Mission Trails Regional Master Plan Update and Natural Resources Management Plan Programmatic Environmental Impact Report: Cultural Resources Report

Prepared for

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June 14, 2016

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NATIONAL ARCHAEOLOGICAL DATABASE INFORMATION

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Consulting Firm:	RECON Environmental, Inc.
Date:	June 14, 2016
Report Title:	Mission Trails Regional Park Master Plan Update and Natural Resources Management Plan Programmatic Environmental Impact Report Cultural Resources Report
Submitted to:	Myra Herrmann City of San Diego Planning Department – Environmental
USGS 7.5' Topographic Quadrangles:	Poway (1975), San Vicente Reservoir (1971) and La Mesa (1994)
Study Area Acreage:	9,696 acres
Keywords:	Old Mission Dam, Mission Flume, bedrock milling, lithics, ceramics, rock art

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Acronyms and Abbreviations

ACOE	U.S. Army Corps of Engineers
AMSL	above mean sea level
APE	area of potential effects
CEQA	California Environmental Quality Act
City	City of San Diego
CRHR	California Register of Historical Resources
GIS	geographic information system
MCAS	Marine Corps Air Station
MPU	Master Plan Update
MSCP	Multiple Species Conservation Program
MTRP	Mission Trails Regional Park
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
NRMP	Natural Resources Management Plan
Park	Mission Trails Regional Park
PEIR	Program Environmental Impact Report
Plans	Mission Trails Regional Park Master Plan Update and Natural Resources Management Plan
RPA	Register of Professional Archaeologists
SDG&E	San Diego Gas & Electric Company
UXO	unexploded ordnance

Executive Summary

This report analyzes the potential impacts to cultural resources due to the adoption and implementation of the Master Plan Update (MPU) and Natural Resources Management Plan (NRMP) prepared for Mission Trails Regional Park (Park). Impacts are analyzed in accordance with the City's Historical Resources Regulations and the Historical Resources Guidelines. The MPU and NRMP (Plans) have been developed to work collectively to provide for the management of important natural resources while also allowing for the development of recreational opportunities within the Park. In order to achieve this end, the Plans were prepared concurrently in order to coordinate the recommendations and management actions for subareas within the existing Park, as well as the expansion subareas. The subareas within the existing Park include Lake Murray, Cowles Mountain, Mission Gorge, and Fortuna Mountain; while the expansion subareas, known as East Elliott and West Sycamore, would be incorporated into the official boundaries of the Park. All of these subareas comprise the study area for the project.

The majority of the study area has been surveyed, with the exception of West Sycamore. Less than 50 percent of this subarea has been surveyed. There are 173 cultural resources (112 historic and/or prehistoric sites and 61 isolated artifacts) recorded within the study area. Of these 173 cultural resources, 5 (3 Old Mission Dam, 1 prehistoric, and 1 multi-component sites) have been confirmed significant, 63 (61 isolates, 2 sites) are not significant, and a significance determination has not been made for 105 cultural resources.

It should be noted that the Plans do not propose specific development at this time. Rather, they aim to provide for the management of important natural resources while also allowing for recreational opportunities within the Park. Based on the known presence of cultural resources throughout the study area, subsequent recreation, facility, and other projects that likely require grading have the potential to adversely impact historical resources. Therefore, potential impacts to cultural resources have been determined to be significant.

Goals, policies, and recommendations enacted by the City, combined with applicable federal, state, and local regulations, provide a framework for developing project-level historical resources mitigation measures for future discretionary projects. All future project submittals will be subject to site-specific review in accordance with the City of San Diego's Historical Resources Regulations and Guidelines. Future development proposals will be required to incorporate feasible mitigation measures, and alternatives adopted in conjunction with the certification of the Program Environmental Impact Report (PEIR) prepared for the project. With the implementation of project-specific mitigation measures, potential impacts from future developments would be reduced to below a level of significance.

1.0 Introduction

A PEIR has been prepared in support of the proposals discussed in the MPU and NRMP. This cultural resources report was prepared in support of the PEIR. It evaluates the potential impacts to cultural resources due to the adoption and implementation of the Plans prepared for the Park in accordance with the City's Historical Resources Regulations and the Historical Resources Guidelines.

The MPU provides updated planning recommendations to the adopted 1985 Master Plan, while the NRMP is the first of its kind for the Park and would implement provisions of the Multiple Species Conservation Program (MSCP). The Plans (i.e., the MPU and NRMP) have been developed to work collectively to provide for the management of important natural resources while also allowing for the development of recreational opportunities within the Park. In order to achieve this end, the Plans were prepared concurrently in order to coordinate the recommendations and management actions for lands within the existing Park, as well as the expansion areas.

The MPU and NRMP are planning documents designed to guide future development within the Park. These Plans would not directly result in a physical change in the environment. However, if the Plans are approved, future development proposals would be regulated by their contents and development would go forth accordingly. Therefore, it is reasonably foreseeable that the recommendations provided in the Plans would indirectly lead to physical changes in the environment. Consequently, this report addresses potential impacts on the environment at the program level.

Potential future projects identified in the Plans are solely recommendations. The Plans do not provide for any specific location, design, or extent of grading for subsequent projects that may potentially be implemented. Any details regarding location, design, or extent of grading associated with these facilities would be subject to review and approval by the City when a future project is proposed in accordance with the Plans. As a result, this report does not evaluate project-level impacts associated with future implementation of any of the specific planning recommendations or public or private development projects proposed within the Park. Any subsequent activities proposed within the Park would be reviewed for consistency with the Plans and PEIR; project-level impacts of these subsequent activities would be subject to separate environmental review under the California Environmental Quality Act (CEQA).

2.0 Project Description

This report analyzes the potential environmental impacts of the adoption and implementation of the MPU and NRMP prepared for the Park (Figures 1–4). As part of project approval, technical amendments to the Tierrasanta, Navajo, and East Elliot Community Plans, as well as the Rancho Encantada Precise Plan, would be required.

The 9,696-acre Park has been divided into six subareas for planning and discussion purposes, including:

- Lake Murray
- Cowles Mountain
- Mission Gorge
- Fortuna Mountain
- East Elliott
- West Sycamore

While the first four subareas constitute the existing Park boundary, the latter two represent expansion areas that would be incorporated into the official Park boundary.

The MPU provides updated planning recommendations to the adopted 1985 Master Plan, while the NRMP is the first of its kind for the Park and would implement provisions of the MSCP. The Plans have been developed to work collectively to provide for the management of important natural resources while also allowing for the development of recreational opportunities within the Park. In order to achieve this end, the Plans were prepared concurrently in order to coordinate the recommendations and management actions for lands within the existing Park, as well as the expansion areas. These Plans would not directly result in a physical change in the environment. However, if the Plans are approved, future development proposals would be regulated by their contents and development would go forth accordingly. Therefore, it is reasonably foreseeable that the recommendations provided in the Plans would indirectly lead to physical changes in the environment. Consequently, this technical report addresses potential impacts on cultural resources at the program level. Future projects that will require ground-disturbing activities could result in adverse effects to historical resources and therefore will be discussed below.

2.1 MPU Recommendations

A planning analysis based on existing conditions in the Park was used to first develop the Plans, which led to the development of recommendations, ranging from broad overarching policy and management-related topics that affect the entire Park to specific physical improvements within the subareas. Most of the major facilities envisioned within the Park in the 1985 Master Plan have been constructed. As such, the majority of the recommendations within the MPU are focused on improving overall land/resource management, the safety and sustainability of

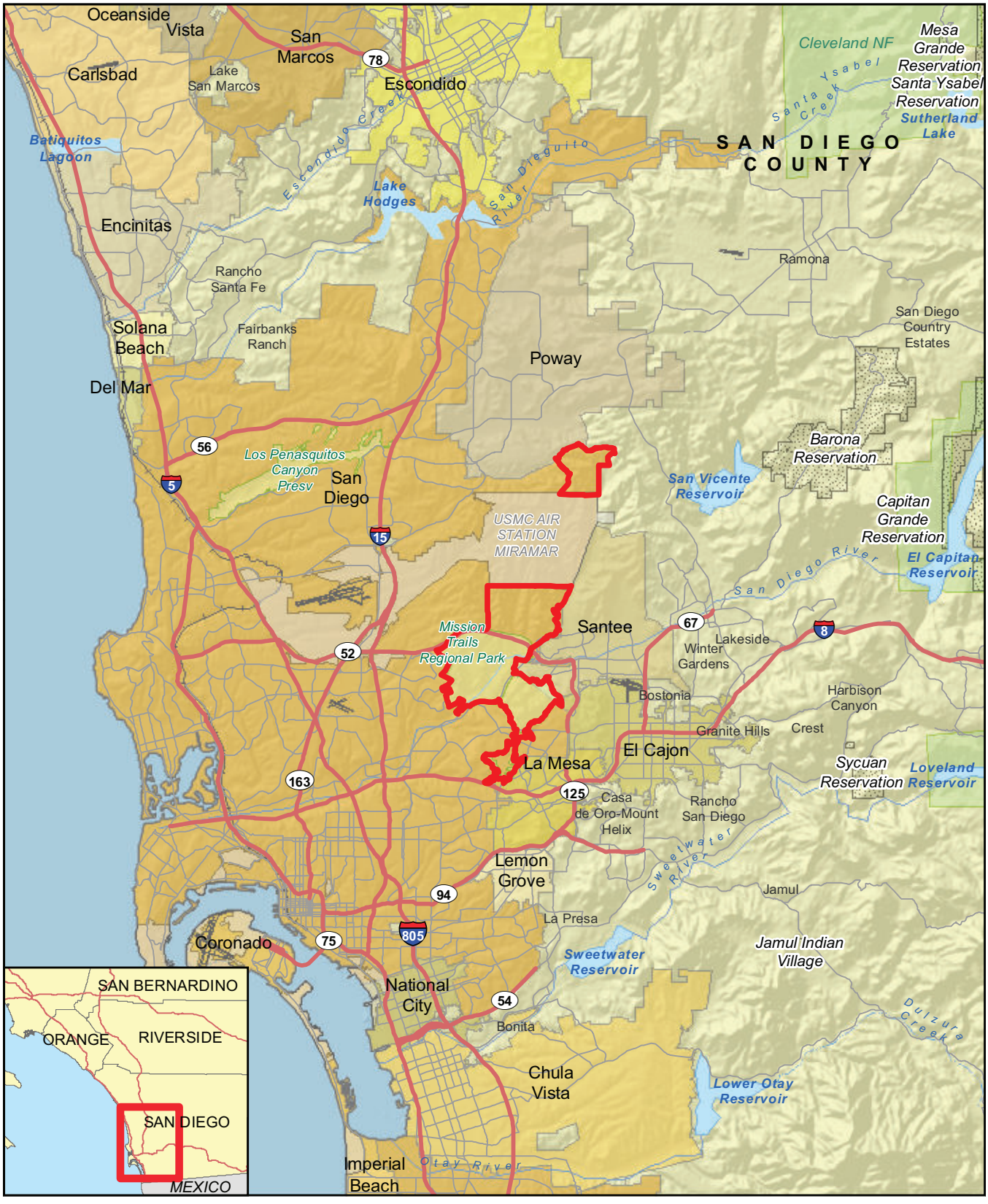

FIGURE 1

Regional Location

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Map Source: USGS 7.5 minute topographic map series, San Vicente Reservoir, Poway, and La Mesa, T14S R01W, T15S R01W, T15S R02W, El Cajon and Mission San Diego Landgrants.

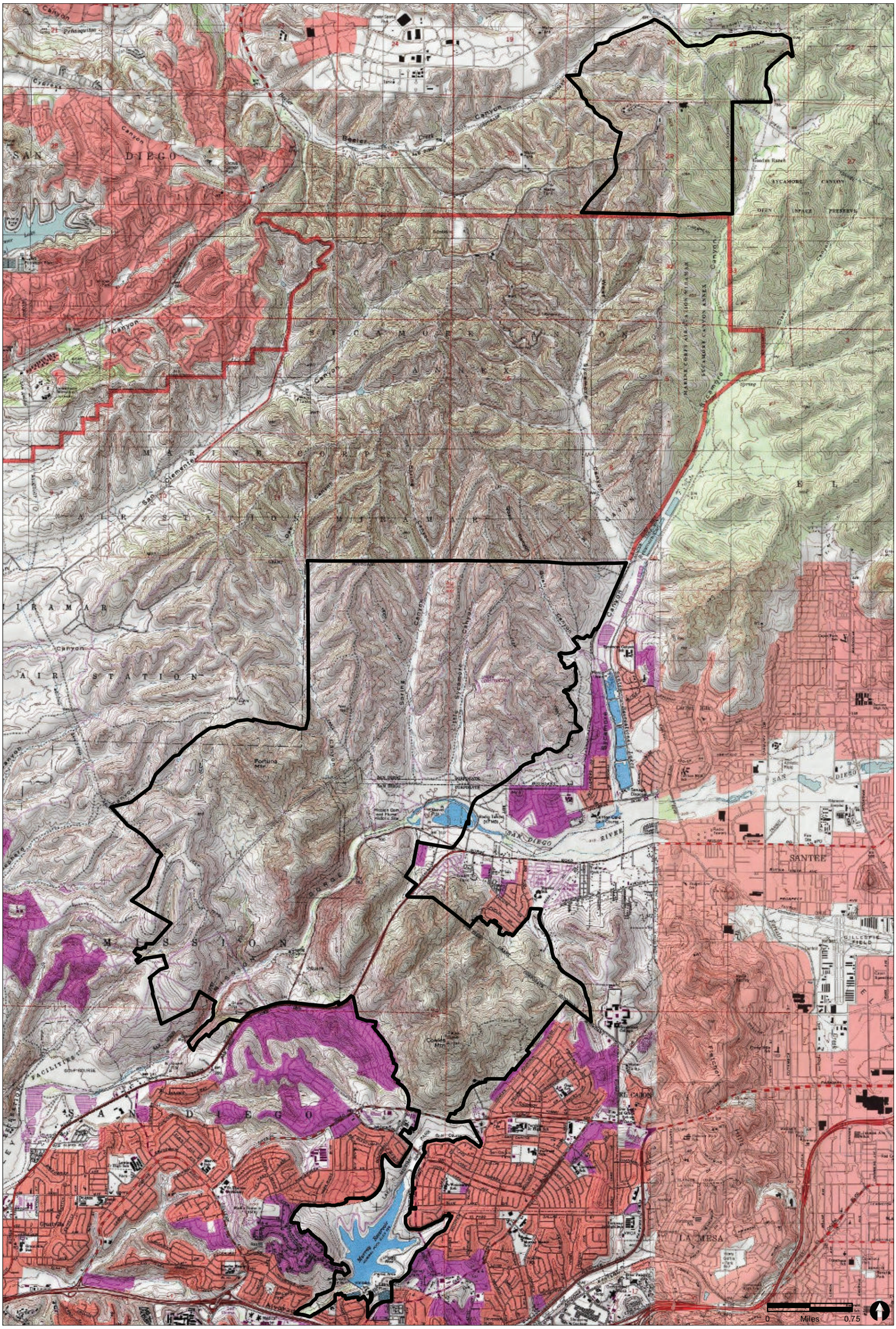

FIGURE 2

Project Location on USGS Map

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Image Source: SanGIS (flown May 2012)

Project Boundary
East Elliott Subarea
West Sycamore Subarea
Cowles Mountain Subarea
Fortuna Mountain Subarea
Lake Murray Subarea
Mission Gorge Subarea

0 Miles 1

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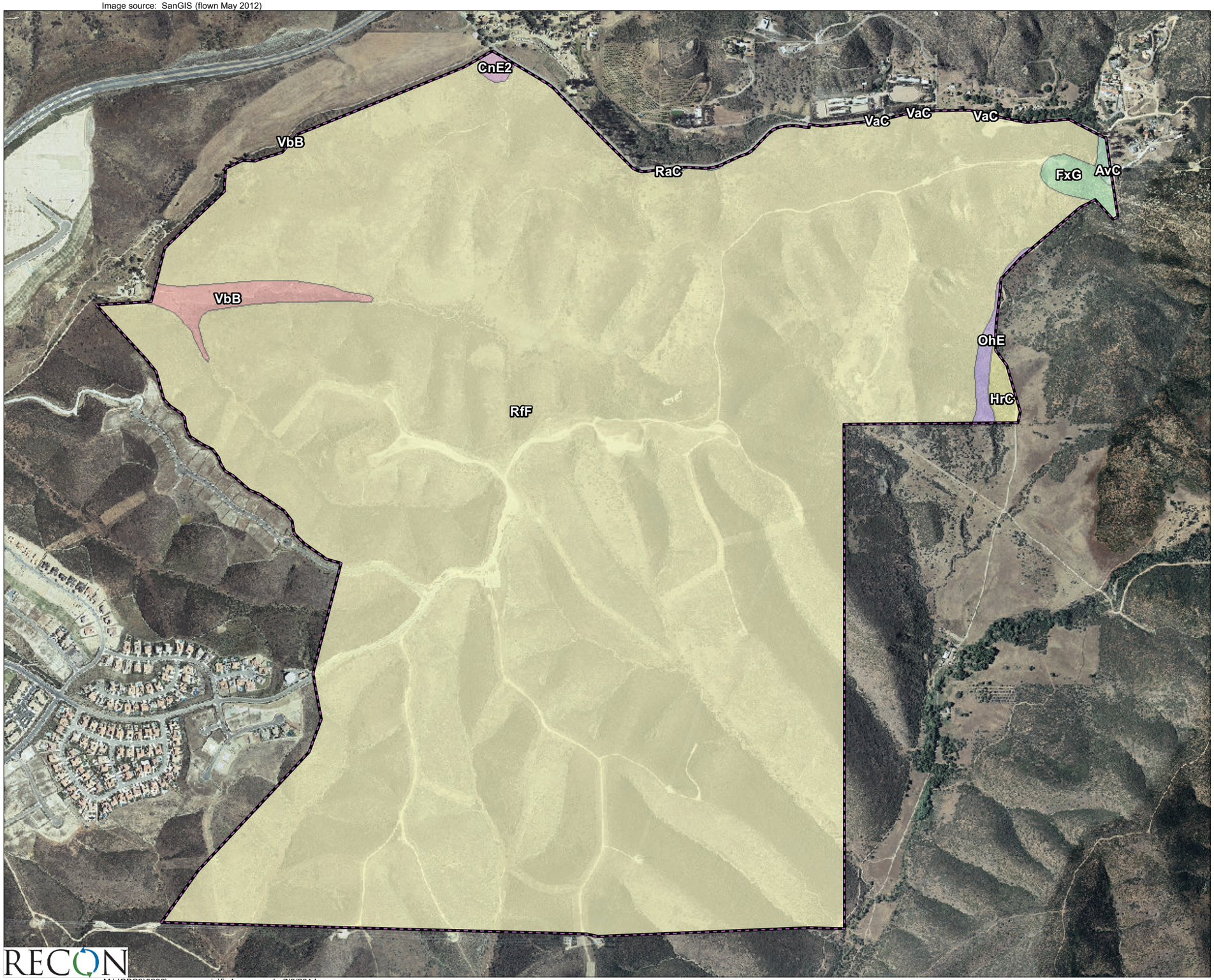
FIGURE 3

Project Location on Aerial Photograph

Image source: SanGIS (flown May 2012)



Project Boundary

MTRP Subareas

West Sycamore Subarea

Soils

AvC, Arlington coarse sandy loam 2 to 9 percent slopes

CnE2, Cieneba-Fallbrook rocky sandy loams 9 to 30 percent slopes eroded

FxG, Friant rocky fine sandy loam 30 to 70 percent slopes

HrC, Huerhuero loam 2 to 9 percent slopes

OhE, Olivenhain cobbly loam 9 to 30 percent slopes

RaC, Ramona sandy loam 5 to 9 percent slopes

RfF, Redding cobbly loam dissected 15 to 50 percent slopes

VaC, Visalia sandy loam 5 to 9 percent slopes

VbB, Visalia gravelly sandy loam 2 to 5 percent slopes

0 Feet 1,000

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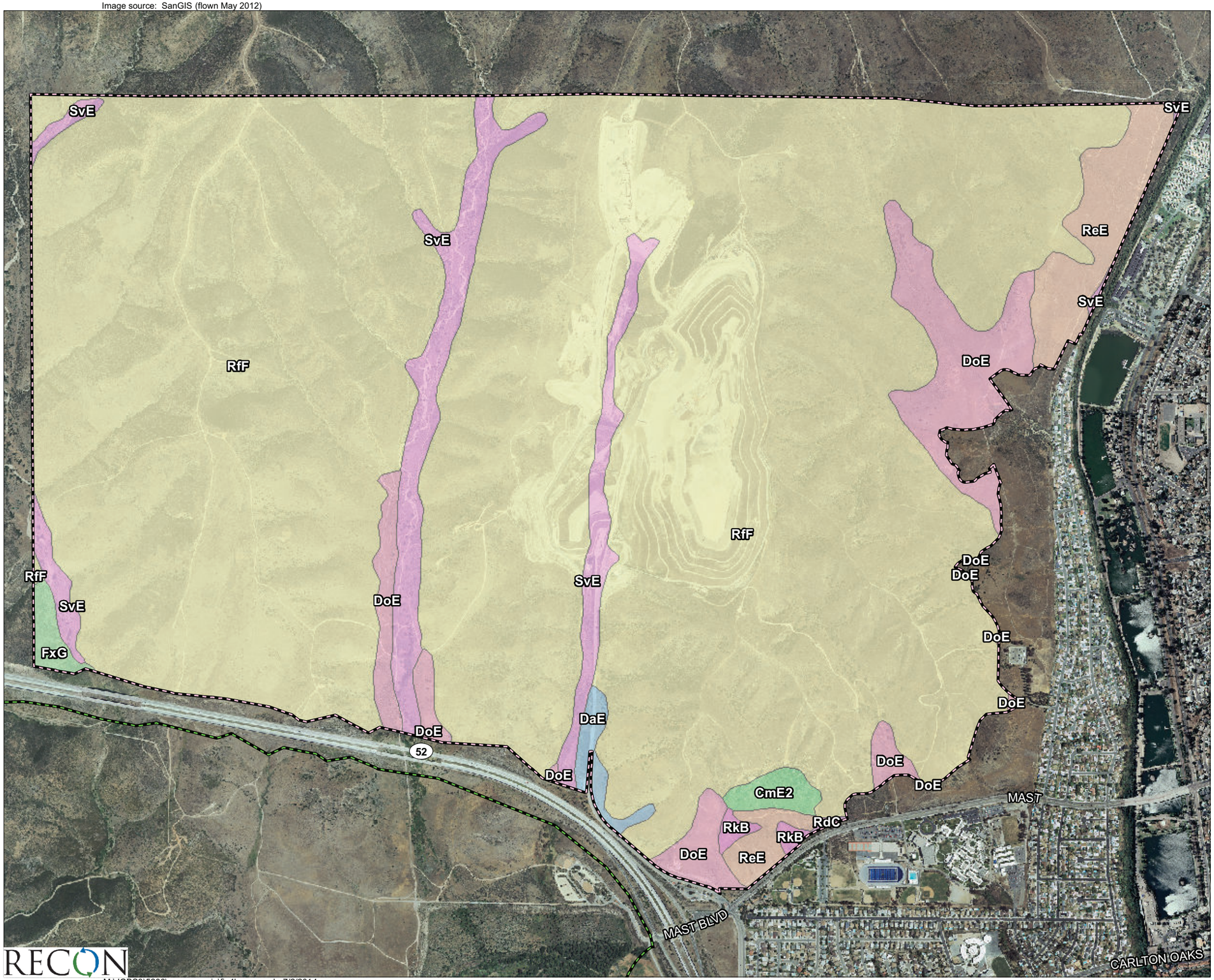
FIGURE 4a

Soils Located within the West Sycamore Subarea

Image source: SanGIS (flown May 2012)



Project Boundary

MTRP Subareas

East Elliott Subarea

Fortuna Mountain Subarea

Soils

- CmE2, Cieneba rocky coarse sandy loam 9 to 30 percent slopes eroded
- DaE, Diablo clay 15 to 30 percent slopes
- DoE, Diablo-Olivenhain complex 9 to 30 percent slopes
- FxG, Friant rocky fine sandy loam 30 to 70 percent slopes
- RdC, Redding gravelly loam 2 to 9 percent slopes
- ReE, Redding cobbly loam 9 to 30 percent slopes
- RfF, Redding cobbly loam dissected 15 to 50 percent slopes
- RkB, Reiff fine sandy loam 2 to 5 percent slopes
- SvE, Stony land

0 Feet 1,200

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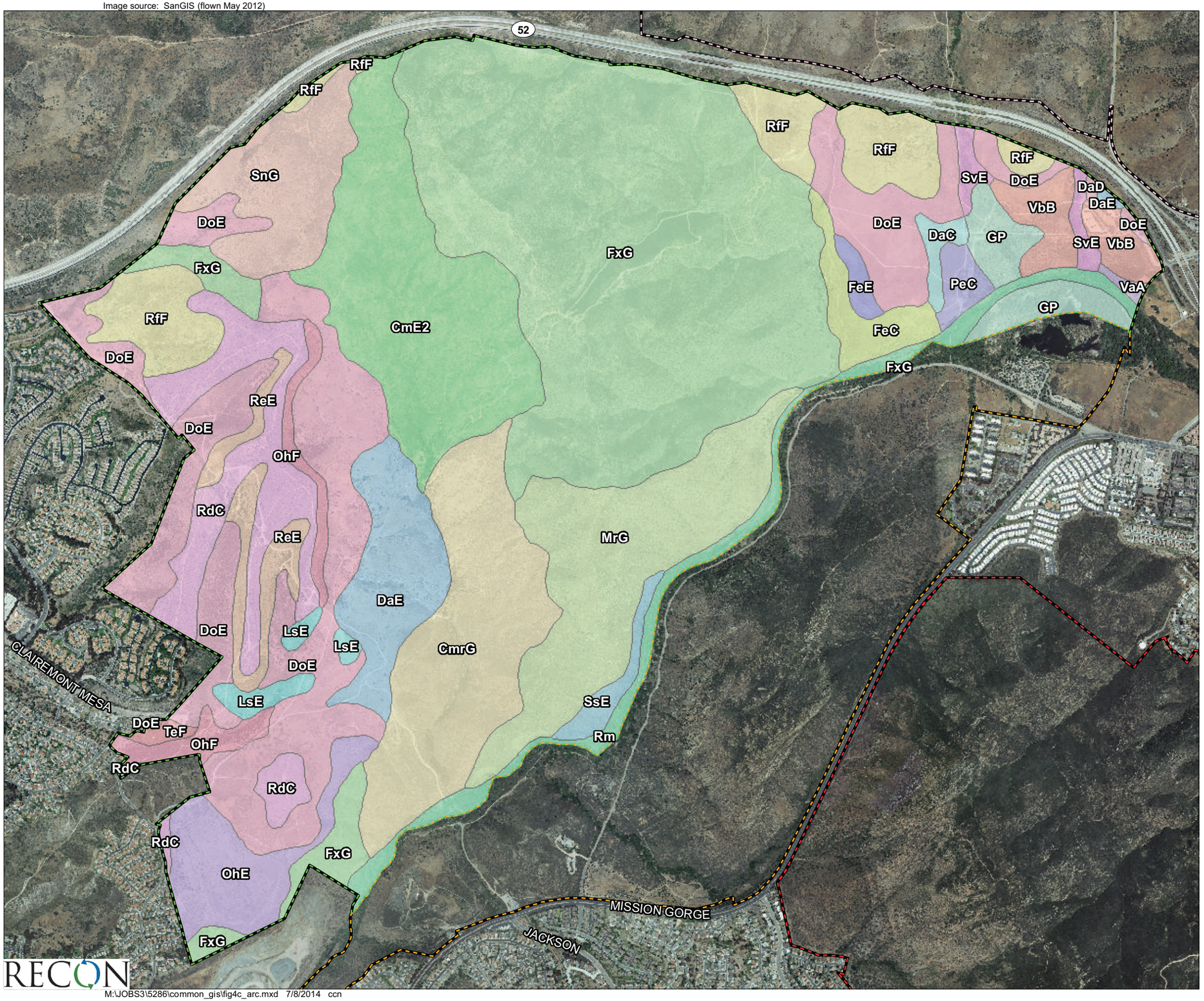
FIGURE 4b

Soils Located within the East Elliot Subarea

Image source: SanGIS (flown May 2012)



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Project Boundary

MTRP Subareas

- Cowles Mountain Subarea
- East Elliott Subarea
- Fortuna Mountain Subarea
- Mission Gorge Subarea

Soils

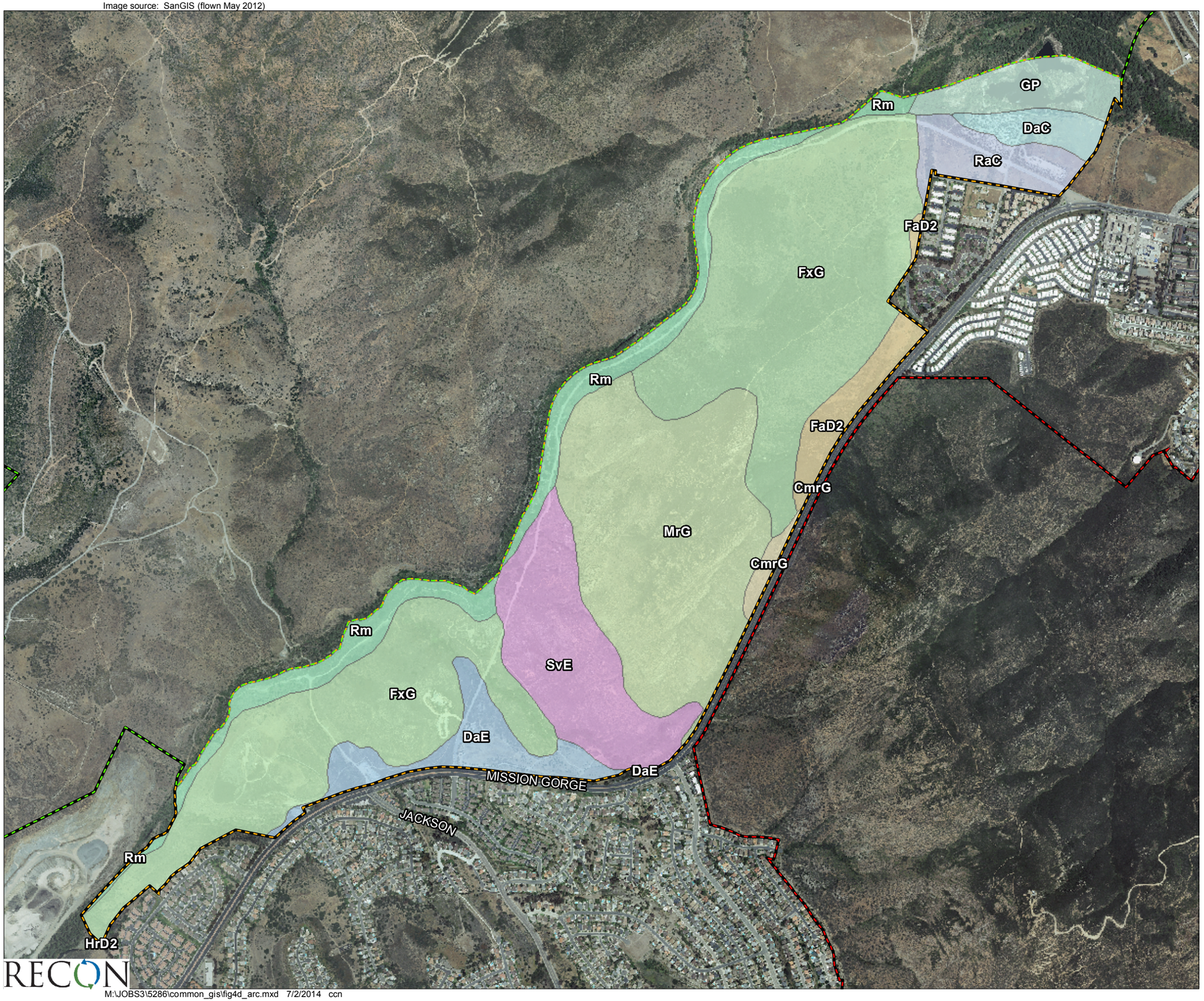
- CmE2, Cieneba rocky coarse sandy loam 9 to 30 percent slopes eroded
- CmrG, Cieneba very rocky coarse sandy loam 30 to 75 percent slopes
- DaC, Diablo clay 2 to 9 percent slopes
- DaD, Diablo clay 9 to 15 percent slopes
- DaE, Diablo clay 15 to 30 percent slopes
- DoE, Diablo-Olivenhain complex 9 to 30 percent slopes
- FeC, Fallbrook rocky sandy loam 5 to 9 percent slopes
- FeE, Fallbrook rocky sandy loam 9 to 30 percent slopes
- FxG, Friant rocky fine sandy loam 30 to 70 percent slopes
- GP, Gravel pits
- LsE, Linne clay loam 9 to 30 percent slopes
- MrG, Metamorphic rock land
- OhE, Olivenhain cobbly loam 9 to 30 percent slopes
- OhF, Olivenhain cobbly loam 30 to 50 percent slopes
- PeC, Placentia sandy loam 2 to 9 percent slopes
- RdC, Redding gravelly loam 2 to 9 percent slopes
- ReE, Redding cobbly loam 9 to 30 percent slopes
- RfF, Redding cobbly loam dissected 15 to 50 percent slopes
- Rm, Riverwash
- SnG, San Miguel-Exchequer rocky silt loams 9 to 70 percent slopes
- SsE, Soboba stony loamy sand 9 to 30 percent slopes
- SvE, Stony land
- TeF, Terrace escarpments
- VaA, Visalia sandy loam 0 to 2 percent slopes
- VbB, Visalia gravelly sandy loam 2 to 5 percent slopes

0 Feet 1,500

FIGURE 4c

Soils Located within the Fortuna Mountain Subarea

Image source: SanGIS (flown May 2012)



Project Boundary

MTRP Subareas

- Cowles Mountain Subarea
- Fortuna Mountain Subarea
- Mission Gorge Subarea

Soils

- CmrG, Cieneba very rocky coarse sandy loam 30 to 75 percent slopes
- DaC, Diablo clay 2 to 9 percent slopes
- DaE, Diablo clay 15 to 30 percent slopes
- FaD2, Fallbrook sandy loam 9 to 15 percent slopes eroded
- FxG, Friant rocky fine sandy loam 30 to 70 percent slopes
- GP, Gravel pits
- HrD2, Huerhuero loam 9 to 15 percent slopes eroded
- MrG, Metamorphic rock land
- RaC, Ramona sandy loam 5 to 9 percent slopes
- Rm, Riverwash
- SvE, Stony land

0 Feet 1,200

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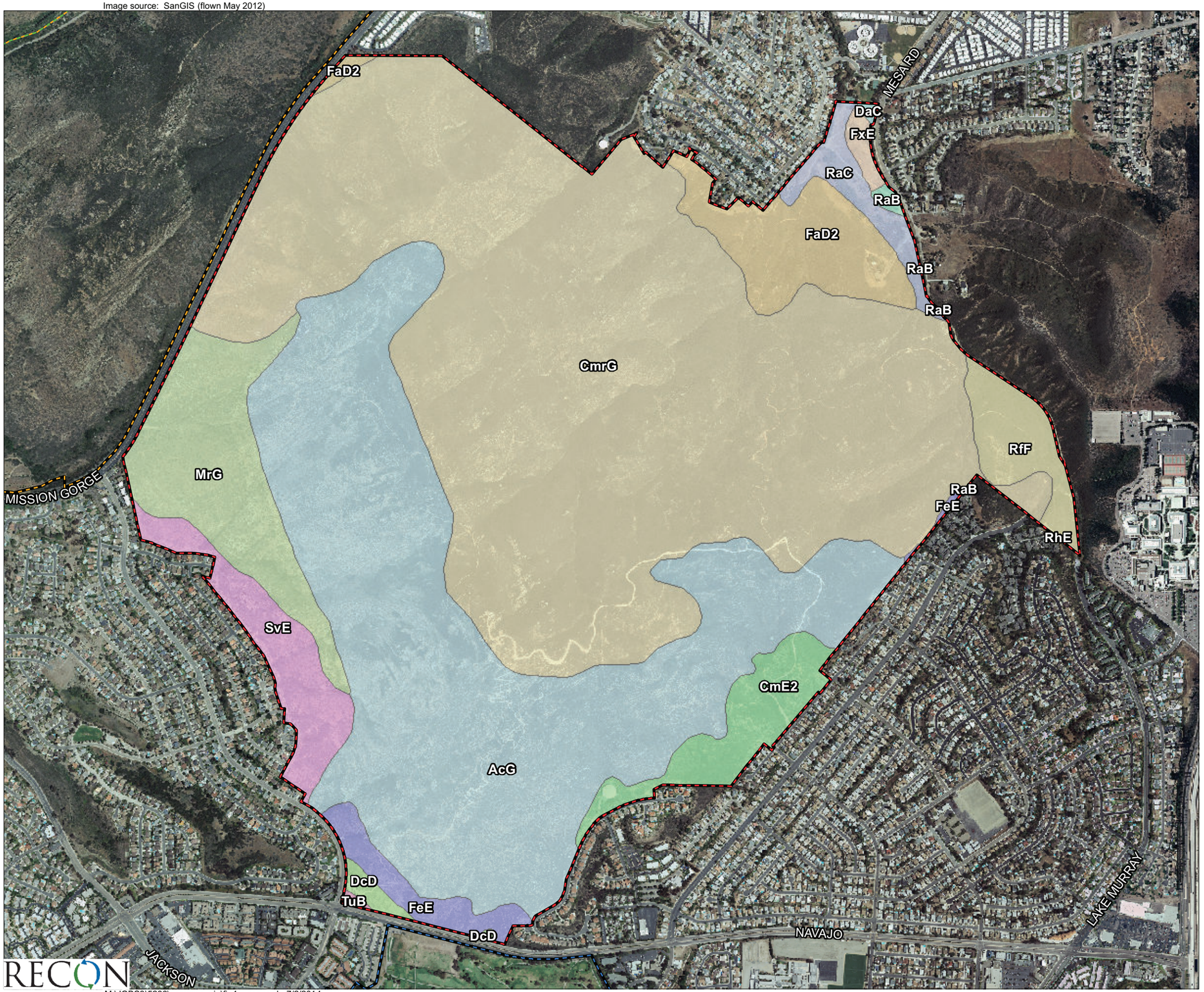
FIGURE 4d

Soils Located within the Mission Gorge Subarea

Image source: SanGIS (flown May 2012)



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Project Boundary

MTRP Subareas

- Cowles Mountain Subarea
- Fortuna Mountain Subarea
- Lake Murray Subarea
- Mission Gorge Subarea

Soils

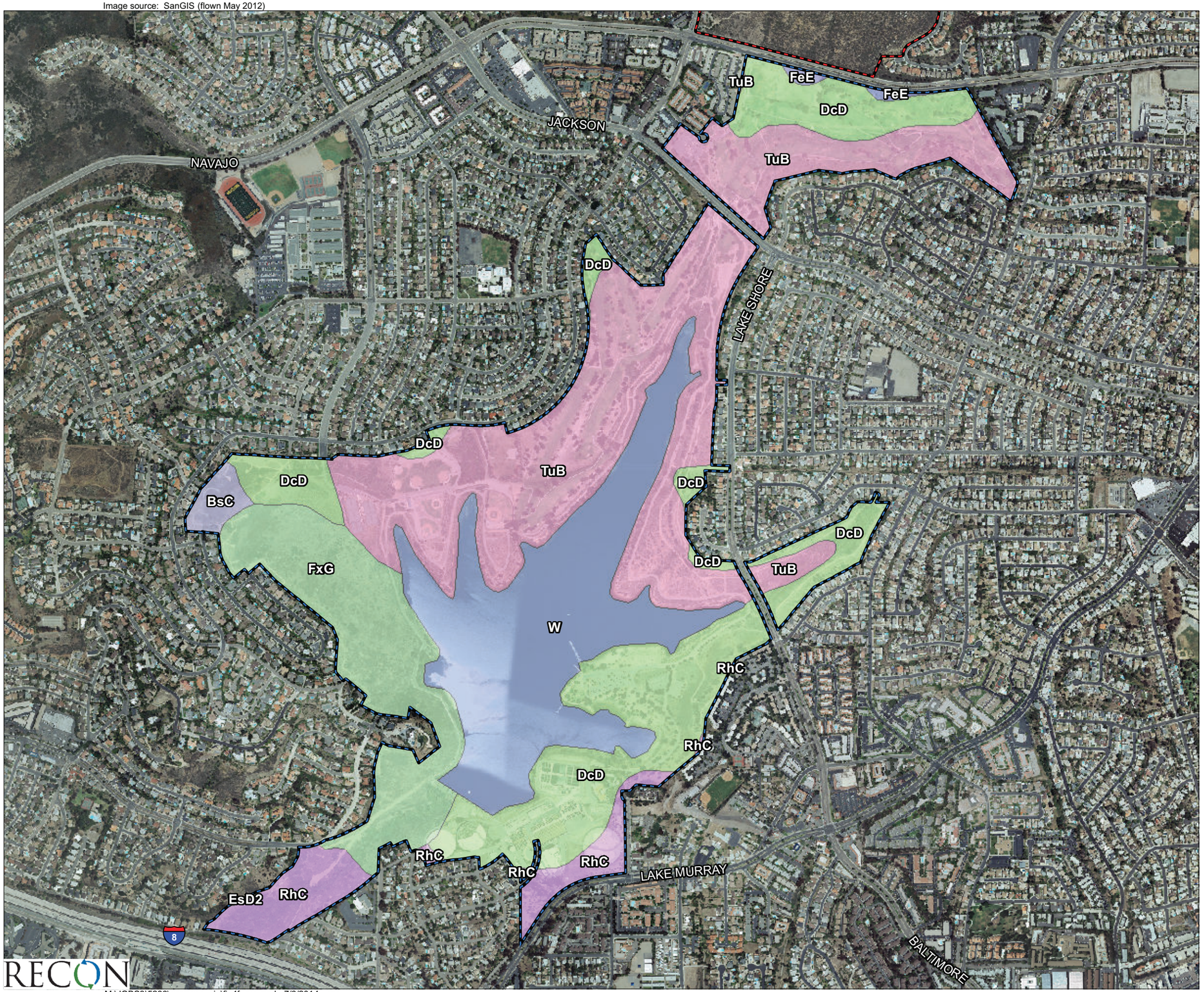
- AcG, Acid igneous rock land
- CmE2, Cieneba rocky coarse sandy loam 9 to 30 percent slopes eroded
- CmrG, Cieneba very rocky coarse sandy loam 30 to 75 percent slopes
- DaC, Diablo clay 2 to 9 percent slopes
- DcD, Diablo-Urban land complex 5 to 15 percent slopes
- FaD2, Fallbrook sandy loam 9 to 15 percent slopes eroded
- FeE, Fallbrook rocky sandy loam 9 to 30 percent slopes
- FxE, Friant rocky fine sandy loam 9 to 30 percent slopes
- MrG, Metamorphic rock land
- RaB, Ramona sandy loam 2 to 5 percent slopes
- RaC, Ramona sandy loam 5 to 9 percent slopes
- RfF, Redding cobbly loam dissected 15 to 50 percent slopes
- RhE, Redding-Urban land complex 9 to 30 percent slopes
- SvE, Stony land
- TuB, Tujunga sand 0 to 5 percent slopes

0 Feet 1,200

FIGURE 4e

Soils Located within the Cowles Mountain Subarea

Image source: SanGIS (flown May 2012)



Project Boundary

MTRP Subareas

Cowles Mountain Subarea

Lake Murray Subarea

Soils

BsC, Bosanko clay 2 to 9 percent slopes

DcD, Diablo-Urban land complex 5 to 15 percent slopes

EsD2, Escondido very fine sandy loam 9 to 15 percent slopes eroded

FeE, Fallbrook rocky sandy loam 9 to 30 percent slopes

FxG, Friant rocky fine sandy loam 30 to 70 percent slopes

RhC, Redding-Urban land complex 2 to 9 percent slopes

TuB, Tujunga sand 0 to 5 percent slopes

W, WATER

0 Feet 1,000

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FIGURE 4f

Soils Located within the Lake Murray Subarea

recreational trails, improving recreational access, and eliminating conflicts between recreational uses and natural habitat.

2.1.1 Management Recommendations

The management recommendations for the entire Park related to cultural resources are:

- Protect and manage identified cultural resources through proper planning for avoidance of significant impacts, maintain site markings as appropriate, enforce historic preservation regulations for all Park users, and develop and maintain an archaeological site monitoring program.

- Develop a plan in cooperation with interested local historical and archaeological groups, local Native American tribes, and educational institutions to promote public participation in historic preservation and enjoyment of cultural resources within the Park.

Other recommendations intend to use the Park experience to improve users' interpretation of cultural history.

For example, Facility Recommendation 6 for Cowles Mountain subarea states to:

- Add interpretive signage along the ridgeline trail from Cowles to Pyles Peak, orienting the public to the visual panorama and explain how a view can be interpreted from different "perspectives" – for example, as an active city full of different uses, nodes, and landmarks linked by circulation; as a landform resulting from long-term geological and hydrological processes; and as the historical accumulation of artifacts tracing man's interaction with his environment.

2.1.2 Subarea Recommendations

The MPU also includes recommendations that identify specific physical improvements within the subareas. For example, each subarea has recreation recommendations for constructing new trails, improving existing trails, rerouting trails, and closing and restoring unauthorized trails. It should be noted that these recommendations do not cover all potential subsequent projects that may be implemented in accordance with the Plans. As previously detailed, potential future projects identified in the Plans are solely recommendations. The Plans do not provide for any specific location, design, or extent of grading for subsequent projects that may potentially be implemented. Any details regarding location, design, or extent of grading associated with these facilities would be subject to review and approval by the City when a future project is proposed.

2.1.2.1 Lake Murray Subarea

The primary goals for this subarea are to protect the water quality of the reservoir; provide water-related recreation on and around the lake; provide focused recreational activities at the Lake Murray Community Park, Lake Murray Tennis Courts, and Mission Trails Golf Course; and

provide a variety of sustainable trails that can accommodate the high number of recreational users while preserving natural and cultural resources. Recommendations include construction of a group picnic area with small shade structures and tables and planting the disturbed area south of the ball field on San Carlos point with native plants.

2.1.2.2 Cowles Mountain Subarea

The goal for this subarea is to provide a variety of sustainable trail facilities that can accommodate the high number of recreational users, while preserving natural and cultural resources. The importance of Cowles Mountain as an open space backdrop for urban San Diego is reflected in the use concept. The area should be primarily a place for passive daytime activities that do not require extensive landform changes and expensive infrastructure and facilities. The trails and service road on the mountain need rehabilitation and erosion protection. New trails, rest stops, and overlooks need to be introduced selectively. No camping or other overnight activities are planned because of the area's urban edge and high visibility. Maintaining the integrity of Cowles Mountain will require sensitive trail location and design to avoid visual scars. It will also require the restoration and revegetation of areas already disturbed. Other considerations include providing shade for the summer user and designing these park elements so that they are unobtrusive. Recommendations also include adding off-street gravel or decomposed granite parking areas and the installation of boundary fencing at the top of Cowles Mountain to reduce habitat impacts and to restore native plants outside the boundary.

2.1.2.3 Mission Gorge Subarea

The goal for this subarea is to provide a variety of sustainable trails and other park amenities that can accommodate the high number of visitors radiating out from the Visitor and Interpretive Center while preserving natural and cultural resources. The riparian corridor along the river, the San Diego ambrosia near the Kumeyaay Lake Campground, and the bat roosts on Kwaay Paay are priorities within the NRMP. Proposed improvements focus on closing redundant and informal trails, improving trail sustainability and user access. The river bank below and roughly parallel to Father Junipero Serra Trail and the riparian corridor within the bottom of the river gorge, west of the San Diego River Crossing trail, will remain closed to the public to protect sensitive biological resources and cultural resources within the floodplain of the river. Recommendations include constructing a bridge across the San Diego River near the San Diego River Crossing Trail, constructing one or more electric vehicle charging stations near the Visitor and Interpretive Center, adding a parking lot near the Visitor and Interpretive Center, constructing a restroom at the Old Mission Dam staging area, and removing accumulated silt from the Kumeyaay Lake.

2.1.2.4 Fortuna Mountain Subarea

This subarea should provide a variety of sustainable trails that create loops of varying length and difficulty to accommodate a wide range of recreational users while preserving natural and cultural resources. The Fortuna Mountain subarea is the largest area of the Park and contains

the largest number of existing roads and trails. Proposed improvements focus on closing redundant and informal trails, improving trail sustainability and user access. Rock climbing access to the old quarry cliff faces along the San Diego River, both up and down stream of the San Diego River Crossing Trail, will remain closed to protect nesting habitat for the least Bell's vireo. Recommendations include improving the equestrian multi-use staging area, providing shade structures at key locations, and reconstructing the Old Mission Dam overlook on the northern river bank.

2.1.2.5 East Elliott Subarea

Habitat and species preservation are the driving force behind the acquisition of lands within the East Elliott subarea. Public access and recreational use must be viewed as secondary uses. Recreational trails are identified as compatible uses within the MSCP, as long as they do not compromise the long-term ecological values of the area. This subarea currently contains several utility access roads and many unauthorized user-created trails. The utility access roads are primarily located along the ridgelines and contain some extremely steep sections that require regular maintenance to address erosion that make these roads unsuitable as recreational trails. Many of the user-created trails are well-constructed narrow contour and single-track trails. However, a majority of these trails are within natural drainages that contain the more sensitive natural resources within the area. As such, some are recommended for closure, while others are recommended for localized reroutes. Additionally, future trail loops should discourage recreational trespass into Marine Corps Air Station (MCAS) Miramar. Recommendations include construction of entrance with informational kiosk near the Santee Boulders and adding shade structures at key locations.

2.1.2.6 West Sycamore Subarea

Habitat and species preservation were the driving force behind the acquisition of the West Sycamore subarea. Public access and recreational use must be viewed as secondary uses. Recreational trails are identified as compatible uses within the MSCP, as long as they do not compromise the long-term ecological values of the area. This subarea currently contains several utility access roads, a few old ranch roads and fire breaks, and several miles of newly constructed trails. The utility access roads are primarily located along the ridgelines and are being jointly used as recreational trails. Similar to the East Elliott subarea, future trail loops should discourage recreational trespass into MCAS Miramar. Recommendations include construction of a restroom, ranger office, hitching posts, and picnic tables at the West Sycamore staging area and adding shade structures at the staging area and in a central location.

2.2 Community Plan Amendments

In addition to projects that might be implemented in accordance with the MPU, amendments to the Tierrasanta, Navajo, and East Elliott Community Plans, as well as the Rancho Encantada Precise Plan, would be required. No impacts on historical resources would occur as a result of

the plan updates. Foreseeable impacts on historical resources could be a direct outgrowth of implementation of projects discussed in the MPU.

2.3 Area of Potential Effect (APE)

The APE cannot be defined presently because the MPU does not define specific projects with specific boundaries. Instead the APE for this report is the study area, which is composed of the six subareas of the Park, as described above (see Figures 1 and 2).

2.4 Project Personnel

RECON archaeologist Carmen Zepeda–Herman, M.A. served as principal investigator and primary author. Ms. Zepeda–Herman is a member of the Register of Professional Archaeologists (RPA) and meets the Secretary of the Interior Standards for Archaeology and Historic Preservation. Harry Price co-authored the document. Stacey Higgins was in charge of copy editing. Chris Nixon managed the geographic information system (GIS) data and performed the GIS data analysis. Resumes of key personnel are on file with the City but can be provided upon request.

3.0 Setting

3.1 Physical Setting

The Park is located near the center of metropolitan San Diego, eight miles northeast of downtown San Diego, midway between the Pacific Ocean and the Cleveland National Forest (see Figure 1). The Park is almost entirely within the City; however, it is within or near several jurisdictions, including La Mesa, Santee, and El Cajon to the east and Poway and unincorporated San Diego County to the north and northeast. With the proposed expansion areas, it would be bisected by MCAS Miramar (see Figure 2).

The Park is a complex of unique environments, as can be seen from the four subareas that currently comprise it (see Figure 2). At the Park's southern end is Lake Murray, a 200-acre reservoir with active recreational uses just north of Interstate 8. Immediately north lies Cowles Mountain, a regional landmark due to its visual prominence. To the northeast, the San Diego River cuts through Mission Gorge flowing west to Mission Bay. Further north is Fortuna Mountain, a prominent ridgeline flanked by a large valley and plateau to its west, and a complex of north-south canyons to its east.

East Elliott, one of the two expansion areas (see Figure 2), lies north across State Route 52, and is also composed of canyon complexes, along with the Sycamore Landfill. West Sycamore, the other expansion area, is undeveloped with sloping terrain and is adjacent to the County's Goodan Ranch and Sycamore Canyon Preserve. It is separated from the other subareas by MCAS Miramar. The project area is composed of all six subareas.

The topography in the Park varies from valleys, canyons, hills, and mountains. Elevation along the San Diego River within the Mission Gorge subarea is approximately 100 feet above mean sea level (AMSL) while the highest elevation is the summit of Cowles Mountain in the Cowles Mountain subarea at 1,593 feet AMSL. Elevation in the Lake Murray subarea ranges from 540 feet AMSL near the lake to 760 feet AMSL; elevation for the Fortuna Mountain subarea ranges from 180 feet AMSL along the southern portion where the San Diego River is to 1,080 feet along the ridge tops; in the East Elliott subarea, elevation ranges from 360 feet AMSL at the bottom of the canyons to 820 feet AMSL on the ridge tops; and in the West Sycamore subarea, elevations ranges from 760 feet AMSL along the perimeter to 1,140 feet AMSL in the central portion.

The Park is located over Cenozoic sedimentary rock units which preserve portions of the last 47 million years. These Cenozoic sedimentary rocks overlie a deeply eroded terrain formed in significantly older crystalline basement rocks of the Peninsular Ranges Batholith. The oldest sedimentary rocks date to the Eocene Epoch and include the Friars Formation, Stadium Conglomerate, Mission Valley Formation, and Pomerado Conglomerate. The sediments dating to the Holocene Epoch (younger than 10,000 years old) consist of alluvial floodplain deposits. These soils are dark brown to dark gray silty sands, sandy silts, and sandy clayed silts and are found in the San Diego river valley and the west of Kumeyaay Lake (Deméré and Ekdale 2011).

Soils within the six subareas of the Park vary considerably. A total of 43 soil types have been mapped within the Park by the U.S. Department of Agriculture Soil Conservation Service (1973) (Figure 5). Several soil types are less likely to contain prehistoric cultural resources with the exception of soil types that contain exposed rock outcrops which may contain bedrock milling features. Soils with lower potential for prehistoric cultural resources include the following:

- Stoney Land (SvE) occurs at the base of cliffs or below steep rocky slopes;
- Friant rocky fine sandy loam (FxG) with 30 to 70 percent slopes, that was formed from fine-grained metasedimentary rock;
- Metamorphic rock land (MrG) usually with less than 10 inches of sandy loam or silt loam over hard rock outcrops;
- Cieneba very rocky coarse sandy loam (CmrG) with 30 to 75 percent slopes, that was formed from granitic rock; and
- Acid igneous rock land (AcG) consists of rough terrain with large boulders and rock outcrops overlain by shallow loam or loamy coarse sand.

The following soils have more potential for prehistoric cultural resources:

- Redding-urban land complex (RhC) with 2 to 9 percent slopes, that occurs on marine terraces and has been altered by cut and fill activities for leveling building pads;
- Redding cobbly loam (RtF) with 15 to 50 percent slopes, that was formed from old mixed cobbly and gravelly alluvium with a hardpan subsoil;

- Diablo-Olivenhain complex (DoE) with 9 to 30 percent slopes, that was formed from soft sandstone and shale and from old gravelly and cobbly alluvium; and
- River wash (Rm) along the San Diego River that consists of sandy, gravelly or cobbly soils.

The San Diego River was the main water source during prehistoric times. Vegetation communities within the Park are primarily composed of Diegan coastal sage scrub (37 percent), chamise chaparral (22 percent), southern mixed chaparral (13 percent), non-native grassland (12 percent), developed lands (7 percent), and other vegetation communities (RECON 2014). A variety of usable resources would have been available to prehistoric populations. The coastal sage scrub and chamise chaparral communities contain many plants used by the ethnographic Kumeyaay population. Three plants in particular, manzanita (*Archtostaphylos* sp.), white sage (*Salvia apiana*), and elderberry (*Sambucus mexicana*), were used for a variety of purposes in ethnographic times. These plants were used for food, medicine, ceremonies, and as a source of wood. Animals available on the mesa would have included jackrabbit, bush rabbit, cottontail rabbit, ground squirrel, woodrat, other small rodents, deer, and various small birds and reptiles.

Currently, the Park is used for recreational day use by walkers, runners, cyclists, in-line skaters, hikers, mountain bikers, climbers, and equestrians. They use both authorized and unauthorized trails. The Visitor and Interpretive Center is located in the Mission Gorge subarea along with the Old Mission Dam, the Kumeyaay Lake Campground, Deerfield Quarry Bike Skills Area, and rock climbing opportunities. East Elliott contains the Sycamore Landfill and San Diego Gas & Electric Company (SDG&E) access roads. The Mission Trails Golf Course, the Alvarado Water Treatment Facility, and the Lake Murray Community Park are located in the Lake Murray subarea.

3.2 Cultural Setting

3.2.1 Prehistoric Period

The following culture history outlines and briefly describes the known prehistoric cultural traditions within the southern California coastal and inland regions. The prehistoric cultural sequence in San Diego County is generally conceived as comprising three basic periods: the Paleoindian Period, the Archaic Period, and the Late Prehistoric Period.

3.2.1.1 Paleoindian Period (12,000–8,500 B.P.)

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex as identified by Rogers (1938, 1939, 1945). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points (Warren et al. 1993:III-33). Only a trace of this period can be found in the Park (MTRP History 2011).

3.2.1.2 Archaic Period (8,500–1,500 B.P.)

The Archaic Period in coastal San Diego County is represented by the La Jollan Complex, a local manifestation of the widespread Millingstone Horizon. This period brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary. The La Jollan assemblage is dominated by rough, cobble-based choppers and scrapers, and slab and basin metates. Elko series projectile points (large side-notched points) appeared late in the period. Only a few archaeological sites dating to this period can be found in the Park (MTRP History 2011).

3.2.1.3 Late Prehistoric Period (1,500–180 B.P.)

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge which suggest that the ancestors of the ethnohistoric Kumeyaay occupied the area. This period is characterized by higher population densities and elaborations in social, political, and technological systems and is referred to as the Cuyamaca Complex. The Cuyamaca Complex is characterized by the presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brown Ware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic "Yuman bow pipes," ceramic rattles, miniature pottery, various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, Desert Side-Notched (more common) and Cottonwood Series projectile points (True 1970) and cremation burial practices. The majority of the archaeological sites within the Park date to the Late Prehistoric Period.

3.2.2 Ethnographic Background

Over 30 sites in the study area can be associated with the Kumeyaay (MTRP History 2011).The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County, and therefore the Park (Luomala 1978). The Kumeyaay lived in semi-sedentary, politically autonomous villages, or rancherias. A settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984). Their economic system consisted of hunting and gathering, with a focus on small game, acorns, grass seeds, and other plant resources. A wide range of tools was made of locally available and imported materials, including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types of metavolcanics, cherts, and quartz were locally available. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars and pestles typically made of locally available fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets and pottery, using the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brown Ware, but some were decorated (May 1978; Spier 1923).

3.2.3 Historic Period

The Spanish Period (1769–1821) begins with the founding of the Mission San Diego de Alcalá and Presidio de San Diego. The mission had vast tracts of land on which cattle, horses, sheep, and goats grazed. As the mission matured and soldiers from the Presidio married and retired, large land grants were made to well-connected individuals to encourage settlement. The rancho system developed with cattle hides and tallow as the principal Alta California export (Rolle 1998). European contact substantially and pervasively stressed the social, political, and economic fabric of the Native American culture (Shipek 1986). Disease, starvation, and a general institutional collapse caused emigration, birth rate declines, and high adult and infant mortality levels for the Native American groups in San Diego County (Cook 1976).

During the Mexican Period (1822–1848), the mission system was secularized by the Mexican government. Secularization opened up vast lands formerly belonging to the Catholic Church, and many more land grants were made. The southern California economy became increasingly based on cattle ranching. The Mexican Period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican-American War (1846–1848). California became a state in 1850 (Rolle 1998).

After the Treaty of Guadalupe Hidalgo in 1848 (beginning of the American Period), the population in San Diego County more than tripled (Pourade 1963). By the late 1800s, development in the county was well under way with the beginnings of a recognizable downtown San Diego area and the gradual development of a number of outlying communities, many of which were established around previously defined ranchos and land grants. A rural community cultural pattern existed in San Diego County from approximately 1870 to 1930. They lived on scattered farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986).

The central core of the Park and East Elliott were part of two large land grants: Mission San Diego and El Cajón. During the Spanish Period, the El Cajón land grant was operated by the Catholic Church and used for cattle, vineyards, and corn fields. After secularization, it was granted to Doña Maria Antonia Estudillo de Pedrorena in 1845. During the Civil War the land grant began to be sold in pieces. In 1868, the largest section of the remaining land was sold to Isaac Lankershim, who grew wheat. Others had citrus groves and vineyards prior to the growth of communities such as El Cajon, Lakeside, and Santee (Pourade 1969).

Rancho de la Mission San Diego de Alcalá was run by Father Junipero Serra during the Spanish Period. The church grew wheat, corn, and beans and had vineyards and olive groves as well as cattle, sheep, pigs, and goats. The Old Mission Dam and Flume were built across Mission Gorge by Indian laborers after droughts in 1801 and 1803. Construction was completed in 1815. During the Mexican Period in 1846, Santiago Arguello was granted the land and was to pay the mission's debts, support the priests, and maintain religious services. The lands were opened to settlement after his death in 1885 (Pourade 1969). After secularization, the dam and flume were not maintained.

After 1885, the study area contained a number of ranches and farms. Granite mining took place in Mission Gorge starting in 1873. Sand and gravel were also extracted. Present-day Kumeyaay Lake is the result of these rock removal operations. The study area, including the West Sycamore and East Elliott subareas, was also used by the military for artillery target training exercises during World War I. During World War II and the Korean War, the area was used for infantry, tank, and artillery training. Hikers have used the area as early as the 1920s (MTRP History 2011).

The concept of the study area as a regional park began in 1960, when the City of San Diego Planning Department proposed the Fortuna Mountain–Mission Gorge Metropolitan Park. This park plan encompassed lands purchased that were part of Camp Elliott and parts of Mission Gorge, Old Mission Dam, and the Fortuna Mountain ridge. In 1972, a Regional Park Implementation Study was prepared. Subsequently, many comprehensive park and open space plans were prepared through the years. In 1974, the County of San Diego acquired Cowles Mountain, and the City of San Diego purchased a one-half undivided interest. This property linked the proposed Fortuna Mountain Regional Park with Lake Murray. The County and City of San Diego jointly sponsored the development of a park complex with Fortuna Mountain, Cowles Mountain, and Lake Murray (MTRP Foundation 1985). The Mission Trails Regional Park Master Development Plan was prepared in 1976 and revised in 1985. The plan identified a park to serve the recreational, educational, and cultural needs of San Diego and to preserve the wilderness character and visual integrity of the land (MTRP History 2011).

4.0 Identification Efforts

4.1 Records Search and Literature Review

A records search of the study area was requested from the South Coastal Information Center using the California Historical Resources Information System to identify previous studies in the area and to locate known cultural resources. The results can be found in Confidential Attachment 1. A total of 91 investigations have been conducted within the Park. The majority of the subareas, including Lake Murray, Cowles Mountain, Mission Gorge, Fortuna Mountain, and East Elliott subareas have been surveyed in the past. The Cowles Mountain, Mission Gorge, and Fortuna Mountain subareas were surveyed in 1978 (Hanna 1978) and portions were surveyed later in 1991 (Dames and Moore 1991) and in 1993 (Glenn 1993). The entire East Elliott subarea was surveyed in 1988 (Hector 1988). Sycamore Landfill in the East Elliott subarea was re-surveyed in 1995 (Robbins-Wade 1995). Less than 50 percent of the West Sycamore subarea has been surveyed, and there may be unrecorded archaeological sites in this unsurveyed area. The most current survey in the West Sycamore subarea was completed in 2010 (Garcia-Herbst et al. 2010). Both prehistoric and historic cultural resources have been recorded throughout the entire study area.

A total of 173 cultural resources (112 archaeological sites and 61 isolated artifacts) that reflect the major themes of prehistory, mining, transportation, ranching, and military activity have been recorded within the study area (Table 1). Isolates consist of one or two prehistoric artifacts and

are not considered significant historical resources under City of San Diego or CEQA criteria and are not included in the discussion of potential impacts and, therefore, will not be further discussed.

TABLE 1
SUMMARY OF CULTURAL RESOURCES WITHIN THE PARK

Pnumber	Trinomial	SDM-W	Bedrock Milling	Lithic	Ceramic	Ground Stone	Bone/ shell	Rock Art	Rock Feature	Cave	Historic	Significant
Sites												
37-000203	SDI-203	W-690	1	1	1	1	1				1	1
37-000208	SDI-208	n/a	lacking data in site form									
37-004505	SDI-4505	W-244-H	1	1				1	1			
37-004510	SDI-4510	W-633	1	1	1							
37-004511	SDI-4511	W-691		1		1						
37-004607	SDI-4607	n/a	1	1								
37-004608	SDI-4608	n/a	1	1		1	1					
37-005518	SDI-5518	W-1422		1			1					
37-005655	SDI-5655	W-1704		1								
37-005656	SDI-5656	W-1705		1			1					
37-005657	SDI-5657	W-1705		1		1						
37-005660	SDI-5660	W-1709		1					1		1	
37-005661	SDI-5661	W-1710	1	1	1	1	1			1		
37-005684	SDI-5684	W-1712	1	1								
37-005685	SDI-5685	W-1713	1									
37-005686	SDI-5686	W-1714		1								
37-005687	SDI-5687	W-1715	1									
37-005688	SDI-5688	W-1716	1									
37-005689	SDI-5689	W-1717	1									
37-005690	SDI-5690	W-1718		1								
37-005691	SDI-5691	W-1719		1								
37-005692	SDI-5692	W-1720		1		1						
37-005693	SDI-5693	W-1721							1			
37-006658	SDI-6658	W-1757									1	1
37-006660	SDI-6660	W-1758									1	1
37-006836	SDI-6836	n/a		1		1						
37-008349	SDI-8349	W-2768		1								
37-009240	SDI-9240	n/a		1								
37-009244	SDI-9244	n/a		1								
37-009246	SDI-9246	n/a		1		1						
37-010026	SDI-10026	n/a	1	1		1	1					
37-010054	SDI-10054	W-1759	1	1		1		1				
37-010153	SDI-10153					1						
37-011057	SDI-11057	n/a	1	1								
37-011077	SDI-11077	n/a	1									
37-011280	SDI-11280	n/a		1								
37-011281	SDI-11281	n/a		1								
37-011282	SDI-11282	n/a		1								
37-011283	SDI-11283	W-4270		1								
37-011284	SDI-11284	n/a		1		1						

TABLE 1
SUMMARY OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	SDM-W	Bedrock Milling	Lithic	Ceramic	Ground Stone	Bone/ shell	Rock Art	Rock Feature	Cave	Historic	Significant
Sites (continued)												
37-011285	SDI-11285	n/a		1		1						
37-011286	SDI-11286	W-4273		1					1			
37-011287	SDI-11287	n/a		1		1						
37-011288	SDI-11288	W-4275		1								
37-011606	SDI-11606	W-4413	1	1	1							
37-011607	SDI-11607	n/a		1		1						
37-011608	SDI-11608	n/a		1		1						
37-011609	SDI-11609	n/a	1	1		1						
37-011610	SDI-11610	n/a	1									
37-011611	SDI-11611	n/a		1								
37-011612	SDI-11612	n/a		1		1						
37-011758	SDI-11758	n/a			1							
37-011759	SDI-11759	n/a		1		1						
37-011810	SDI-11810	n/a									1	
37-012016	SDI-12016	n/a		1								
37-012017	SDI-12017	n/a		1		1						
37-012018	SDI-12018	n/a		1								
37-012019	SDI-12019	n/a		1								
37-012020	SDI-12020	n/a		1								
37-012021	SDI-12021	n/a		1								
37-012834	SDI-12834	n/a		1								
37-013222	SDI-13222	n/a		1								
37-013227	SDI-13227	n/a		1							1	
37-013228	SDI-13228	n/a		1							1	
37-013229	SDI-13229	n/a		1								
37-013230	SDI-13230	n/a		1								
37-013231	SDI-13231	n/a	1	1								
37-013232	SDI-13232	n/a		1								
37-013233	SDI-13233	n/a		1								
37-013234	SDI-13234	n/a		1								
37-013235	SDI-13235	n/a		1		1			1			
37-013236	SDI-13236	n/a	1	1		1						
37-013237	SDI-13237	n/a		1								
37-013238	SDI-13238	n/a		1								
37-013239	SDI-13239	n/a	1									
37-013489	SDI-13489	n/a		1								
37-013561	SDI-13561	n/a		1								
37-013562	SDI-13562	n/a		1								
37-013563	SDI-13563	n/a		1								
37-013564	SDI-13564	n/a		1		1						
37-013565	SDI-13565	n/a		1								
37-013566	SDI-13566	n/a		1								
37-013567	SDI-13567	n/a		1								
37-013568	SDI-13568	n/a		1								

TABLE 1
SUMMARY OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	SDM-W	Bedrock Milling	Lithic	Ceramic	Ground Stone	Bone/ shell	Rock Art	Rock Feature	Cave	Historic	Significant
Sites (continued)												
37-013569	SDI-13569	n/a		1								
37-013570	SDI-13570	n/a		1								
37-013571	SDI-13571	n/a		1								
37-013572	SDI-13572	n/a		1								
37-013573	SDI-13573	n/a		1								
37-013574	SDI-13574	n/a		1								
37-013575	SDI-13575	n/a		1								
37-013576	SDI-13576	n/a		1								
37-013592	SDI-13592	n/a		1		1						
37-013593	SDI-13593	n/a		1		1						
37-014092	SDI-14031	n/a		1		1			1			
37-014093	SDI-14032	n/a		1								
37-014094	SDI-14033	n/a		1								
37-014095	SDI-14034	n/a	1									
37-014096	SDI-14035	n/a		1								
37-014097	SDI-14036	n/a		1								
37-014257	SDI-14077	n/a		1								
37-014259	SDI-14079	n/a									1	
37-014260	SDI-14080	n/a							1			
37-014687	SDI-14290	n/a		1								
37-019198	SDI-15881	n/a		1		1					1	1
37-025801	SDI-17157	n/a									1	
37-014255	SDI-14075		1									
37-014256	SDI-14076			1								
37-014258	SDI-14078		1									
37-014261				1							1	
37-015363				1								
37-020910											1	1
TOTAL SITES			**24**	**91**	**5**	**27**	**6**	**2**	**7**	**1**	**12**	**5**
Isolates												
37-013740		n/a			1							
37-014100				1								
37-014101				1								
37-014102				1								
37-014103				1								
37-014104				1								
37-014253				1								
37-014905				1								
37-015081						1						
37-015082						1						
37-015190				1								
37-015192				1								
37-015337				1								
37-015338				1								

TABLE 1
SUMMARY OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	SDM-W	Bedrock Milling	Lithic	Ceramic	Ground Stone	Bone/ shell	Rock Art	Rock Feature	Cave	Historic	Significant
Isolates (continued)												
37-015340				1								
37-015341				1								
37-015342				1								
37-015344				1								
37-015345				1								
37-015346				1								
37-015347				1								
37-015348				1								
37-015349				1								
37-015350				1								
37-015352				1								
37-015353				1								
37-015354				1								
37-015355				1								
37-015356				1								
37-015357				1								
37-015358				1								
37-015359				1								
37-015360				1								
37-015361				1								
37-015362				1								
37-015365				1								
37-015399				1								
37-015400				1								
37-015401				1								
37-015402				1								
37-015403				1								
37-015404				1								
37-015405				1								
37-015406				1								
37-015407				1								
37-015408				1								
37-015409				1								
37-015410				1								
37-015411				1								
37-015947				1								
37-016207				1								
37-016208				1								
37-016209				1								
37-016210				1								
37-016211				1								
37-016212				1								
37-016213				1								
37-016214				1								

TABLE 1
SUMMARY OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	SDM-W	Bedrock Milling	Lithic	Ceramic	Ground Stone	Bone/ shell	Rock Art	Rock Feature	Cave	Historic	Significant
Isolates (continued)												
37-016215				1								
37-028920											1	
37-030197											1	
Total Isolates			**0**	**56**	**1**	**2**	**0**	**0**	**0**	**0**	**2**	**5**

The types of sites that occur within the study area include the following:

- Prehistoric/Native American bedrock milling stations, seasonally used places usually for the processing of plant remains; through the pounding and grinding of acorns, seeds and other materials on bedrock surfaces, various types of depressions are created, which have been termed slicks, metates, basins, ovals, mortars, and cupules.

- Prehistoric/Native American campsites or villages, seasonally or year-round occupied sites containing cultural remains from daily life, stone tools and manufacturing debris, pottery, shellfish and animal bones in midden deposits.

- Prehistoric/Native American sacred or ceremonial places, e.g., rock art sites, Cowles Mountain solstice site, in the latter case where no physical remains may be found, but the importance of place is nonetheless significant in the minds and spirits of local Native peoples like the Kumeyaay.

- Historic era settlements from the Spanish, Mexican or American periods, possibly related to the Presidio, Mission, Padre Dam, villages, Old Town pueblo, farming and ranching, sand and mine operations, leaving their cultural traces in the form of remains like building foundations and walls, trash pits, privies, and domestic, business, and manufacturing debris.

Of the 112 recorded sites within the study area, 5 sites have been determined eligible for listing on the California Register of Historical Resources (CRHR). Test excavations have been completed at two (CA-SDI-203 and -13227/H) of these sites in order to make that determination. The other three sites are at the Old Mission Dam and Flume (P-37-020910, CA-SDI-6658H and -6660H). The Old Mission Dam and Flume sites have been recorded and documented along different segments, and thus three different permanent numbers have been assigned and have been counted three times. The Old Mission Dam and Flume sites have been listed on the National Register of Historic Places (NRHP), designated as California Historic Landmark #52, and listed as San Diego Historical Resources Board Landmark #2.

Seventeen additional sites (P-37-014261, CA-SDI-9240, -10026, -11057, -11081, -11280, -11281, -11282, -11283, -11284, -11285, -11286, -11287, -11288, -11606, -13592, and -13593) have been tested for significance; however, no significance determinations were noted on the site forms for 15 of the sites. Of these 15 sites, 10 had no subsurface deposits as noted in the site forms. The other 2 sites (P-37-014261 and CA-SDI-11081) were determined not eligible for listing on the CRHR.

The historic component of CA-SDI-15881 was determined not eligible for the NRHP. No determination was made for the prehistoric component of CA-SDI-15881.

In summary, of the 173 cultural resources, 5 (3 Old Mission Dam, 1 prehistoric, and 1 multi-component sites) have been confirmed significant, 63 (61 isolates, 2 sites) are not significant, and a significance determination has not been made for 105 cultural resources. Table 2 presents the current status of the 112 cultural resources sites based on site form data and visual inspection using an aerial photograph. The visual inspection was completed by superimposing the digitized site locations on a current aerial photograph of the study area and noting if there was any development such as trails. A number of cultural resources currently have authorized and unauthorized trails that bisect their site boundaries. Some have been destroyed by road construction.

TABLE 2
STATUS AND LOCATION OF CULTURAL RESOURCES WITHIN THE PARK

Pnumber	Trinomial	Location	Status
37-000203	SDI-203	Fortuna Mtn	Intact with trails
37-000208	SDI-208	Lake Murray	Intact
37-004505	SDI-4505	Mission Gorge	Intact with trails
37-004510	SDI-4510	Cowles Mtn	Intact
37-004511	SDI-4511	Mission Gorge	Intact with trails
37-004607	SDI-4607	Fortuna Mtn	Intact with trails
37-004608	SDI-4608	East Elliott	Partially impacted by Scripps Poway Parkway
37-005518	SDI-5518	Fortuna Mtn	Intact with trails
37-005655	SDI-5655	Fortuna Mtn	portion in MRTP intact with trails
37-005656	SDI-5656	Fortuna Mtn	Intact
37-005657	SDI-5657	Fortuna Mtn	Intact
37-005660	SDI-5660	Fortuna Mtn	Intact with trails
37-005661	SDI-5661	Fortuna Mtn	Intact with trails
37-005684	SDI-5684	Fortuna Mtn	Intact with trails
37-005685	SDI-5685	Fortuna Mtn	Disturbed by trails and erosion
37-005686	SDI-5686	Fortuna Mtn	Intact with trails
37-005687	SDI-5687	Fortuna Mtn	Intact
37-005688	SDI-5688	Mission Gorge	Intact
37-005689	SDI-5689	Mission Gorge	Intact, next to parking lot
37-005690	SDI-5690	Cowles Mtn	Intact
37-005691	SDI-5691	Cowles Mtn	Intact with trails
37-005692	SDI-5692	Cowles Mtn	Intact

TABLE 2
STATUS AND LOCATION OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	Location	Status
37-005693	SDI-5693	Cowles Mtn	Intact
37-006658	SDI-6658	Mission Gorge	Intact, next to trail
37-006660	SDI-6660	Fortuna Mtn	Intact, next to trail
37-006836	SDI-6836	Mission Gorge	Intact
37-008349	SDI-8349	Fortuna Mtn	Intact, next to trail
37-009240	SDI-9240	Fortuna Mtn	Intact
37-009244	SDI-9244	Fortuna Mtn	Intact
37-009246	SDI-9246	Fortuna Mtn	Destroyed by SR-52
37-010026	SDI-10026	Fortuna Mtn	Intact with trails
37-010054	SDI-10054	West Sycamore	Intact with trails
37-010153	SDI-10153	West Sycamore	Impacted by development and trails
37-011057	SDI-11057	Mission Gorge	Disturbed by road construction
37-011077	SDI-11077	Cowles Mtn	Intact
37-011280	SDI-11280	Fortuna Mtn	Intact
37-011281	SDI-11281	Fortuna Mtn	Intact with trails
37-011282	SDI-11282	Fortuna Mtn	Intact
37-011283	SDI-11283	Fortuna Mtn	Intact, next to trail
37-011284	SDI-11284	Fortuna Mtn	Intact, next to trail
37-011285	SDI-11285	Fortuna Mtn	Destroyed by parking lot
37-011286	SDI-11286	Fortuna Mtn	Intact with trails
37-011287	SDI-11287	Fortuna Mtn	Intact
37-011288	SDI-11288	Fortuna Mtn	Intact
37-011606	SDI-11606	Mission Gorge	Disturbed by campground
37-011607	SDI-11607	Mission Gorge	Disturbed by camp parking
37-011608	SDI-11608	Mission Gorge	Intact with trails
37-011609	SDI-11609	Mission Gorge	Intact
37-011610	SDI-11610	Mission Gorge/Fortuna Mtn	Intact
37-011611	SDI-11611	Mission Gorge	Intact with trails
37-011612	SDI-11612	Mission Gorge	Intact with trails
37-011758	SDI-11758	Mission Gorge	Intact
37-011759	SDI-11759	Mission Gorge	Intact
37-011810	SDI-11810	Cowles Mtn	Intact with trails
37-012016	SDI-12016	Fortuna Mtn	Intact with trails
37-012017	SDI-12017	Fortuna Mtn	Intact with trails
37-012018	SDI-12018	Fortuna Mtn	Intact, next to trail
37-012019	SDI-12019	Fortuna Mtn	Intact
37-012020	SDI-12020	Fortuna Mtn	Intact
37-012021	SDI-12021	Fortuna Mtn	Destroyed per site form
37-012834	SDI-12834	East Elliott	Intact
37-013222	SDI-13222	East Elliott	Destroyed by firebreak per site form
37-013227	SDI-13227	West Sycamore	Intact, trail outside MTRP
37-013228	SDI-13228	West Sycamore	Not an archaeological site
37-013229	SDI-13229	West Sycamore	Disturbed by trail construction
37-013230	SDI-13230	West Sycamore	Intact

TABLE 2
STATUS AND LOCATION OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	Location	Status
37-013231	SDI-13231	West Sycamore	Intact with trails
37-013232	SDI-13232	West Sycamore	Intact, next to trail
37-013233	SDI-13233	West Sycamore	Intact
37-013234	SDI-13234	West Sycamore	Intact
37-013235	SDI-13235	West Sycamore	Intact with trails
37-013236	SDI-13236	West Sycamore	Intact, next to trail
37-013237	SDI-13237	West Sycamore	Not an archaeological site
37-013238	SDI-13238	West Sycamore	Intact
37-013239	SDI-13239	West Sycamore	Intact
37-013489	SDI-13489	West Sycamore	Intact
37-013561	SDI-13561	West Sycamore	Intact
37-013562	SDI-13562	West Sycamore	Intact, next to trail
37-013563	SDI-13563	West Sycamore	Not an archaeological site
37-013564	SDI-13564	West Sycamore	Intact with trails
37-013565	SDI-13565	West Sycamore	Intact with trails
37-013566	SDI-13566	West Sycamore	Intact, next to trail
37-013567	SDI-13567	West Sycamore	Not an archaeological site
37-013568	SDI-13568	West Sycamore	Intact with trails
37-013569	SDI-13569	West Sycamore	Intact
37-013570	SDI-13570	west Sycamore	Intact
37-013571	SDI-13571	West Sycamore	Intact
37-013572	SDI-13572	West Sycamore	Intact with trails
37-013573	SDI-13573	West Sycamore	Intact with trails
37-013574	SDI-13574	West Sycamore	Intact
37-013575	SDI-13575	West Sycamore	Intact, next to trail
37-013576	SDI-13576	West Sycamore	Intact with trails
37-013592	SDI-13592	West Sycamore	Intact
37-013593	SDI-13593	West Sycamore	Disturbed by road construction
37-014092	SDI-14031	West Sycamore	Intact with trails
37-014093	SDI-14032	West Sycamore	Not an archaeological site
37-014094	SDI-14033	West Sycamore	Not an archaeological site
37-014095	SDI-14034	West Sycamore	Intact with trails
37-014096	SDI-14035	West Sycamore	Not an archaeological site
37-014097	SDI-14036	West Sycamore	Disturbed by SR-52
37-014257	SDI-14077	Fortuna Mtn	Intact with trails
37-014259	SDI-14079	Fortuna Mtn	Intact with trails
37-014260	SDI-14080	Fortuna Mtn	Intact
37-014687	SDI-14290	West Sycamore	Intact
37-019198	SDI-15881	East Elliott	Partially impacted by home, trails through MTRP portion
37-025801	SDI-17157	East Elliott	Intact
37-014255	SDI-14075	Fortuna Mtn	Intact
37-014256	SDI-14076	Fortuna Mtn	Intact
37-014258	SDI-14078	Fortuna Mtn	Intact
37-014261		East Elliott	Intact

TABLE 2
STATUS AND LOCATION OF CULTURAL RESOURCES WITHIN THE PARK
(continued)

Pnumber	Trinomial	Location	Status
37-015363		West Sycamore	Intact
37-020910		Fortuna Mtn	Intact with trails
37-030197		East Elliott	Intact

4.2 Sacred Land Search and Tribal Consultation

The Native American Heritage Commission (NAHC) was contacted by the City of San Diego in accordance with Senate Bill 18 requirements. NAHC provided a list of tribal contacts for consultation during the review process. The City of San Diego sent consultation letters to these tribal contacts describing the MTRP MPU process. The letter formally invited tribal representatives to request consultation regarding the MRTP MPU within a 90-day period in accordance with Senate Bill 18. No responses were received.

Additionally, in April 2014 the City of San Diego sent the Notice of Preparation for the PEIR to the following Native American tribes, organizations, and individuals:

- Kumeyaay Cultural Heritage Preservation
- Kumeyaay Cultural Repatriation Committee
- Barona Group of Capitan Grande Band of Mission Indians
- Campo Band of Mission Indians
- Ewiiaapaayp Tribal Office
- Inaja Band of Mission Indians
- Jamul Indian Village
- La Posta Band of Mission Indians
- Manzanita Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Mission Indians
- Mesa Grande Band of Mission Indians
- San Pasqual Band of Mission Indians
- Ipai Nation of Santa Ysabel
- La Jolla Band of Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Mission Indians
- Carmen Lucas
- Ron Christman
- Clint Linton
- Frank Brown – Intertribal Cultural Resource Council

5.0 Regulatory Framework

This section provides summary background information regarding applicable land use regulations at the federal, state, and local levels.

5.1 Federal

There currently is no federal nexus to the MPU and NRMP because no actual land disturbances would occur until projects are put forth. At that time, involvement with agencies like the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, and U.S. Army Corps of Engineers would likely necessitate compliance with cultural resource laws, and specifically with Section 106 of the National Historic Preservation Act of 1966, as amended.

5.2 State

Compliance with CEQA requires consideration of impacts to cultural resources as historical resources within projects, specifically CEQA Guidelines Section 15064.5(a) and 15064.5(c).

According to Section 15064.5 (a) of the CEQA Guidelines, a historical resource includes the following:

1. A resource listed in, or determined to be eligible for listing on, the California Register of Historical Resources,
2. A resource included in the local register, and
3. A resource which an agency determines to be historically significant.

A resource may be considered historically significant if it meets one of the following criteria for listing on the CRHR (PRC Section 5024.1):

1. Associated with events that have made a significant contribution to the broad patterns local or regional history and cultural heritage of California or the United States.
2. Associated with the lives of persons important to the nation or to California's past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

In addition to meeting one of the above criteria, a resource must retain enough of its integrity of location, design, setting, materials, workmanship, feeling, and association. A resource does not need to have integrity of all, but of a sufficient number so that it conveys the essence of why it might be significant in the first place (California Code of Regulations Title 14, Chapter 11.5

Section 4852(c)). CEQA also recognizes resources listed in a local historic register or deemed significant in a historical resource survey.

A project that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (Sections 15064.5(b) and 21084.1). CEQA Section 15064.5(b) defines substantial adverse change in the significance of an historical resource as the physical demolition, destruction, relocation, or alteration of an historical resource or its immediate surroundings such that the significance is materially impaired.

5.3 City of San Diego

The City of San Diego has developed a set of guidelines that ensure compliance with state and federal guidelines for the management of historical resources, referred to as the City's Historical Resources Guidelines. The intent of these guidelines is to ensure consistency in the identification, evaluation, preservation/mitigation, and development of the City's historical resources.

The criteria used by the City to determine significance for historic resources reflect a more local perspective of historical, architectural, and cultural importance. For inclusion on the City's Historical Resources Register, the resource can meet one or more of the following criteria:

a. Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or agricultural development.

b. Is identified with persons or events significant in local, state, or national history.

c. Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or crafts.

d. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman.

e. Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places, or is listed or has been determined eligible by the State Historical Preservation Office for listing on the State Register of Historic Resources.

f. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value, or which represent one or more architectural periods or styles in the history and development of the city (City of San Diego 2001, 2011).

Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. Testing is required to document the absence of a subsurface deposit. Such sites could include:

- Isolated artifacts
- Sparse lithic scatters
- Isolated bedrock milling features
- shellfish processing stations

Sparse lithic scatters are identified and evaluated based on criteria from the Office of Historic Preservation's "California Archaeological Resource Identification and Data Acquisition Program: Sparse Lithic Scatters" (Jackson et al. 1988). Isolated bedrock milling stations are defined as having no associated site within a 50-meter radius and lacking a subsurface component. Shellfish processing stations are defined as containing a minimal amount of lithics and no subsurface deposit. Historic buildings, structures, objects, and landscapes are generally not significant if they are less than 45 years old. A non-significant building or structure located within an historic district is by definition not significant. Resources found to be non-significant as a result of the survey and assessment would require no further work beyond documentation of the resource and inclusion in the survey and assessment report.

Per the City's Municipal Code, Section 143.0210 (Historical Resources Regulations):

> The purpose of these regulations is to protect, preserve, and where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or historical objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources.

The regulations apply to all proposed development within the City of San Diego when historical resources are present on the premises that are subject to ministerial review for any building, demolition, or grading permit; or for discretionary review associated with the CEQA review process. The City's Historical Resources Guidelines, amended in April 2001, are designed to implement the Historical Resources Regulations within the Municipal Code.

If any resources have been recorded on the property, those resources must be evaluated for significance/importance in accordance with criteria listed in the Historical Resources Guidelines. Resources determined to be significant/important must either be avoided or a data recovery program for important archaeological sites must be conducted to recover the cultural and scientific information that is related to the resource's significance/importance.

6.0 Thresholds of Significance

Historical resources significance determination, pursuant to the City of San Diego's Significance Determination Thresholds, consists first of determining the sensitivity or significance of identified historical resources and, secondly, determining direct and indirect impacts that would result from project implementation.

Based on the City's Significance Determination Thresholds, impacts related to historical resources would be significant if the proposed project would:

1. Result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site;
2. Result in any impact to existing religious or sacred uses within the potential impact area; or
3. Result in the disturbance of any human remains, including those interred outside of formal cemeteries.

7.0 Potential Impacts

This section describes the overall impacts on cultural resources based on reasonably foreseeable effects of the adoption of the project. It describes the methods used to determine the impacts of the project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate, i.e., avoid, minimize, reduce, eliminate, or compensate for significant impacts, accompany each impact discussion. The analysis in this section assesses potential impacts to historical resources from the future actions of the MPU. Future actions include recommendations (i.e., recreation and facilities) that could result in ground-disturbing activities. Some of these have been listed under each subarea in the project description section above. Project-level impacts associated with future projects implemented in accordance with the MPU and NRMP, and its associated historical resources analysis, would be subject to subsequent environmental review in accordance with CEQA and the City's Historical Resources Regulations and Guidelines. No analysis is required for the amendments to the Tierrasanta, Navajo, and East Elliott community plans or those for the Rancho Encantada Precise Plan because no impacts on historical resources would occur as a result of the plan amendments. Foreseeable impacts on historical resources could be a direct outgrowth of implementation of projects discussed in the MPU and NRMP.

7.1 Issue 1: Prehistoric or Historical Resources

Would the MPU and associated discretionary actions and NRMP result in an alteration, including the adverse physical or aesthetic effects and/or destruction of a prehistoric or historic

archaeological site or historic building (including an architecturally significant building), structure, object, or site?

7.1.1 Impact Thresholds

The City's Historical Resources Guidelines (April 2001) and CEQA Significance Thresholds (January 2011) provide criteria for evaluating impacts on cultural resources, which include direct, indirect, and cumulative impacts. Examples of direct impacts would include:

- Mass grading
- Permanent and temporary road construction
- Excavation for sewer and water pipelines
- Staging areas
- Access roads
- Demolition, grading, and excavation activities
- Deterioration due to neglect
- Alteration or repairs to a historic structure
- Inappropriate repair
- New addition
- Relocation from original site, or
- Isolation of a historic resource from its setting, when the setting contributes to its significance
- Soil stockpiling
- Construction of trails in open space or
- Increased awareness or exposure of a resource

Indirect impacts in the built environment include the introduction of visual, audible, or atmospheric effects that are out of character with the cultural resource or alter its setting, when the setting contributes to a property's significance. Examples include, but are not limited to, the construction of a large-scale building, structure, object, or public works project that has the potential to cast shadow patterns on the cultural resource, intrude into its viewshed, generate substantial noise or vibrations, or substantially increase air pollution or wind patterns. For archaeological resources and tribal cultural resources, indirect impacts are often the result of increased public accessibility to resources not otherwise subject to impacts, which would result in an increased potential for vandalism and site destruction. Placing sites into open space does not always mean that there would not be the potential for indirect impacts on the resource. Since open space boundaries can change during the project review as a result of environmental design and/or community constraints, resources placed into open space need to be evaluated for indirect impacts.

Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. The loss of a historical resource due to mitigation by data recovery could be considered a cumulative impact. In the built environment, cumulative impacts most

often occur to districts, where several minor changes to contributing properties, their landscaping, or to their setting over time result in a significant loss of integrity.

Impact thresholds are dependent on whether the cultural resource is important enough to qualify as a historical resource. There are three regulatory frameworks used to evaluate the significance of a cultural resource: federal, state, and local (see Section 4.0 for significance criteria). Under these frameworks, agencies are required to determine how a project could affect a significant cultural resource. Under federal regulations, significant cultural resources are called historic properties and under CEQA and the city guidelines, they are called historical resources.

If a resource qualifies as an historical resource under CEQA, it must then be determined how the project could affect those qualities that make a resource significant in accordance with CEQA. Once it is known how a project would affect a resource, it is then possible to address whether the effect on the resource is adverse.

7.1.2 Impact Analysis

The NRMP includes management actions that have been set forth in order to protect sensitive biological resources. Some of these actions would involve limited soil disturbance, such as the installation of exclusionary fencing, erosion control measures, and weeding. Although the soil disturbance would be rather limited, the potential exists that these activities could disturb historical resources. Additional impacts could result from the removal of unexploded ordnance (UXO) by the Army Corps of Engineers (ACOE) should this be identified prior to or during implementation of management actions. Removal of UXO could require excavation and thus soil disturbance. Potential impacts associated with the NRMP would be significant, and mitigation is required.

The MPU includes management recommendations for protection of cultural resources while providing recreational opportunities. Management Recommendation Number 4 states “protect and manage identified cultural resources through proper planning for avoidance of significant impacts, maintain site markings as appropriate, enforce historic preservation regulations for all park users, and develop and maintain an archaeological site monitoring program” and Recommendation Number 5 states “develop a plan in cooperation with interested local historical and archaeological groups, local Native American tribes, and educational institutions to promote public participation in historic preservation and enjoyment of cultural resources within MTRP”. Despite these management recommendations, MPU planning, facility, and habitat/species recommendations include the types of subsequent projects that could cause adverse impacts on historical resources. Projects that will require disturbing in situ soils have the highest potential to adversely impact historical resources. Some of these subsequent projects may include picnic tables, shade structures, and additional parking lots; restoration of areas with native plants; and installing new trails, improving existing trails, rerouting trails, and closing and restoring unauthorized trails. As noted above, removal of UXO could also result in an adverse impact to historical resources. Because construction of these types of projects could occur within areas known to contain historical resources, each subsequent project implemented with

the MPU would need to be evaluated independently for its potential impacts on historical resources depending upon the context and intensity of impacts on the environment. Potential impacts associated with the MPU would be significant, and mitigation is required.

As previously mentioned, it is estimated that most of the subareas were surveyed over 20 years ago. Less than 50 percent of the West Sycamore subarea has been surveyed for cultural resources. It should be noted that studies that are more than 3 years old generally need to be updated. Conditions related to weather, vegetation or ground cover, accessibility, and more could affect the adequacy of any cultural resource survey. These must all be weighed against the context and intensity of any subsequent project proposed in accordance with the Plans.

7.1.3 Significance of Impact

Impacts on known prehistoric or historic resources (both archaeological and built environment) and those not yet found and formally recorded could occur anywhere in association with implementation of the Plans. Grading of original in situ soils could also expose buried archaeological resources and features. Potential impacts on historical resources associated with subsequent projects implemented in accordance with the Plans would be considered **significant (Impact HIST-1)**.

7.1.4 Mitigation Framework

The MPU includes management recommendations for the protection of cultural resources as noted above. In addition to those recommendations, the following framework details the process of implementing those recommendations and would be required for future projects with the potential to impact potentially significant historical resources.

7.1.4.1 Archaeological and Tribal Cultural Resources

MM-HIST-1a: Prior to issuance of any permit that could directly affect an archaeological or tribal cultural resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological or tribal cultural resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socio-economic and ethnic backgrounds. Resources may also include resources associated with prehistoric Native American activities.

Initial Determination

The environmental analyst shall determine the likelihood for the project site to contain historical resources by reviewing site photographs and existing historic information (e.g., Archaeological Sensitivity Maps, the Archaeological Map Book, and the California Historical Resources Inventory System and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and may conduct a site visit. If there is any evidence that the site

contains archaeological or tribal cultural resources, then an archaeological evaluation consistent with the City Guidelines would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City's Historical Resources Guidelines.

Step 1

Based on the results of the initial determination, if there is evidence that the project area contains archaeological resources, preparation of an evaluation report is required. The evaluation report could generally include background research, field survey, archaeological testing, and analysis. Before actual field reconnaissance would occur, background research is required that includes a record search at the South Coastal Information Center at San Diego State University. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections should also be obtained from the San Diego Archaeological Center and any tribal repositories or museums.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet City standards. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or tribal cultural resources. If, through background research and field surveys, resources are identified, then an evaluation of significance, based on the City Guidelines must be performed by a qualified archaeologist.

Step 2

Where a recorded archaeological site or Tribal Cultural Resource (as defined in the Public Resources Code) is identified, the City shall initiate consultation with identified California Indian tribes pursuant to the provisions in Public Resources Code Section 21080.3.1 and 21080.3.2, in accordance with Assembly Bill 52 (AB 52). It should be noted that during the consultation process, tribal representative(s) will be involved in making recommendations regarding the significance of a tribal cultural resource which also could be a prehistoric archaeological site. A testing program may be recommended which requires reevaluation of the proposed project in consultation with the Native American representative, which could result in a combination of project redesign to avoid and/or preserve significant resources, as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). The archaeological testing program, if required shall include evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies including surface and subsurface investigations can be found in the City of San Diego's Historical Resources Guidelines. Results of the consultation process will determine the nature and extent of any additional archaeological evaluation or changes to the proposed project.

The results from the testing program will be evaluated against the Significance Thresholds found in the Guidelines. If significant historical resources are identified within the APE, the site may be eligible for local designation. However, this process would not proceed until such time that the tribal consultation has been concluded and an agreement is reached (or not reached) regarding significance of the resource and appropriate mitigation measures are identified. When the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3

Preferred mitigation for archaeological resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. When tribal cultural resources are present and also cannot be avoided, appropriate and feasible mitigation will be determined through the tribal consultation process and incorporated into the overall data recovery program, where applicable or project specific mitigation measures incorporated into the project. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to distribution of a draft CEQA document and shall include the results of the tribal consultation process. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground disturbing activities whenever a tribal cultural resource or any archaeological site located on City property, or within the APE of a City project, would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of California Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions would be

outlined in the Mitigation Monitoring and Reporting Program included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4

Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation. Specific types of historical resource reports are required to document the methods (see Section III of the Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the Historical Resources Guidelines), which will be used by Environmental staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover), along with historical resource reports for archaeological sites and tribal cultural resources, containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects that result in a substantial collection of artifacts, which must address the management and research goals of the project, the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City of San Diego. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5

For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historical

deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project Mitigation Monitoring and Reporting Program. The disposition of human remains and burial- related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., AB 2641 and California Native American Graves Protection and Repatriation Act [NAGPRA]) and federal (i.e., federal NAGPRA) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collections (dated May 7, 1993) and, if federal funding is involved, Part 36, Section 79 of the Code of Federal Regulations. Additional information regarding curation is provided in Section II of the Historical Resources Guidelines.

7.1.4.2 Built Environment Resources

HIST-1b: Prior to issuance of any permit that could directly affect historic buildings, structures, districts, or objects, the City shall require the following steps be taken to determine: (1) the presence of built environment resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. The mitigation would be the same as of HIST-1a. The mitigation framework shall include an evaluation following the requirements in the Historical Resources Regulations and Guidelines as indicated below.

Prior to issuance of any permit that would directly or indirectly affect a building/structure in excess of 45 years of age, the City shall determine whether the affected building/structure meets any of the following criteria: (1) National Register-Listed or formally determined eligible, (2) California Register-Listed or formally determined eligible, (3) San Diego Register-Listed or formally determined eligible, or (4) meets the CEQA criteria for a historical resource. The evaluation of historic architectural resources would be based on criteria such as: age, location, context, association with an important person or event, uniqueness, or structural integrity as indicated in the Historical Resources Guidelines and Historic Resources Regulations (San Diego Municipal Code Sections 143.0201–143.0280).

Preferred mitigation for historic buildings or structures is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm to the resource shall be taken. Depending upon project impacts, measures can include, but are not limited to, the following:

a. Preparing a historic resource management plan.

b. Designing new construction that is compatible in size, scale, materials, color, and workmanship to the historic resource (such additions, whether portions of existing buildings or additions to historic districts, shall be clearly distinguishable from historic fabric).

c. Repairing damage according to the Secretary of the Interior's Standards for Rehabilitation.

d. Screening incompatible new construction from view through the use of berms, walls, and landscaping in keeping with the historic period and character of the resource.

Specific types of historical resource reports are required to document the methods (see Section III of the Historical Resources Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources. If potentially significant impacts to an identified historical resource are identified, these reports will also recommend appropriate mitigation to reduce the impacts to below a level of significance, where possible. If required, mitigation programs can also be included in the report.

7.1.5 Significance after Mitigation

Although implementation of the Plans would have the potential to result in significant direct and indirect impacts to historic built-environment, archaeological and tribal cultural resources, subsequent projects would be required to implement the Mitigation Framework identified in the MMRP prior to implementation. The Mitigation Framework requires site-specific environmental review, analysis of potential impacts, tribal consultation, and recommendations for mitigation to reduce significant impacts to below a level of significance.

7.2 Issue 2: Religious or Sacred Uses

Would the Master Plan Update and NRMP result in any impacts on existing religious or sacred uses within the potential impact area?

7.2.1 Impact Thresholds

Impact thresholds for religious or sacred land uses depend on whether sites associated with those activities are still currently and actively being used for such purposes. For example, would a future project impact a group’s ability to conduct their religious or sacred uses of a place? Would the resulting project generate audible, visual, or other intrusive elements to a place’s setting such that the feeling and association people have with that place are irretrievably harmed? Native American activities surrounding the study area would have to be carefully documented. Are Kumeyaay people still utilizing the area for sacred purposes? Is Cowles Mountain still being used to conduct solstice ceremonies? Is the rock art site a sacred place to the Kumeyaay? As with Issue 1 above, the significance of a resource associated with religious

or sacred uses would be determined in consultation with the local Kumeyaay tribal representative during the consultation process in accordance with the provisions outlined in Assembly Bill 52. Results of consultation would determine exactly how potential impacts would affect those qualities that contribute to the significance of a tribal cultural resource associated with religious or sacred uses, and ultimately how to avoid adversely affecting religious or sacred places.

7.2.2 Impact Analysis

Cultural use of the Park by the Kumeyaay people has been well documented, both historically and prehistorically and their story is told in a permanent exhibit in the Park Visitor's Center which provides a window into the significance of the area to the tribal community. As such, the potential for religious or sacred places to be impacted during future construction activities associated with implementation of the MPU is high, particularly considering the Park has been previously identified as an area of concern to the local Native American community, along with areas along waterways, where prehistoric resources are most likely to be found. The impact analysis for Issue 2 would be the same as outlined above for Issue 1 with the inclusion of tribal consultation in accordance with AB 52 to avoid potential impacts to religious or sacred places. Spirituality of place is often impossible to define because it transcends material remains, which archaeologists cannot recover during significance testing or data recovery programs. Therefore, significant impacts could occur during subsequent projects implemented in accordance with the Plans. The impacts would be significant and mitigation is required.

7.2.3 Significance of Impact

Impacts on known tribal cultural resources associated with religious or sacred places, and those not yet found and formally recorded, could occur anywhere within the Park. Grading of original in situ soils could also expose buried tribal cultural resources and features including sacred sites. Potential impacts on tribal cultural resources associated with subsequent projects implemented in accordance with the Plans would be considered significant **(Impact HIST-2)**.

7.2.4 Mitigation Framework

The Mitigation Framework outlined above under Issue 1 (**MM-HIST-1a)** would apply for this issue (religious or sacred lands) which includes the requirement for initiating tribal consultation in accordance with AB 52.

7.2.5 Significance after Mitigation

Future projects implemented in accordance with the Plans that would have the potential to result in impacts on sacred or religious places would be required to implement MM-HIST-1a. This Mitigation Framework which includes the City's regulatory requirements, along with federal and state regulations, combined with the policies of the General Plan and the MPU, as well as consultation with Native American groups early in the development review process will ensure

that potentially significant impacts to sacred or religious places have been reduced to below a level of significance at the program-level.

7.3 Issue 3: Human Remains

Would the MPU and NRMP result in the disturbance of any human remains, including those interred outside of formal cemeteries?

7.3.1 Impact Thresholds

Impacts on human remains may be unavoidable in certain circumstances, especially when resources are discovered during construction. Impact thresholds for human remains depends on whether sites or places containing human remains occur within the potential impact area of the project. Although no human remains have been found within the study area, documented cultural use of the Park by the Kumeyaay people, both historically and prehistorically provides the context for a relatively high potential to encounter human remains anywhere in the Park when subsequent projects are implemented in accordance with the MPU.

7.3.2 Impact Analysis

As stated previously, impacts on human remains may be unavoidable in certain circumstances, especially when remains are discovered during resource evaluation or construction-related activities. When a subsequent project is submitted in accordance with the MPU, especially in areas of high sensitivity, consultation in accordance with AB 52 would be initiated and the potential for impacting human remains would be considered during the consultation process. Additionally, subsequent projects would be subject to the City's environmental review process to ensure compliance with federal, state, and local criteria for the appropriate treatment of human remains. The impact analysis for Issue 3 would be the same as outlined above for Issue 1.

The discovery of human remains also demands that certain laws and protocols be followed before proceeding with any action that might disturb the remains further. If human remains are discovered, then the provisions set forth in California Public Resources Code Section 5097.98 and State Health and Safety Code Section 7050.5 would be implemented in consultation with the assigned Most Likely Descendant as identified by the NAHC.

While it is preferable in all cases to avoid impacting human remains, this is not always possible given the uncertainties of unanticipated discoveries during construction. In the vicinity of a known cemetery or a prehistoric archaeological site suspected to be over 1,500 years old, interments are possible. Background research could help identify possible burial locations related to historic era properties. Forensic dogs or other nondestructive ground-penetrating techniques could help identify subsurface anomalies that might be related to the presence of inhumations. Forensic dogs have also been useful on sites where scattered cremation remains are present. When data recovery of an archaeological site is required, all possible pre-excavation planning would be implemented to guard against the accidental discovery of human

remains. This would also apply to subsequent destruction of an archaeological site during project implementation because archaeological data recovery can never fully recover all the data from a site.

Potential impacts associated with the disturbance and/or discovery of human remains would be significant **(Impact HIST-3)**, and mitigation is required.

7.3.3 Significance of Impact

Impacts associated with the disturbance and/or discovery of human remains could occur anywhere within the Park. Grading of original in situ soils could also expose buried human remains. Potential impacts on human remains associated with construction of projects implemented in accordance with MPU recommendations would be considered **significant (Impact HIST-3)** and mitigation is required.

7.3.4 Mitigation Framework

MM-HIST-3: The Mitigation Framework outlined above under Issue 1 (**HIST-1a)** would apply for this issue (human remains) with the inclusion of tribal consultation in accordance with AB 52 early in the project review process.

7.3.5 Significance after Mitigation

Future projects implemented in accordance with the Plans that would have the potential to result in impacts associated with the discovery of human remains would be required to implement MM-HIST-1. This Mitigation Framework, which includes the City's regulatory requirements, along with federal and state regulations as set forth in California Public Resources Code Section 5097.98 and State Health and Safety Code Section 7050.5, combined with the policies of the General Plan and the MPU, as well as consultation with Native American groups early in the development review process will ensure that potentially significant impacts associated with the discovery of human remains have been reduced to below a level of significance at the program-level.

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CONFIDENTIAL ATTACHMENT

Not for public review