range 18S (31-35) In Range 19S (1-6)

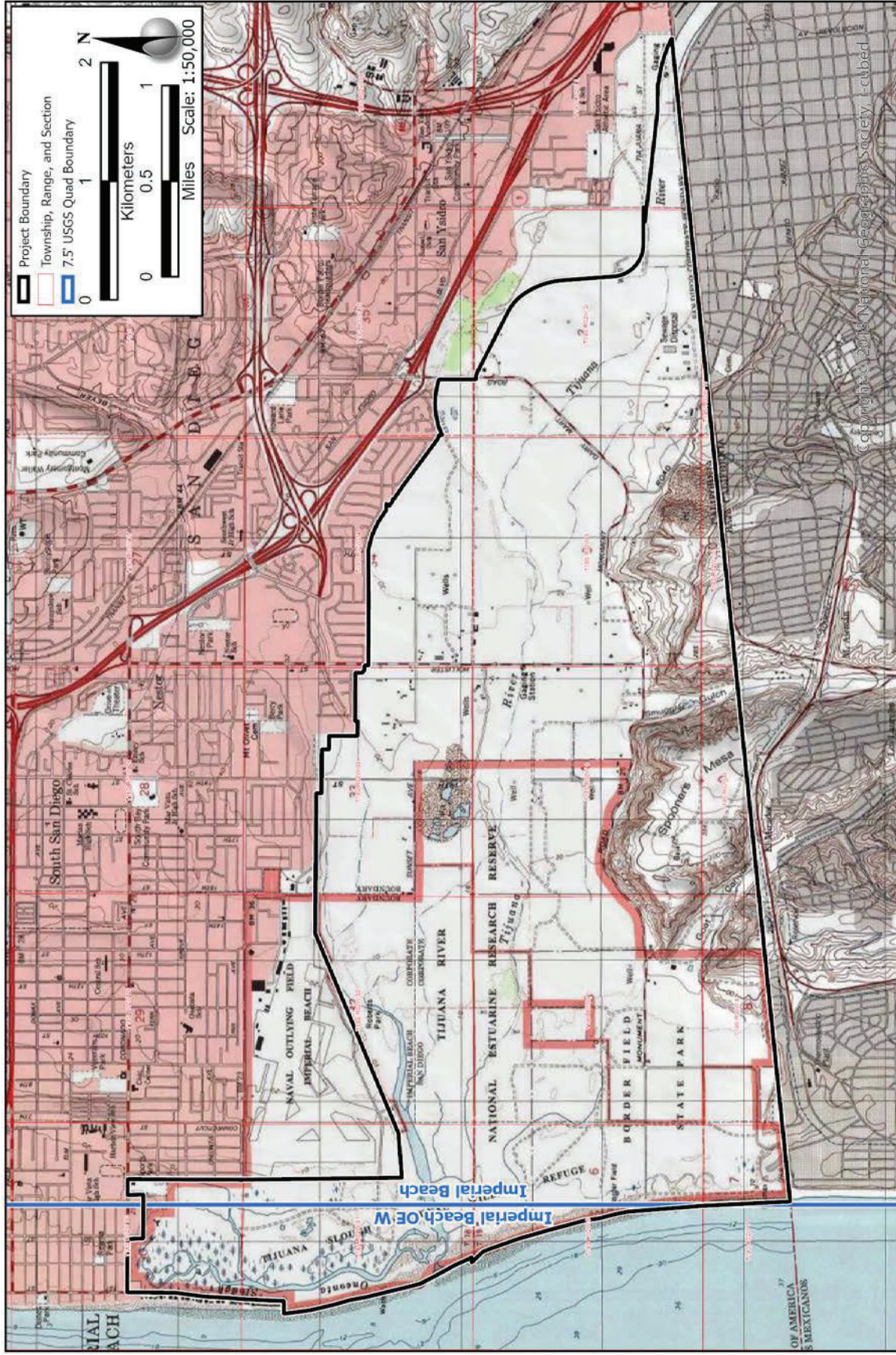


Figure 1. Project location shown on the Imperial Beach USGS 7.5' Quad map.

NATIVE AMERICAN HERITAGE COMMISSION

December 2, 2020

James Daniels
ASM Affiliates

Via Email to: jdaniels@asmaffiliates.com

Re: USMCA Mitigation of Transboundary Wastewater Flows in the Tijuana River Watershed Project, San Diego County

Dear Mr. Daniels:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the Kwaaymii Laguna Band of Mission Indians on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. 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. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
San Diego County
12/2/2020**

Barona Group of the Capitan Grande

Edwin Romero, Chairperson
1095 Barona Road Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
cloyd@barona-nsn.gov

Campo Band of Diegueno Mission Indians

Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Ewiiapaayp Band of Kumeyaay Indians

Robert Pinto, Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
wmicklin@leaningrock.net

Ewiiapaayp Band of Kumeyaay Indians

Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
michaelg@leaningrock.net

Iipay Nation of Santa Ysabel

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

Iipay Nation of Santa Ysabel

Virgil Perez, Chairperson
P.O. Box 130 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Inaja-Cosmit Band of Indians

Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. Diegueno
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village

Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Jamul Indian Village

Erica Pinto, Chairperson
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Kwaaymii Laguna Band of Mission Indians

Carmen Lucas,
P.O. Box 775 Kwaaymii
Pine Valley, CA, 91962 Diegueno
Phone: (619) 709 - 4207

La Posta Band of Diegueno Mission Indians

Javaughn Miller, Tribal Administrator
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

La Posta Band of Diegueno Mission Indians

Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

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 Resource 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 USMCA Mitigation of Transboundary Wastewater Flows in the Tijuana River Watershed Project, San Diego County.

**Native American Heritage Commission
Native American Contact List
San Diego County
12/2/2020**

**Manzanita Band of Kumeyaay
Nation**

Angela Elliott Santos, Chairperson
P.O. Box 1302 Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

**Sycuan Band of the Kumeyaay
Nation**

Cody Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

**Mesa Grande Band of Diegueno
Mission Indians**

Michael Linton, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

**Viejas Band of Kumeyaay
Indians**

Ernest Pingleton, Tribal Historic
Officer, Resource Management
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 659 - 2314
epingleton@viejas-nsn.gov

**San Pasqual Band of Diegueno
Mission Indians**

John Flores, Environmental
Coordinator
P. O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

**Viejas Band of Kumeyaay
Indians**

John Christman, Chairperson
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

**San Pasqual Band of Diegueno
Mission Indians**

Allen Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

**Sycuan Band of the Kumeyaay
Nation**

Kristie Orosco, Kumeyaay
Resource Specialist
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 6917

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 Resource 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 USMCA Mitigation of Transboundary Wastewater Flows in the Tijuana River Watershed Project, San Diego County.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

March X, 2021

Edwin Romero
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

Dear Chairman Romero:

The U.S. Environmental Protection Agency (EPA) is seeking early engagement with potentially affected tribes under the *EPA Policy on Consultation and Coordination with Indian Tribes* (Policy) regarding the United States-Mexico-Canada Agreement (USMCA) Mitigation of Contaminated Tijuana Transboundary Flows project (project). EPA is seeking early tribal input in part to determine the potential for effects to tribal interests pursuant to the Policy; your early feedback can help EPA ensure these impacts are considered in the current environmental review underway and so we can appropriately scope a subsequent invitation for government-to-government consultation.

The USMCA Implementation Act made available funds to EPA for implementation of wastewater infrastructure projects at the U.S.-Mexico border. Specifically, the Act authorized EPA to plan, design, and construct wastewater treatment projects in the Tijuana River area to treat wastewater (including stormwater), nonpoint sources of pollution, and related matters resulting from international transboundary water flows originating in Mexico. Through a collaborative process established by EPA pursuant to the USMCA Implementation Act, EPA has identified a set of 10 project options that have the potential (individually or in combination) to reduce contamination in transboundary flows from Tijuana that cause adverse public health and environmental impacts in the Tijuana River area and neighboring coastal areas in the U.S. Seven of the project options are situated within the Tijuana River Valley in southern San Diego County, California, while the other three are situated wholly within Mexico. Maps of the combined footprint of the seven project options that are located in the U.S. (identified as the “cultural resource study area”) are provided in Enclosure A. The boundaries of these project options are tentative and subject to change. EPA is currently evaluating the engineering, regulatory, and financial feasibility of each project option and anticipates identifying a preferred alternative that will consist of one project option or a combination of the project options.

The cultural resources inventory for project option areas in the U.S. will be conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA). A records search was conducted of the California Historic Resources Information System records at the South Coastal Information Center for all of the project option areas. A total of 13 previously recorded cultural resources intersect portions of the project option areas. Six of these are prehistoric sites, two are prehistoric isolates, and five are historic period sites (Table 1). A copy of the records search confirmation page is provided in Enclosure B.

A records search of the Native American Heritage Commission’s Sacred Lands File was conducted, and the results were positive. A copy of the results of the Sacred Lands File search is provided in Enclosure C.

Table 1. Summary of Cultural Resources Potentially Intersecting Project Option Areas in U.S.

Primary No. P-37-	Trinomial No. CA-SDI-	California Department of Parks and Recreation (DPR) Form Recorders	Description	National Register of Historic Places (NRHP) Eligibility Status
P-37-004933	CA-SDI-4933	1986 (Gallegos); 1990 (R. Franklin)	AP2 (Lithic scatter); AP15 (Habitation debris)	Ineligible
P-37-008604	CA-SDI-8604	1981 (K. Polan); 1992 (Richard Coleman); 2000 (Andrew Pigniolo)	AP2 (Lithic scatter)	Ineligible
P-37-008605	CA-SDI-8605	1970 (Mike Poe); 1981 (K. Polan); 1990 (Frank Ritz and Mac Davis); 1992 (Richard Coleman); 1999 (J.L. Buisse and F.B. Largent); 2018 (A.B. Foglia)	AP2 (Lithic scatter)	Ineligible
P-37-011096	CA-SDI-11096H	1989 (S. Van Wormer); 1994 (Richard Coleman); 2018 (A.B. Foglia)	HP2 (Single family property)	Ineligible
P-37-011948	CA-SDI-11948H	1990 (Frank Ritz and Mac Davis); 1992 (Richard Coleman)	AH2 (Foundations); AH11 (Wall/fence)	Unevaluated
P-37-012962 ^a	CA-SDI-12962H	1992 (Larry Pierson); 2014 (AECOM)	AH4 (Historic trash scatter)	Unevaluated
P-37-013486	CA-SDI-13486	1992 (Richard Coleman); 2010 (N. Blotner, J. Berryman, and S. Rosenberg)	AP2 (Lithic scatter)	Ineligible
P-37-013527	CA-SDI-13527	1992 (Richard Coleman)	AP02 (Lithic scatter)	Ineligible
P-37-014987	N/A	1990 (Robbins-Wade)	Isolate scraper	Ineligible
P-37-014988	N/A	1990 (Robbins-Wade)	Isolate flake	Ineligible
P-37-036865	CA-SDI-22219H	2016 (Shelby Castells and Joel Lennen)	HP34 (Military Property-Machine Gun Ranges); HP11 (Engineer structure); AH4 (Trash Scatter)	Unevaluated
P-37-036866	CA-SDI-22220H	2016 (Shelby Castells and Joel Lennen)	HP34 (Military Property – road system); HP11 (Engineering structure); AH7 (Roads)	Unevaluated
Temp. site # SWCA-S-1000 Site has not yet been assigned a Primary or Trinomial Number		2020 (Kent Smolik and Jaime Wojak)	AP2 (Lithic scatter); AH4 (Historic trash scatter)	Unevaluated

a – CA-SDI-12962H was reported as mis-mapped in the most recent DRP update and is not likely to intersect the project option areas.

EPA is offering early coordination with your tribe before initiating an environmental review pursuant to the National Environmental Policy Act and before initiating Section 106 consultation. Please let us

know if you are aware of any issues of cultural concern regarding the project areas shown on the enclosed maps. EPA would like to know if you have knowledge of any Tribal Cultural Resources, Traditional Cultural Properties, Sacred Sites, resource collecting areas, or any other areas of concern of which you wish us to be aware. Among other potential concerns, EPA is interested in information about any cultural and historic properties that may be affected by the proposed project pursuant to Section 106 of the NHPA.¹ We understand the need for confidentiality in these matters.

After reviewing the attached materials, if you believe the project may have the potential to affect your tribe's interests or would like to discuss the project to determine whether your tribe is affected, please contact Tom Konner at (415) 972-3408 or at Konner.thomas@epa.gov. We appreciate any input you may have on the project.

Thank you for your attention to this matter. EPA welcomes your input and asks for your reply by May 14, 2021 to assist us with continued coordination on this proposed project. EPA will offer consultation on the proposed action at the appropriate time regardless of whether you are presently able to respond.

Sincerely,

Douglas E. Eberhardt
Manager, Infrastructure Section

Attached: Enclosure A: Cultural Resource Study Area Maps for the USMCA Mitigation of Contaminated Tijuana Transboundary Flows Project

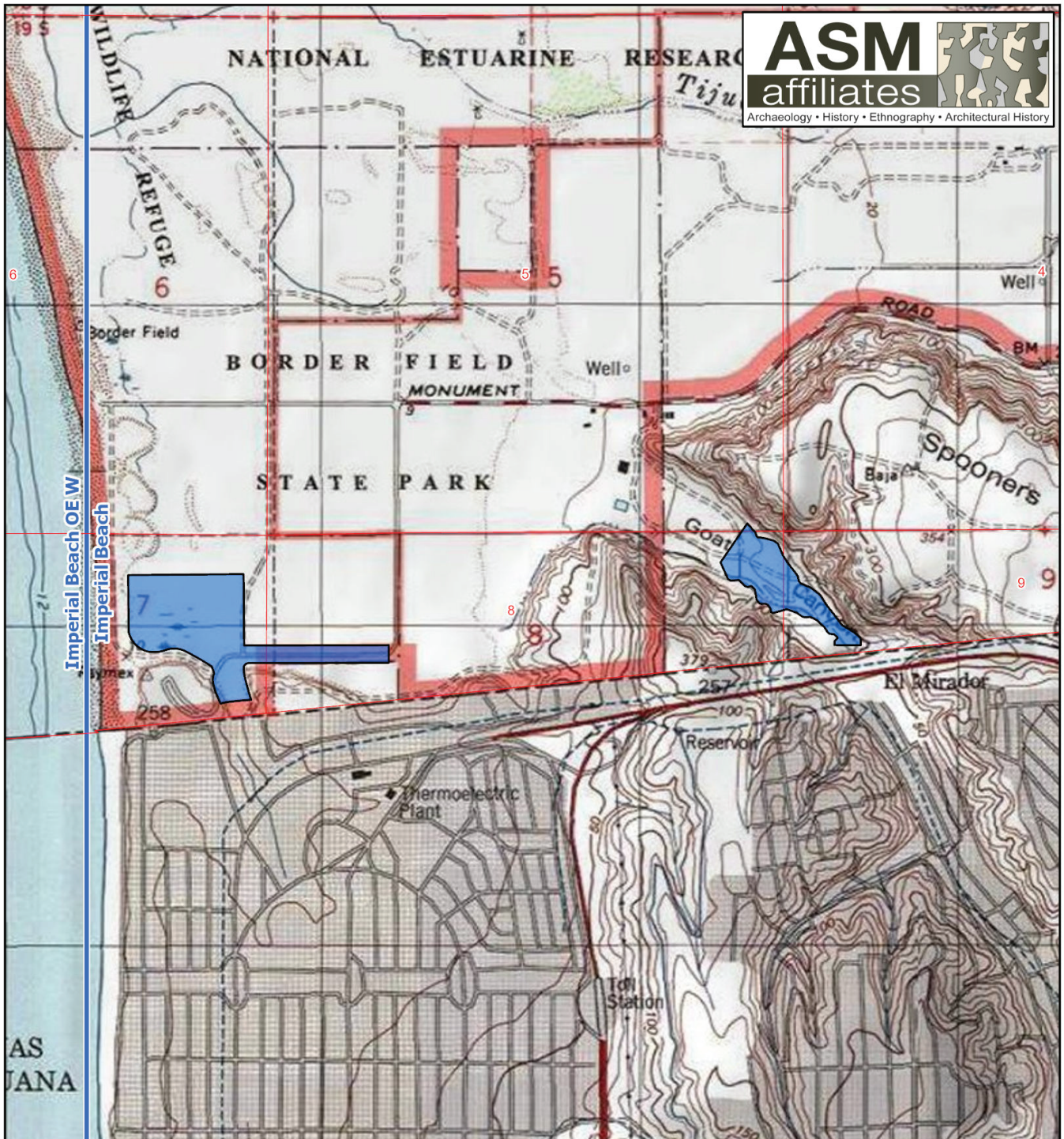
Enclosure B: California Historical Resource Information System (CHRIS) Records Search Confirmation

Enclosure C: Native American Heritage Commission (NAHC) Sacred Lands File Search Results

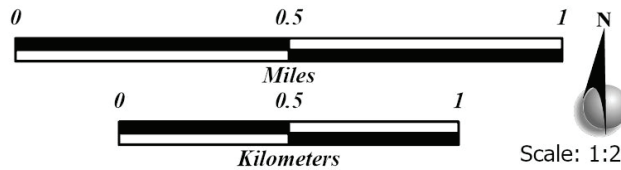
¹ <https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf>

ENCLOSURE A

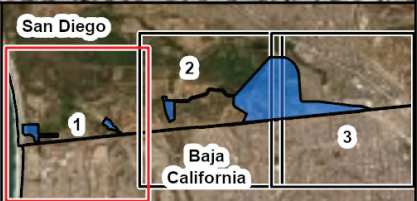
**CULTURAL RESOURCE STUDY AREA MAPS FOR THE USMCA
MITIGATION OF CONTAMINATED TIJUANA TRANSBOUNDARY
FLOWS PROJECT**

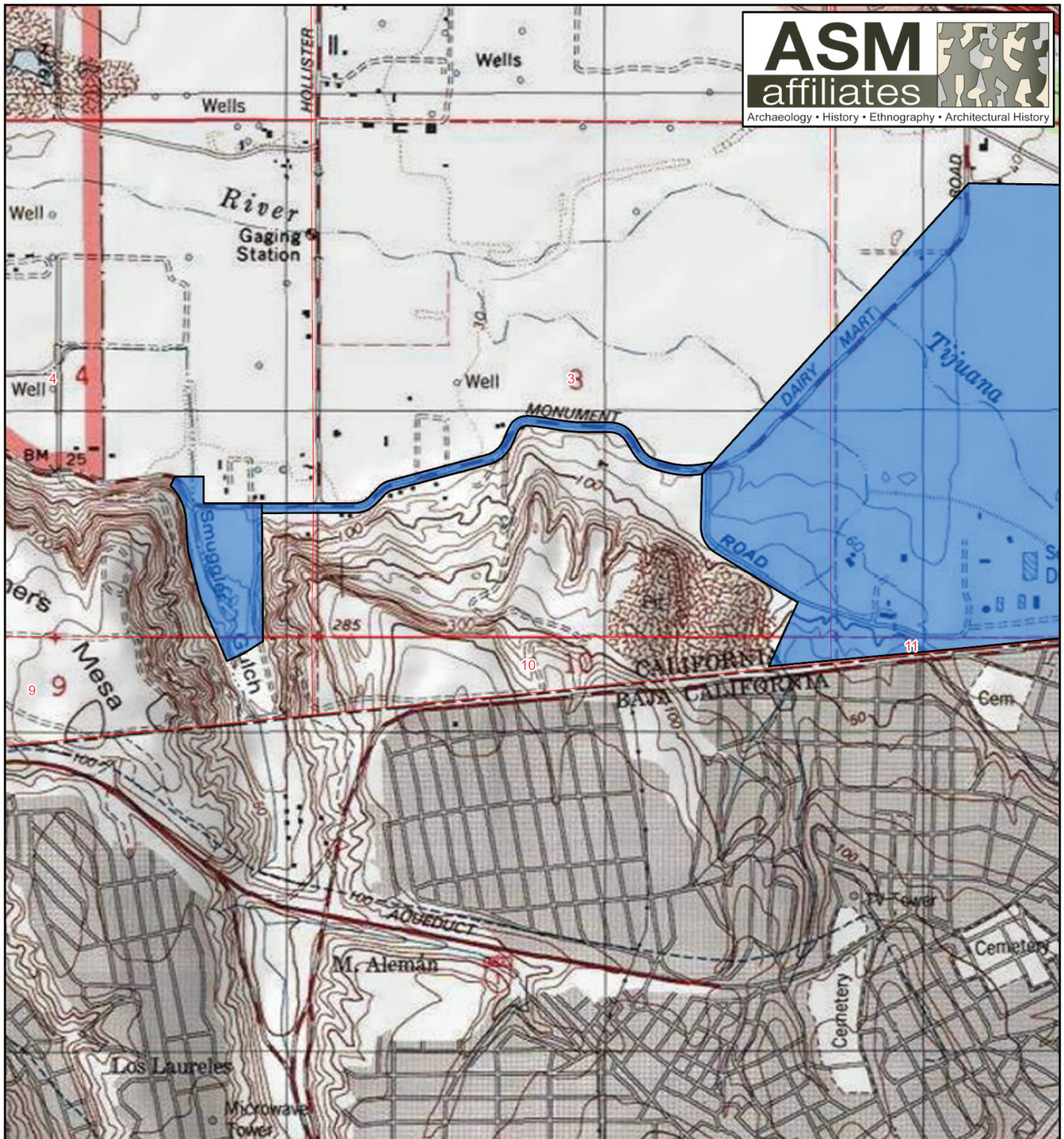


Cultural Resource Study Area
 Township, Range, and Section
 7.5' USGS Quad Boundary

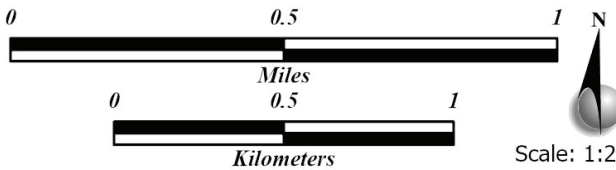


Scale: 1:24,000

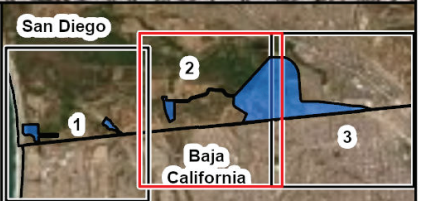


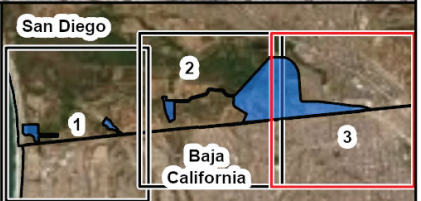
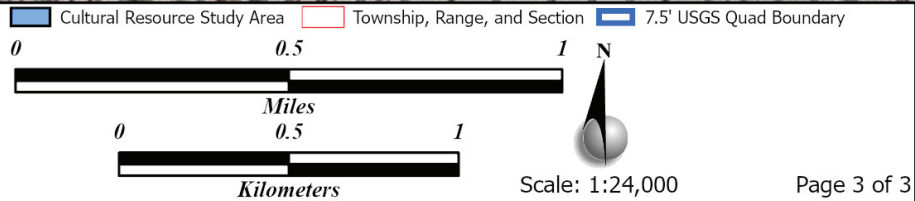
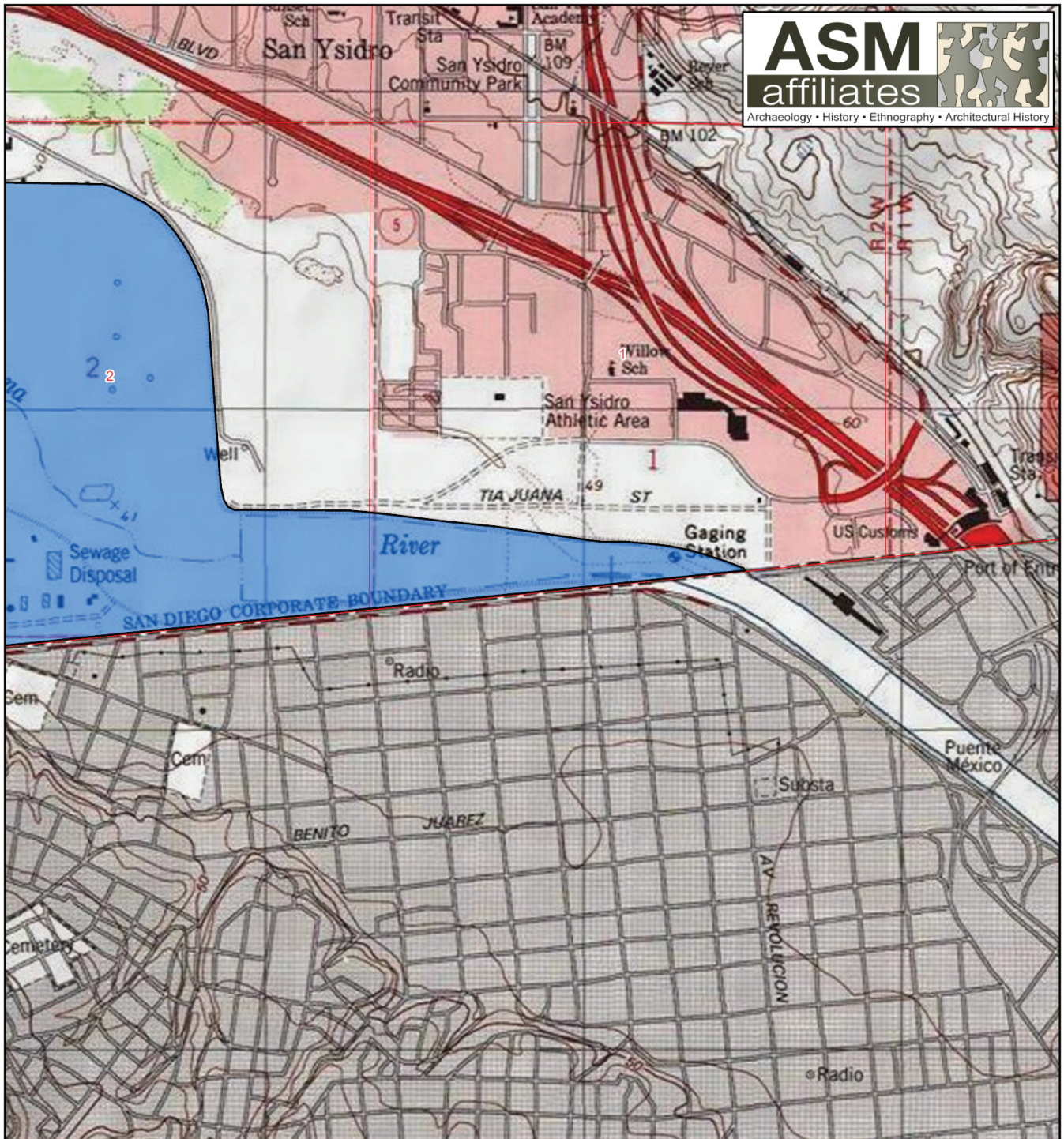


Cultural Resource Study Area
 Township, Range, and Section
 7.5' USGS Quad Boundary



Scale: 1:24,000





Map 3. Cultural Resource Study Area for the USMCA Mitigation of Contaminated Tijuana Transboundary Flows Project (3 of 3)

ENCLOSURE B

**CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM
(CHRIS) RECORDS SEARCH CONFIRMATION**



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

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM CLIENT IN-HOUSE RECORDS SEARCH

Company: ASM Affiliates
Company Representative: Nick Doose
Date: 12/3/2020
Project Identification: ERG Tijuana River #36320

Search Radius: within project area only

Historical Resources: SELF

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

Previous Survey Report Boundaries: SELF

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

Historic Addresses: SELF

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

Historic Maps: SELF

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

Copies: 287

Hours: 1.5

This is not an invoice. Please pay from the monthly billing statement

ENCLOSURE C

**NATIVE AMERICAN HERITAGE COMMISSION (NAHC) SACRED
LANDS FILE SEARCH RESULTS**

**NATIVE AMERICAN HERITAGE COMMISSION**

December 2, 2020

James Daniels
ASM AffiliatesVia Email to: jdaniels@asmaffiliates.comCHAIRPERSON
Laura Miranda
LuiseñoVICE CHAIRPERSON
Reginald Pagaling
ChumashSECRETARY
Merril Lopez-Keller
LuiseñoPARLIAMENTARIAN
Russell Atebery
KarukCOMMISSIONER
Marshall McKay
WintunCOMMISSIONER
William Mungary
Paiute/White Mountain
ApacheCOMMISSIONER
Julie Tumamall-
Stenslie
ChumashCOMMISSIONER
[Vacant]COMMISSIONER
[Vacant]EXECUTIVE SECRETARY
Christina Snider
Pomo**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov**Re: USMCA Mitigation of Transboundary Wastewater Flows in the Tijuana River Watershed Project, San Diego County**

Dear Mr. Daniels:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the Kwaaymii Laguna Band of Mission Indians on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. 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. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment

Rincon Band of Luiseño Indians

CULTURAL RESOURCES DEPARTMENT

One Government Center Lane | Valley Center | CA 92082
(760) 749-1051 | Fax: (760) 749-8901 | rincon-nsn.gov



April 28, 2021

Sent via email: Konner.Thomas@epa.gov
United States Environmental Protection Agency
Region IX
Tom Konner
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Mitigation of Contaminated Tijuana Transboundary Flows Project under the United States-Mexico-Canada Agreement (USMCA)

Dear Mr. Konner,

This letter is written on behalf of the Rincon Band of Luiseño Indians (“Rincon Band” or “Band”), a federally recognized Indian Tribe and sovereign government. We received your letter concerning the Mitigation of Contaminated Tijuana Transboundary Flows Project, as provided by ERG via email on April 2, 2021, and thank you for the opportunity to provide comments.

From the provided information, the Rincon Band understands that seven of the identified projects are situated within the Tijuana River Valley in southern San Diego County and three are located in Mexico. The locations identified within project documents are not within the Band’s specific Area of Historic Interest (AHI). At this time, we have no additional information to provide concerning potential impacts to cultural resources. We recommend that you contact a Tribe that is closer to the projects and may have pertinent information. The Rincon Band supports efforts to avoid cultural resources and recommends working closely with the Kumeyaay Nation to address and mitigate impacts to cultural resources. However, as wastewater pollution has potential to directly and indirectly impact cultural and natural resources within our Traditional Use Area, we ask to please include the Band on all distribution lists for environmental document reviews, consultations, circulation of public documents, and notices for public hearings and scheduled approvals.

If you have additional questions or concerns, please do not hesitate to contact our office at your convenience at (760) 297-2635. Thank you for the opportunity to protect and preserve our cultural assets.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Cheryl Madrigal', is written over a light blue horizontal line.

Cheryl Madrigal
Tribal Historic Preservation Officer
Cultural Resources Manager

Bo Mazzetti
Chairman

Tishmall Turner
Vice Chair

Laurie E. Gonzalez
Council Member

John Constantino
Council Member

Joseph Linton
Council Member

From: [Ray Teran](#)
To: [Tijuana-Transboundary-EIS](#)
Cc: [Ernest Pingleton](#)
Subject: FW: EPA Public Notice - USMCA Mitigation of Contaminated Transboundary Flows Project
Date: Thursday, April 8, 2021 8:43:03 PM
Attachments: [Public Notice Tijuana EIS English.pdf](#)
[Anuncio Publico Tijuana Declaracion de Impacto Ambiental Espanol.pdf](#)

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the APE-DE of the proposed project.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

If you wish to utilize Viejas cultural monitors, please call Ernest Pingleton at 619-655-0410 or email, epingleton@viejas-nsn.gov, for contracting and scheduling. Thank you.

From: Ernest Pingleton
Sent: Thursday, April 8, 2021 4:49 PM
To: Ray Teran <rteran@viejas-nsn.gov>
Subject: Fwd: EPA Public Notice - USMCA Mitigation of Contaminated Transboundary Flows Project

Sent from my iPhone

Begin forwarded message:

From: "Borowiec, Elizabeth" <Borowiec.Elizabeth@epa.gov>
Date: April 8, 2021 at 9:46:31 AM PDT
To: allen@sanpasqualtribe.org, bennaecalac@aol.com, bomazzetti@aol.com, Shane Chapparosa <chapparosa@msn.com>, cjlinton73@aol.com, cloyd@barona-nsn.gov, crd@rincon-nsn.gov, Ernest Pingleton <epingleton@viejas-nsn.gov>, epinto@jiv-nsn.gov, jmiller@lptribe.net, johnf@sanpasqualtribe.org, lcumper@jiv-nsn.gov, lp13boots@aol.com, mesagrandeband@msn.com, "michaelg.leaningrock.net" <michaelg@leaningrock.net>, rgoff@campo-nsn.gov, sgaughen@palatribe.com, ssilva@sycuan-nsn.gov, wmicklin@leaningrock.net
Cc: Patrick Goodwin <Patrick.Goodwin@erg.com>, "Konner, Thomas" <Konner.Thomas@epa.gov>, "Eberhardt, Doug" <Eberhardt.Doug@epa.gov>
Subject: EPA Public Notice - USMCA Mitigation of Contaminated Transboundary Flows Project

Greetings,

On April 5, 2021, the U.S. Environmental Protection Agency (EPA) published a notice of intent (NOI) in the Federal Register regarding preparation of an environmental impact statement, in accordance with the National Environmental Policy Act, for the proposed United States-Mexico-Canada Agreement (USMCA) Mitigation of Contaminated Transboundary Flows Project. The USMCA Project involves the planning, design, and construction of infrastructure to reduce transboundary flows of untreated wastewater (sewage), trash, and sediment that routinely enter the U.S. from Mexico via the Tijuana River, its tributaries, and across the maritime boundary along the San Diego County coast.

Please see the attached public notice (in English and Spanish), which describes how to learn more about the project options being evaluated by EPA and provides notice of the 45-day public comment period and the virtual public scoping meeting for the USMCA Project.

(español)

Saludos,

El 5 de abril del 2021, la Agencia de Protección Ambiental de los Estados Unidos (EPA) publicó un aviso de intención (NOI) en el Registro Federal con respecto a la preparación de una declaración de impacto ambiental, de conformidad con la Ley de Política Ambiental Nacional, para la propuesta por parte del proyecto del Tratado entre Estados Unidos, México y Canadá de Mitigación de Flujos Transfronterizos Contaminados (USMCA). El Proyecto USMCA involucra la planificación, diseño y construcción de infraestructura para reducir los flujos transfronterizos de aguas residuales no tratadas (aguas residuales), basura y sedimentos que ingresan rutinariamente a los EE. UU. Desde México a través del río Tijuana, sus afluentes y a través del límite marítimo a lo largo de la costa del condado de San Diego.

Consulte el aviso público adjunto (en inglés y en español), que describe cómo obtener más información sobre las opciones de proyectos que está evaluando la EPA y proporciona un aviso del período de comentarios públicos de 45 días y la reunión pública virtual de alcance para el Proyecto USMCA.

Elizabeth Borowiec
USEPA Region 9
75 Hawthorne Street
San Francisco, California 94105

Intentionally blank

CONFIDENTIAL APPENDIX C (BOUND SEPARATELY)
Site Records and Site Record Updates

CONFIDENTIAL APPENDIX D (BOUND SEPARATELY)

Confidential Report Figures

