

Rim of the Valley Corridor Special Resource Study & Environmental Assessment

Errata

November 2015

The following errata provide factual corrections, additions, and revisions to the *Rim of the Valley Corridor Draft Special Resource Study and Environmental Assessment (draft study/EA)*, dated April 2015. Changes to the draft study/EA, and references to the page number where the change has occurred are provided. The reader must have access to a copy of the draft study/EA in order to fully understand the changes.

Additional copies of this document and the April 2015 draft study/EA can be downloaded from the internet at www.nps.gov/pwro/rimofthevalley. Printed copies are also available on request from the address below.

Attn: Rim of the Valley Corridor Special Resource Study
National Park Service
333 Bush Street, Suite 500
San Francisco, CA 94104

INTRODUCTION

The following document includes errata, organized by chapter, that correct and add factual information to the April 2015 *Rim of the Valley Corridor Draft Special Resource Study and Environmental Assessment* (draft study/EA). Attach this document to the draft study/EA to comprise a full and complete record of the environmental impact analysis. The NPS did not identify any changes that would result in the determination of significant impacts. A Finding of No Significant Impact was completed for the study in Fall 2015.

Underlined text is new information added to the special resource study/EA, while text struck out is deleted.

Executive Summary

Page xxiv, left column, 1st paragraph after “Concept”, 2nd sentence, revised as follows:

Existing parks such as Griffith Park, Hansen Dam, Sepulveda basin, Los Encinos State Historic Park, Debs Park, El Pueblo de Los Angeles Historical Monument, and Los Angeles State Historic Park would serve as major portals into the Rim of the Valley area.

Chapter 1: Introduction

Page 18, right column, 2nd paragraph, heading, revised as follows:

County of Los Angeles Department of Parks and Recreation - Santa Susana Mountains Trail Master Plan (~~underway~~2015)

The *Santa Susana Mountains Trail Master Plan* ~~will~~ promotes and encourages safe and enjoyable recreation trail opportunities for hikers, mountain bikers and equestrians. The plan ~~will~~ identifies connections to existing local, state, regional and national trail systems, as well as makes connections to existing trailheads and points of interest. This plan includes the Rim of the Valley Trail in the Los Angeles County portion of the Santa Susana Mountains and is an proposed amendment to the Los Angeles County General Plan.

Chapter 2: Resource Description

Page 28 through 44, stylistic corrections as follows:

Capitalize “formation” when part of a name (e.g. Topanga Canyon Formation);

Capitalize “complex” when part of a name (e.g. Conejo Volcanic Complex);

Lowercase “late” and “early” when referring to geologic periods (e.g. late Paleocene);

Page 31, Figure 2-2 Geology:

This figure has been replaced with the California Geologic Map for the study area, originally created in 1977 and updated in 2010. California Geological Survey, Geologic Data Map No. 2, Compilation and Interpretation by: Charles W. Jennings (1977), Updated version by: Carlos Gutierrez, William Bryant, George Saucedo, and Chris Wills Graphics by: Milind Patel, Ellen Sander, Jim Thompson, Barbara Wanish and Milton Fonseca. Available online at:

http://www.conservation.ca.gov/cgs/cgs_history/Pages/2010_geologicmap.aspx

Page 34, left column, 2nd paragraph, last sentence, revised as follows:

The formations vary from deep to shallow marine, to terrestrial stream deposits or alluvium, due to changes in ocean levels and the location of the coast over time (~~Figure 2-2: Geology~~).

California Geological Survey, Geologic Data Map No. 2

SYMBOL EXPLANATION

Contact between geologic units - approximately located



Fault traces - solid where well located, dashed where approximately located or inferred, dotted where concealed, and queried where continuation or existence is uncertain. Ball and bar on downthrown side (relative or apparent). Arrows indicate direction of lateral movement (relative or apparent)



Thrust fault (barbs on upper plate)



Regional strike and dip of stratified rocks



Regional strike and dip of stratified rocks (overturned)



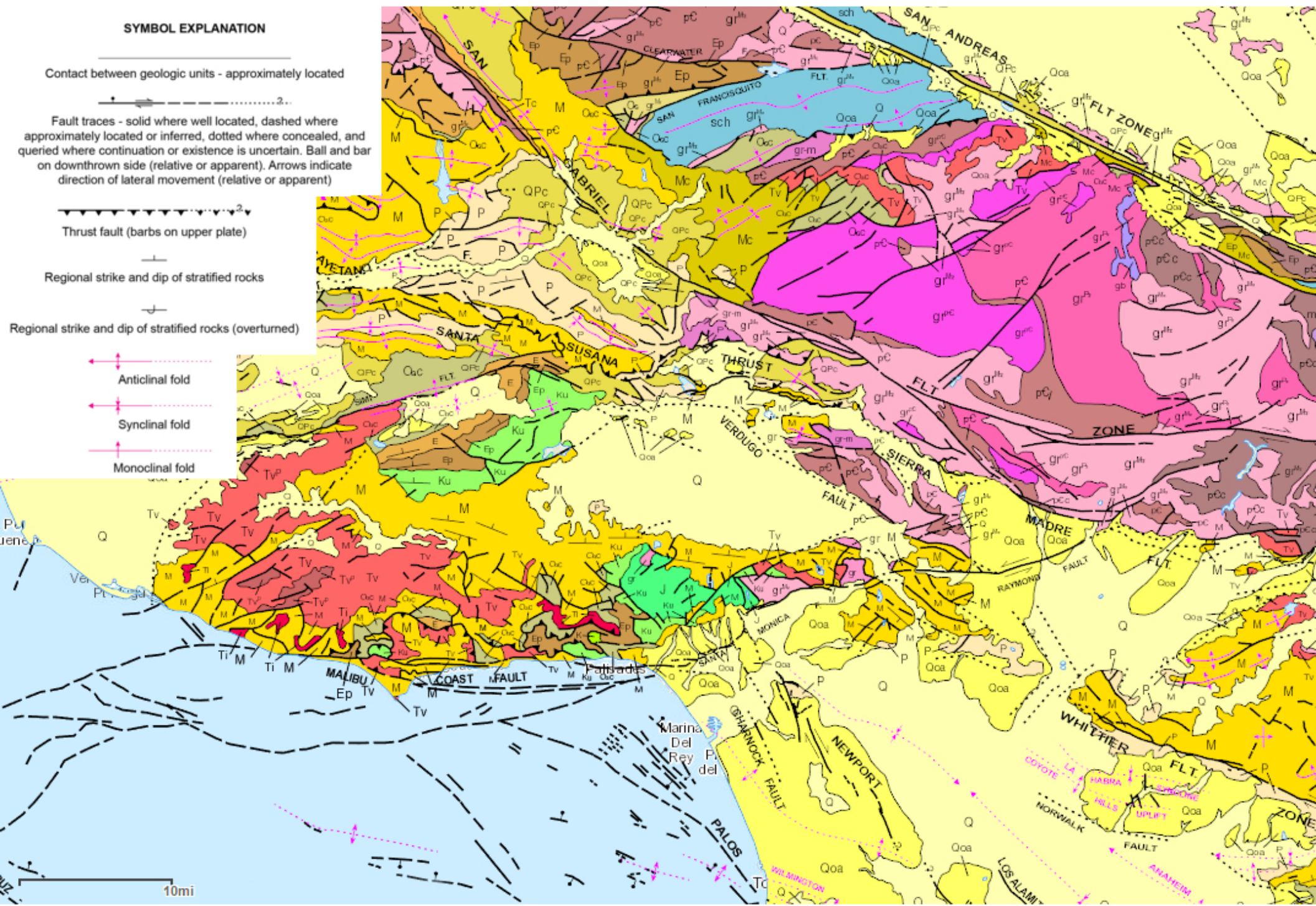
Anticlinal fold



Synclinal fold



Monoclinical fold



Compilation and Interpretation by: Charles W. Jennings
(1977)Updated version by: Carlos Gutierrez, William Bryant,
George Saucedo, and Chris WillsGraphics by: Milind Patel, Ellen Sander, Jim Thompson,
Barbara Wanish and Milton Fonseca**DESCRIPTION OF MAP UNITS****QUATERNARY DEPOSITS**

Qs	Extensive marine and nonmarine sand deposits, generally near the coast or desert playas
Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated
Qls	Selected large landslides
Qg	Glacial till and moraines. Found at high elevations mostly in the Sierra Nevada and Klamath Mountains
Qoa	Older alluvium, lake, playa, and terrace deposits
QPc	Pleistocene and/or Pliocene sandstone, shale, and gravels deposits; mostly loosely consolidated

QUATERNARY VOLCANIC ROCKS

Qrv	Recent (Holocene) volcanic flow rocks; minor pyroclastic deposits
Qrv ^p	Recent (Holocene) pyroclastic and volcanic mudflow deposits
Qv	Quaternary volcanic flow rocks; minor pyroclastic deposits
Qv ^p	Quaternary pyroclastic and volcanic mudflow deposits

TERTIARY SEDIMENTARY ROCKS

Tc	Undivided Tertiary nonmarine sandstone, shale, conglomerate, breccia, and ancient lake deposits
P	Pliocene marine sandstone, siltstone, shale, and conglomerate; mostly moderately consolidated
M	Miocene marine sandstone, shale, siltstone, conglomerate, and breccia; moderately to well consolidated
Mc	Miocene nonmarine sandstone, shale, conglomerate, and conglomerate; moderately to well consolidated
O _o	Oligocene marine sandstone, shale, and conglomerate; mostly well consolidated
O _c	Oligocene nonmarine sandstone, shale, and conglomerate; mostly well consolidated
E	Eocene marine shale, sandstone, conglomerate, and minor limestone; mostly well consolidated
Ec	Eocene nonmarine sandstone, shale, and conglomerate; moderately to well consolidated
Ep	Paleocene marine sandstone, shale, and conglomerate; mostly well consolidated

TERTIARY VOLCANIC ROCKS

Tv	Tertiary volcanic flow rocks; minor pyroclastic deposits
Tv ^p	Tertiary pyroclastic and volcanic mudflow deposits.
Ti	Tertiary intrusive rocks; mostly shallow (hypabyssal) plugs and dikes

TERTIARY PLUTONIC ROCKS

gr ^c	Cenozoic (Tertiary) granitic rocks - quartz monzonite, quartz latite, and minor monzonite, granodiorite, and granite; found in the Kingston, Panamint, Amargosa, and Greenwater Ranges in southeastern California
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MESOZOIC SEDIMENTARY AND METASEDIMENTARY ROCKS

TK	Sandstone, shale, and minor conglomerate in coastal belt of northwestern California. Previously considered Cretaceous, but now known to contain early Tertiary microfossils in places
K	Undivided Cretaceous sandstone, shale, and conglomerate; minor nonmarine rocks in Peninsular Ranges
Ku	Upper Cretaceous sandstone, shale, and conglomerate
Kl	Lower Cretaceous sandstone, shale, and conglomerate
KJf	Franciscan Complex: Cretaceous and Jurassic sandstone with smaller amounts of shale, chert, limestone, and conglomerate. Includes Franciscan melange, except where separated
KJf _m	Melange of fragmented and sheared Franciscan Complex rocks
KJf _s	Blueschist and semi-schist of Franciscan Complex
J	Jurassic shale and sandstone; minor conglomerate, chert, slate, limestone, and pyroclastic rocks
Tr	Triassic shale, conglomerate, limestone, dolomite, sandstone, slate, hornfels, and quartzite; minor pyroclastic rocks
sch	Schists of various types; mostly Paleozoic or Mesozoic age; some Precambrian
ls	Limestone, dolomite, and marble whose age is uncertain but probably Paleozoic or Mesozoic

MESOZOIC MIXED ROCKS

gr-m	Mesozoic to Precambrian granitic and metamorphic rocks; mostly gneiss and other metamorphic rocks injected by granitic rocks.
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MESOZOIC METAVOLCANIC ROCKS

M ₂ v	Undivided Mesozoic volcanic and metavolcanic rocks. Andesite and rhyolite flow rocks, greenstone, volcanic breccia and other pyroclastic rocks; in part strongly metamorphosed. Includes volcanic rocks of Franciscan Complex: basaltic pillow lava, diabase, greenstone, and minor pyroclastic rocks
mv	Undivided pre-Cenozoic metavolcanic rocks. Includes latite, dacite, tuff, and greenstone; commonly schistose

MESOZOIC PLUTONIC ROCKS

gr ^h	Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite
um	Ultramafic rocks, mostly serpentine. Minor peridotite, gabbro, and diabase; chiefly Mesozoic
gb	Gabbro and dark dioritic rocks; chiefly Mesozoic
gr	Undated granitic rocks

PALEOZOIC SEDIMENTARY AND METASEDIMENTARY ROCKS

P _z	Undivided Paleozoic metasedimentary rocks. Includes slate, sandstone, shale, chert, conglomerate, limestone, dolomite, marble, phyllite, schist, hornfels, and quartzite
Pm	Permian shale, conglomerate, limestone, dolomite, sandstone, slate, hornfels, and quartzite; minor pyroclastic rocks
C	Carboniferous shale, sandstone, conglomerate, limestone, dolomite, chert, hornfels, marble, and quartzite; in part pyroclastic rocks
D	Devonian limestone, dolomite, sandstone, and shale; in part tuffaceous
SO	Silurian to Ordovician sandstone, shale, conglomerate, chert, slate, quartzite, hornfels, marble, dolomite, and phyllite; some greenstone
c	Cambrian sandstone, shale, limestone, dolomite, chert, quartzite, and phyllite; includes some rocks that are possibly Precambrian

PALEOZOIC MIXED ROCKS

m	Undivided pre-Cenozoic metasedimentary and metavolcanic rocks of great variety. Mostly slate, quartzite, hornfels, chert, phyllite, mylonite, schist, gneiss, and minor marble
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PALEOZOIC METAVOLCANIC ROCKS

P ₂ v	Undivided Paleozoic metavolcanic rocks. Mostly flows, breccia, and tuff; includes greenstone, diabase, and pillow lavas; minor interbedded sedimentary rocks
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PALEOZOIC PLUTONIC ROCKS

gr ^h	Paleozoic and Permo-Triassic granitic rocks in the San Gabriel and Klamath Mountains
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PRECAMBRIAN ROCKS

pC	Conglomerate, shale, sandstone, limestone, dolomite, marble, gneiss, hornfels, and quartzite; may be Paleozoic in part
pCc	Complex of Pre-cambrian igneous and metamorphic rocks. Mostly gneiss and schist intruded by igneous rocks; may be Mesozoic in part
gr ^c	Precambrian granite, syenite, anorthosite, and gabbroic rocks in the San Gabriel Mountains; also various Precambrian plutonic rocks elsewhere in southeastern California

Page 36, right column, 3rd paragraph, 4th sentence revised as follows:

Cenozoic beds, including the fossiliferous and terrestrial Mint and Tick Canyon Formations, are located only along the range's western and northern margins.

Page 37, left column, 2nd paragraph, revised as follows:

In the southwest corner of the mountains, the Tujunga Terrane, names for rocks exposed in lower Tujunga Canyon, contains basement rocks such as gneisses, late quartz diorite, and granodiorite-quartz, as well as metasedimentary rocks associated with the pre-Triassic Placerita Formation.

Page 39, left column, 2nd paragraph, 1st sentence, revised as follows:

Generally, the Rim of the Valley Corridor study area is defined on the south by the Santa Monica-Hollywood-Raymond-Sierra Madre ~~F~~fault ~~Z~~zones.

Page 39, left column, 4th paragraph, 2nd sentence, revised as follows:Activity on this fault is very ~~r~~Recent (Norris and Webb 1990).

Page 39, left column, last paragraph, 1st sentence, revised as follows:

In addition to these mapped faults, the region contains blind thrust faults. ~~Blind thrust faults are~~ shallow-dipping reverse faults that lie entirely below the earth's surface.

Page 39, last sentence of left column continuing into 2nd column, revised as follows:

Although many of the faults ~~remain unknown~~ are poorly constrained and understood, two regional examples are the Puente Hills Blind Thrust, which runs underneath downtown Los Angeles and was the source of the 1987 Whittier Narrows earthquake, and the Northridge Thrust Fault, which ruptured in the 1994 Northridge earthquake.

Page 41, left column, 4th paragraph, revised as follows:

Native Americans used seeps of asphalt that oozed to the surface on the north side of the Santa Susana Mountains from Pico Canyon to Placerita Canyon. The oldest producing oil field in California is in Pico Canyon near Newhall. Oil was collected here as early as 1850 (Norris and Webb 1990). In the 1920s, Los Angeles County was the world's fifth largest oil producer. Presently, oil production is less prevalent than it was almost a century ago, although ~~some~~ oil and natural gas wells are still in production, primarily in the Santa Susana Mountains. While many older mines and oil wells have been abandoned, recent oil price increases have prompted drilling of new wells and reopening of some idle wells (California Department of Conservation 2009).

In 2014, the study area contained 15 active oil and gas fields, as designated by the California Division of Oil, Gas and Geothermal Resources. However, not all of the fields have operating wells in the study area (Department of Conservation 2015a), see Table 2-2A: Oil and Gas Production for 2014 and Figure 2-2A: Oil Fields and Active Wells. In 2014, active fields produced approximately 1,726,000 barrels of oil and 1,136,000 Mcf² of gas in 2014 (Department of Conservation 2015b). In addition, natural gas is stored subsurface in gaps in the rock layers where oil was previously extracted. The 3,600 acre Aliso Canyon Storage Facility, north of Porter Ranch, is one of the largest of these storage facilities in the country. Several oil and gas companies own subsurface mineral rights in the study area, primarily in the Santa Susana Mountains.

Table 2-2A: Oil and Gas Production for 2014

<u>Oil Field</u>	<u>Location</u>	<u>Field Status</u>	<u>Active Wells in Study Area</u>	<u>Oil (barrels)</u>	<u>Net Gas withdrawn (thousand cubic feet)</u>
<u>Los Angeles City</u>	<u>Los Angeles River</u>	<u>Active</u>	<u>No</u>	<u>1,216</u>	<u>0</u>
<u>Torrey Canyon</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>118,353</u>	<u>171,660</u>
<u>Oakridge</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>147,570</u>	<u>89,147</u>
<u>Santa Susana</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>15,871</u>	<u>102,575</u>
<u>Tapo Canyon, South</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>9,283</u>	<u>1,675</u>
<u>Big Mountain</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>28,992</u>	<u>115,191</u>
<u>Oak Park</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>17,116</u>	<u>6,088</u>
<u>Simi</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>0</u>	<u>0</u>
<u>Tapo, North</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>4,580</u>	<u>0</u>
<u>Placerita</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>898,754</u>	<u>0</u>
<u>Newhall-Potrero</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>113,963</u>	<u>189,731</u>
<u>Newhall</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>2,676</u>	<u>0</u>
<u>Cascade</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>132,485</u>	<u>193,977</u>
<u>Oat Mountain</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>83,680</u>	<u>84,921</u>
<u>Aliso Canyon</u>	<u>Santa Susana Mtns</u>	<u>Active</u>	<u>Yes</u>	<u>151,300</u>	<u>180,564</u>
<u>Total</u>				<u>1,725,839</u>	<u>1,135,529</u>
<u>Source:</u> Department of Conservation 2015b					

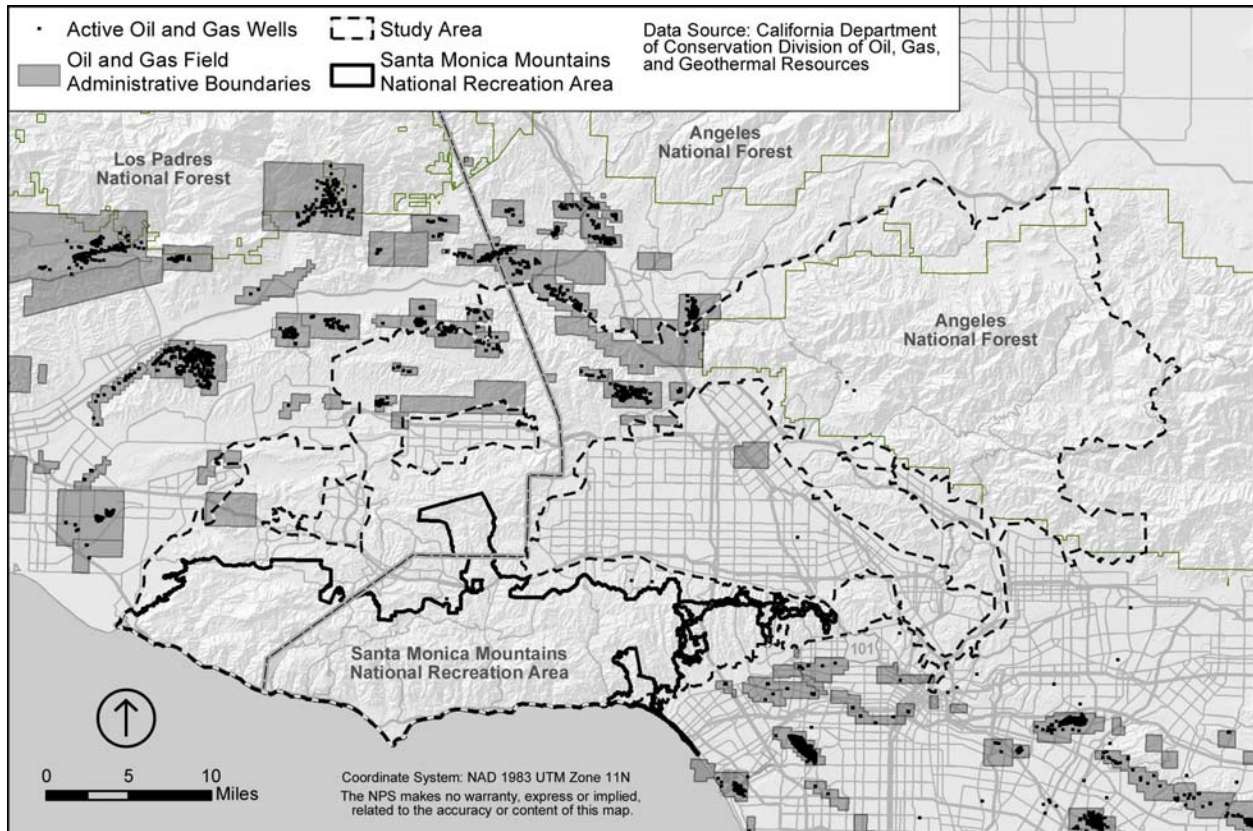


Figure 2-2A: Oil Fields and Active Wells

Page 42, 2nd column, 3rd paragraph, 2nd sentence, revised as follows:

In the Simi Hills outside SMMNRA, the Las Virgenes Sandstone formation contains some logs, clams, snails, and burrows (Parker 1983a and 1938b, Saul 1983, Squires 1997).

Page 44, left column, 2nd paragraph, 3rd sentence, revised as follows:

The Mint Canyon Formation includes vertebrate fossils such as Merychippus, Hipparion, Alticamelus, Merychippus, Hipparion, Alticamelus, rhinoceroses, antelopes, and carnivores (Mount 1971).

Page 44, left column, 4th paragraph, revised as follows:

The study area contains portions of ~~four~~ five major watersheds: the Santa Clara River watershed, the Calleguas Creek watershed, the Santa Monica Bay watershed, and the Los Angeles River watershed, and small portions of the San Gabriel River Watershed. (Figure 2-3: Major Watersheds). The Rio Hondo, a tributary of the San Gabriel River, branches from the river just below Santa Fe Dam to the east of the study area and flows westward to the Whittier Narrows area where portions of the flow from the upper San Gabriel River are conveyed to the Rio Hondo, which then joins the Los Angeles River. For the purposes of this study, the Rio Hondo is included as part of the description of the Los Angeles River Watershed (LADPW 2006b).

Page 48, left column, 1st paragraph, revised as follows:

The Rio Hondo has now been engineered as a permanent tributary to the Los Angeles River for flood control, while continuing to provide a hydrological connection between the two rivers (LADPW 2006a; California Coastal Conservancy 2001).

Page 49, right column, 2nd paragraph, revised as follows:

The Metropolitan Water District of Southern California (MWD), a consortium of 26 cities and water districts, functions as a water wholesaler that bridges the gap between local water supplies and demand. MWD receives water via the Colorado River Aqueduct and the State Water Project's California Aqueduct, the latter of which conveys water from northern California. As part of their imported water infrastructure, MWD operates eight water supply pipelines in and around the study area, and the Joseph P. Jensen Water Treatment Plant in the northern San Fernando Valley.

Page 61, left column, 3rd paragraph, revised as follows:

Vernal pools are a distinctive type of seasonal freshwater wetland which are extremely rare in the area. ~~The nearest verified vernal pools are just outside the study area on the northern rim of the Upper Santa Clara River Valley (at Cruzan Mesa and Plum Canyon). However, there are likely unrecognized ephemeral pools within the study area in suitable soil types. For example, there is at least one small documented seasonal pond with typical vernal pool characteristics in the Golden Valley Ranch portion of the upper Placerita Sand Canyon watershed on the south side of the Upper Santa Clara River Valley. This small pool is surrounded by coastal sage scrub, with a band of native needlegrass and melic grass (*Melica* spp.) on its fringes. The Golden Valley pool supports vernal pool fairy shrimp, Riverside fairy shrimp and western spadefoot toad (Juhasz 2011, LADRP 2012a). They are notable and highly valued as habitat for a number of rare and protected species, including vernal pool fairy shrimp, Riverside fairy shrimp, western spadefoot toad, and California Orcutt grass. Vernal pools have been documented in the study area at Tierra Rejada, Santa Clarita (end of Via Princessa), and Golden Valley Ranch. It is likely that there are additional unrecognized or undocumented vernal pools in the study area in suitable soil types and terrain (Juhasz 2011, LADRP 2012a, USFWS 2011e).~~

Page 76, Figure 2-11 title, revised as follows:

Figure 2-11: ~~Ethnographic Native American Territories~~ – Linguistics: Regions in which the languages of California were spoken prior to European contact.

Page 76, left column, last paragraph, last sentence, revised as follows:

The study area lies within portions of the traditional territory of the Chumash, the western Tongva/Gabrielino, the Tataviam, and the Serrano as indicated in *Figure 2-11: ~~Ethnographic Native American Territories~~ Linguistics: Regions in which the languages of California were spoken prior to European contact.* (Heizer and Sturtevant 1981, USFS 1986, King and Parsons 2010).

Page 77, left column, 3rd paragraph, 4th sentence, revised as follows:

At the time of contact, the Tataviam population was estimated at probably less than 1,000 people by King and Blackburn (1978), while Johnson (2006) estimated approximately 3,000 people. However, these numbers may be low as Mission San Fernando Rey de España and Mission San Gabriel records and other historical documents often failed to distinguish the Tataviam as an individual group (Gulley 2015).

Page 77, the document incorporates the following information provided by the Fernandeno Tataviam Band of Mission Indians by reference. The information is to be inserted in the left column, after the 3rd paragraph:

Fernandeno Tataviam Band of Mission Indians: Ethnographic Excerpt

The information presented in this ethnography is based off the interpretations of the present-day enrolled citizens, elders, and the tribal leadership of the Fernandeno Tataviam Band of Mission Indians constructed off data gathered by anthropologists, archaeologists, and linguists.

Fernandeno: Regional Terms

"Fernandeno" (or "Fernandino") is a Spanish regional term representing the people of four diverse territories enslaved during the Mission San Fernando period. J.P. Harrington archives Fernandeno Takic terms, one of the many languages spoken among the Indians of Mission San Fernando, for the Four related, yet culturally diverse, territories prior to the Mission period. Using Pasekivitam, the people of the villages of San Fernando, the Mission, and the basin of the valley, as a central point of reference would position Tataviam as the people of the region north of Pasekivitam, Simivitam as the western people inhabiting Simi Valley in territories south of Tataviam, and the Vanyume as the most eastern groups encompassing Antelope Valley (Harrington 1916 Reel # 106). The Tataviam, Pasekivitam, and Vanyume maintained slightly distinct Takic languages, while the people of Simi Valley and coastal areas were members of the Chumashan language. There are several alternative names that represent ethnic (tribal) perspectives For the words recorded by both the Spanish priests and Harrington, but the general rule stands with Four important Takic suffixes: -vit, -pet, -bit, or - bet refer to one person or lineage, -am is plural and can convert one person (-vit) to multiple people (-vitam), and -nga is a locative reference. Language types and marital patterns did not determine political or national organization among the pre-mission Fernandenos. They exercised power over territory, self-government, a judicial system, and upheld a network of social, economic and political ties to other lineages over an extensive area. The lineages continued as the major form of social and political organization through the Mission period, and are the primary form of indigenous organization among the present-day descendants of the Fernandenos.

Fernandeno and Gabrieleno: The Difference

Although the Fernandeno and Gabrieleno are linguistically related, they represent two geographical areas that shall not be confused, or interchanged, with one another. Sivavitam, the people of Los Angeles Basin, are known as the Gabrieleños during the Mission period. The people of Mission San Gabriel, Gabrieleños, referred to the Fernandenos as Pavasikwar, which exemplifies the separate native identities associated with the two post-Mission era names. Additionally, the Fernandenos referred to the Gabrieleños inhabiting areas further east of the Los Angeles Basin as Komivitam, or the people in the Eastern portion of San Gabriel Valley, which further established a line between the two mission-associated regional terminologies.

Page 79, left photo caption, 2nd sentence, revised as follows:

They include the only depictions in Chumash art style of human figures in profile and of mounted horsemen.

Page 79, right photo caption, 2nd sentence, revised as follows:

Burro Flats lies within the traditional territory of the Chumash and Tataviam.

Page 79, left column, 1st paragraph, 5th sentence, revised as follows:

Located in the San Gabriel Mountains foothills, just south of the Angeles National Forest, the Tataviam village of Tujunga covers a larger area, both above and below the Hansen Dam and has potential for scientific discovery (CA-LAN-167).

Page 79, left column, last paragraph, 3rd sentence. Revised as follows:

The Santa Susana Pass is the junction between the Simi Hills and the Santa Susana Mountains and served as a transition zone between the territories of Chumash, Gabrieleño/Tongva, and the ~~Tataviam~~ Tataviam (CSP 2005).

Page 79, right column, 1st paragraph, 5th sentence, revised as follows:

A village site uncovered in the park is thought to be the Tongva/Tataviam village of Momonga (CA-LAN-449) (Mealy and Brodie 2005).

Page 80, left column, 1st paragraph, revised as follows:

“ . . . outcrop. The site appears to have included at least some astronomical significance, since it is aligned with the solstice. Burro Flats lies within the traditional territory of the Chumash and Tataviam, whose interest in astronomical phenomena was observed and recorded by ethnographer J.P. Harrington. The site was also noted for its astronomical significance in E.C. Krupp’s *Echoes of the Ancient Skies: The Astronomy of Lost Civilizations*. The coincidence of this prehistoric astronomical site with the location of NASA’s Santa Susana Field Laboratory test areas which helped to develop the earliest manned and unmanned exploration of deep space is notable and should be the subject of both preservation and interpretive efforts. Burro Flats was listed in the National Register of Historic Places in 1976.

The Burro Flats Painted Cave area has been recognized as an Indian Sacred Site under Executive Order 13007 by the Santa Ynez Band of Chumash Indians for its importance to understanding and appreciation of the site’s importance for religious practices of the Chumash and other neighboring tribes. The Native American Heritage Commission has also identified the entire Santa Susana Field Laboratory property as a sacred site at the request of the Santa Ynez Band of Chumash Indians.

Page 80, left column, 2nd paragraph, 1st sentence, revised as follows:

Although just outside of the study area boundary, it should be noted that at the northern base of the Santa Susana Mountains, a Tataviam site known as Bowers Cave near Val Verde reportedly yielded a diverse assemblage of American Indian religious and ceremonial artifacts following its discovery in 1884 (City of Santa Clarita 2011).

Page 80, left column, 2nd paragraph, 2nd sentence, revised as follows:

Also of note are ~~Tataviam~~ Tataviam-rock art examples in Vasquez Rocks County Park, located just outside of the study area near Soledad basin.

Page 84, left column, 3rd paragraph, add after last sentence:

Supplied by water from the Los Angeles River and zanjas, the production and trade of grapes and wine was also an important industry during the Mexican Period.

Page 85, left photo caption, 1st sentence, revised as follows:

The site of Rancho Los Encinos includes a natural spring that provided a year-round source of water for the ancient village of Siutcanga, home to the Tongva and Tataviam people.

Page 86, right column, 1st paragraph, add new paragraph after last sentence:

The production of grapes and wine continued to be an important component of the agricultural economy until vines were eventually weakened and killed by Pierce's disease beginning in the early 1880s. Vineyards were then replaced with other types of orchard trees such as citrus. Today, 150 year-old vines are still present at the Avila Adobe at El Pueblo de Los Angeles Virbila 2015).

Page 97, right column, 3rd paragraph, revised as follows:

In 1947, North American Aviation (later Rocketdyne) selected a site in the Simi Hills for construction of large rocket-testing stands. The first test stand was completed in 1949. It was located within a natural, bowl-shaped depression of the rocky topography of the Simi Hills in what was referred to as Area I. Company histories describe "Santa Susana's Bowl Area" (also known as Area I) as the first liquid-fuel, high-thrust rocket engine test facility in the continental United States with multiple, permanent test stands. It would be the precursor of the more extensive complex of test facilities built by the Air Force in a separate area of the Santa Susana Field Laboratory site (Area II).

Development of the Air Force's next generation of intermediate and long-range guided missiles in Area II (the Thor and the Atlas) dated from 1954 and was centered in Southern California, with North American Aviation chosen to be the major contractor. To handle its additional responsibilities, North American Aviation established Rocketdyne as a separate company division devoted entirely to the missile program. A new complex would include four clusters of three Vertical Test Stands—twelve in all—each with accompanying blockhouses for observation and a workshop facility, or Component Test Laboratory, as well as associated utilities. These sites were given the sequential names Alfa, Bravo, Coca, and Delta. All of the new facilities would be operated under contract with the Air Force.

Page 98, left column, 2nd paragraph, revised as follows:

By 1969, NASA had begun planning on the Space Shuttle. In 1971, it awarded Rocketdyne the contract to develop the Space Shuttle Main Engine. The engine was developed and constructed at Rocketdyne's Canoga Park plant (AFP 56) while static fire testing was conducted at the SSFL on specially-modified vertical test stands at the Coca site. Static fire testing would continue at SSFL throughout the 1980s and 1990s in support of NASA's space program, but during the following decade the test facilities at SSFL were gradually deactivated. The last engine tests were conducted at the Alfa site in 2006.

Page 98, right column, 2nd paragraph, last sentence revised as follows:

In 1959, the SRE may have earned a more dubious distinction by becoming the first civilian reactor to suffer a serious accident when more than a third of its fuel rods overheated and melted through their protective cladding, releasing a plume of radioactive gas into the atmosphere (Lochbaum 2006). In 1959, the SRE experienced a core damage accident as a result of coolant flow blockage within the reactor. There has been considerable controversy and concern in surrounding communities about the release of radioactive gases as a result of the accident. The Department of Energy has published recent independent studies on its website that confirmed Boeing's initial findings that only small quantities of noble gases were released into the environment. The Sodium Reactor Experiment was shut down in 1964, and the building which housed the reactor was demolished in 1999 (U.S. Department of Energy 2015).

Page 115, left column, 1st bullet, revised as follows:

The Resource Conservation District (RCD) of the Santa Monica Mountains offers programs for grades K-6 on Chumash cultural and natural history at Topanga State Park, and with funding through San Fernando Valley Audubon Society, co-administers science programming for grades 4-6 on freshwater lake habitats at Sepulveda Basin Wildlife Reserve and Malibu Lagoon.

Page 115, left column, 3rd bullet, revised as follows:

~~The Children's Nature Institute offers a regular schedule of Outreach Field Discovery trips to SMMNRA.~~

Chapter 3: New Park Unit Criteria Analysis

Page 140, right column, 2nd paragraph, 3rd sentence, revised as follows:

Of particular note is the area's Chumash style rock art, considered to be some of the most interesting and spectacular in the United States (Heizer and Sturtevant 1981).

Page 141, photo caption, revised as follows:

One of the largest Native American Indian populations in the world, representing virtually every tribe, lives within easy access of the study area. Satwiwa Native American Culture Center in SMMNRA serves as a destination for a broad range of American Indian groups from across the nation. Satwiwa is a learning center for all people to share traditional and contemporary indigenous lifeways. Shown is late Chumash leader, Charlie Cooke, with a child. Photo: NPS.

Page 180, left column, 2nd paragraph, 2nd sentence, revised as follows:

As described in *Chapter 2: Resource Description*, the Santa Susana Mountains area is largely unsurveyed for archeological resources but served as a transition zone between the territories of Chumash, Gabrieleño/ Tongva, and the ~~Tatavium~~ Tataviam.

Page 185, right column, after the first paragraph, revised as follows:

Within this category of land use are also botanical gardens and cemeteries. While not traditionally considered open space, larger cemeteries and memorial parks are typically open, landscaped areas. Although typically in under private management, there are some examples of cemeteries being used by communities for recreational uses such as walking on dedicated pathways, as long as such use is consistent with cemetery rules and guidelines.

The largest cemetery within the study area is the 444-acre Forest Lawn memorial-park in the Hollywood Hills. This memorial-park is a dedicated cemetery that is largely developed and under continued operation. State law requires that the property must be held, occupied, and used exclusively for a cemetery and for cemetery purposes and cemetery development.

Page 185, right column, 3rd paragraph, last sentence, revised as follows:

Some gravel mining occurs within the Upper Santa Clara River area at the base of the San Gabriel Mountains, in the Conejo Mountain area, and in the Santa Susana Mountains.

Page 185, right column, after last paragraph, revised as follows:

Water and power transmission facilities include sixteen (16) Southern California Edison 66 kV substations, two 220/66 kV substations, one 500/220 kV substation, and fifty (50) distribution circuits. The study area also contains designated utility corridors to allow for future transmission infrastructure to be built out in certain areas.

A high speed rail corridor near the study area (from Los Angeles to Palmdale) has been identified in the 2005 Final Program Environmental Impact Report/Environmental Impact Statements for the Proposed California High Speed Train System (2005). All of the proposed Palmdale to Burbank and Burbank to Los Angeles high-speed rail alternatives traverse the study area.

Chapter 4: Boundary Adjustment Evaluation

Page 211, left column, 2nd bullet, 1st sentence, revised as follows:

The north side of the Santa Susana Mountains is also influenced by a convergence of montane and desert influences that create rare and unusual plant communities, including a pure stand of blue elderberry and some ancient relict plant communities (e.g. bigcone Douglas-fir and canyon live oak).

Chapter 5: Alternatives

Page 249, left column, 4th paragraph, 2nd sentence, revised as follows:

Existing parks such as Griffith Park, Hansen Dam, Sepulveda basin, Los Encinos State Historic Park, Debs Park, El Pueblo de Los Angeles Historical Monument, and Los Angeles State Historic Park would serve as major portals into the Rim of the Valley area.

Chapter 6: Environmental Consequences

Page 276, right column, 1st paragraph, after last bullet, revised to add:

- Scholl Canyon Landfill Expansion
- Proposed California High Speed Rail
- Various development proposals considered by local communities (e.g. Newhall Ranch, Canyon Hills, Upper Browns Canyon/Hidden Creek Estates, Canyon Park Homes, Big Tujunga Canyon.

Page 279, left column, last paragraph, “Native American Indian Sacred Sites,” revised as follows:

To comply with the American Indian Religious Freedom Act, federal agencies must consider the effects of their actions on American Indian traditional religious practices. ~~Based on analysis, there are no known traditional or religious use areas within the study area. In addition, there are no known Indian sacred sites that would require compliance with Executive Order 13007: Indian Sacred Sites (61 FR 26771, 42 USC 1996).~~ During review of the draft study report, the Santa Ynez Band of Chumash Indians notified the National Park Service that the tribe designated the NASA portion of the Santa Susana Field Laboratory site that contains the Burro Flats Painted Cave (National Register of Historic Places #76000539) as an Indian sacred site, in accordance with Executive Order (EO) 13007 (Federal Register 1996) and that the Native American Heritage Commission (NAHC) designated the entire 2,000-acre Santa Susana Field Laboratory property as an Indian Sacred Site at the request of the Santa Ynez Band of Indians. The definition of an Indian “Sacred Site” according to the EO is: Any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site” (Federal Register 1996).

This topic has been dismissed because inclusion of the Santa Susana Field Laboratory site within the boundary of Santa Monica Mountains National Recreation Area would not have any

adverse effects on this site. Any potential effects would be beneficial as the selected alternative specifically states that “Many sites within the study area are important to Native American tribes and other organizations. Tribes, organizations and others could continue to work with public and private landowners and managers to protect sacred sites and archeological resources, and to obtain access or ownership of important sites for ceremonial, interpretive, and educational purposes.”

Page 289, right column, 3rd paragraph, 8th sentence, revised as follows:

Replace use of “E. coli” with “fecal coliform” and add the following sentence: The amended water quality objective now utilizes E. coli rather than fecal coliform as an indicator when assessing protection of the REC-1 beneficial use and states the single sample E. coli density shall not exceed 235/100 ml or 126/ 100 ml as a geometric mean of multiple samples.

Page 290, right column, 1st paragraph, revised as follows:

Several of these pollutants, including metals, pesticides and other organics can bioaccumulate in organisms, causing more harm to animals at the top of the food chain than to those lower in the food chain (LADPW 2006a).

Page 291, right column, 4th paragraph, revised as follows:

In addition, the Greater Los Angeles County Region Integrated Regional Water Management Plan provides funding for projects that meet its goals, including optimizing local water resources to reduce reliance on imported water, improving the quality of runoff to meet beneficial use requirements for receiving water bodies, increasing the number of wetlands, aquatic buffers and wildlife linkages, increasing watershed friendly open space, and reducing flood risk (LADPW 2006a).

Page 292, right column, 4th paragraph, after 3rd sentence, revised as follows:

Impacts from climate change may also increase or extend droughts and alter temperature and rainfall patterns.

Page 307, right column, first paragraph, 1st sentence, revised as follows:

Lands within the study area lie within the traditional territories of the Chumash, the Tongva/Gabrielino, the Serrano, and the ~~Tatavium~~ Tataviam.

Page 307, right column, 3rd paragraph, 2nd sentence, revised as follows:

Known sites within SMMNRA include spectacular Chumash style pictographs, village sites representing over 3,000 years of human use, and the only known site where a Clovis point has reportedly been found on the west coast (Stickel 2006).

Page 308, right column, 1st paragraph, 1st sentence, revised as follows:

Lands within the study area lie within the traditional territories of the Chumash, the Tongva/Gabrielino, the Serrano, and the ~~Tatavium~~ Tataviam.

Page 308, right column, 3rd paragraph, last sentence, revised as follows:

For instance, Burro Flats (Chumash and Tongva/ Gabrielino) and the Tujunga village site (Hansen Dam—Serrano/Tataviam) would be within the boundary.

Page 310, right column, 1st paragraph, 2nd sentence, revised as follows:

There could be opportunities to study a wide range of human interest and significant events important to the development of the oil industry (development of Union/Standard Oil in Newhall, Santa Clarita and Santa Paula), the aerospace industry (Boeing, Rocketdyne and NASA’s Jet

Propulsion Laboratory in Simi Valley/Chatsworth and Pasadena), the film industry (numerous film settings and studios), archeological and ethnographic information about the Chumash, ~~Tatavium~~ Tataviam, Tongva/ Gabrielino, and Serrano as well as stories of the first African American woman to own land in California (Biddie Mason), and even more modern development associated with the development of conservation biology and firefighting techniques (as these relate to the study area).

Page 332, Table 6-11, 2nd row, 3rd column, last sentence, revised as follows:

Protecting lands related to the transition between the Chumash and Tongva/Gabrielino, and new sites related to the Serrano and Tataviam, could improve understanding of archeological resources.

Chapter 7: Consultation and Coordination

Page 339, both columns, revise to include the following names to the list of *Experts, Scholars, and National Park Service Professionals Consulted or Contributed Information* (alphabetical order):

- Barbara Blankenship, Acquisition Specialist, City of Santa Clarita
- Joe Edmiston, Executive Director, Santa Monica Mountains Conservancy
- Craig Sap, Superintendent, Angeles District, California State Parks
- Ronald P. Schafer, Superintendent, Angeles District, California State Parks
- Rorie Skei, Deputy Executive Director, Santa Monica Mountains Conservancy

Table 7-1, left column, 1st cell, revised as follows:

~~All tribal governments and organizations sent a consultation letter in 2011 (see previous section) are also being sent a copy of the draft special resource study.~~

<u>Federally Recognized Tribes</u>	<u>Santa Ynez Band of Chumash Mission Indians</u> <u>San Manuel Band of Mission Indians</u> <u>Morongo Band of Mission Indians</u> <u>Pala Band of Mission Indians</u>
<u>Other Tribal Organizations</u>	<u>Barbareño/Ventureño Band of Mission Indians</u> <u>Coastal Band of the Chumash Nation</u> <u>Fernandeño Tataviam Band of Mission Indians</u> <u>Gabrieleño/Tongva San Gabriel Band of Mission Indians</u> <u>Gabrieleño Band of Mission Indians</u> <u>Gabrielino Tongva Indians of California Tribal Council</u> <u>Gabrielino/Tongva Nation</u> <u>Gabrielino-Tongva Tribe</u> <u>Kitanemuk & Yowlumne Tejon Indians</u> <u>Los Angeles City/County Native American Indian Commission</u> <u>San Fernando Band of Mission Indians</u> <u>San Luis Obispo County Chumash Council</u> <u>Tongva Ancestral Territorial Tribal Nation</u>

The draft study was also sent to a number of Native American individuals suggested by the Native American Heritage Commission.

Appendices

Page 356, Table D-4: Water Reclamation Plants in the Study Area, Column 1, Row 1, revised as follows:

~~Los Angeles Department of Water and Power~~ City of Los Angeles, Department of Sanitation

Page 360, left column, 1st paragraph, 2nd sentence, revised as follows:

Within the study area, this species has primarily been observed in the San Gabriel Foothills, the Verdugo Mountains, Sepulveda Basin, and Griffith Park.

References

Page 406, after California Department of Conservation, revised as follows:

2015a Well Finder Data. Available online at:

<http://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx>

2015b 2014 Preliminary Report of California Oil and Gas Production Statistics (Issued July 2015). Available online at:

http://www.conservation.ca.gov/dog/pubs_stats/annual_reports/pages/annual_reports.aspx

Page 411, before Feinberg, Marjorie Shafton, revised as follows:

Federal Register

1996 Presidential Documents. Executive Order 13007 of May 24, 1996. Indian Sacred Sites. Federal Register. Volume 61. Number 104. May 29.

Page 412, before Gumprecht, Blake, revised as follows:

Gulley, Caitlin, Tribal Historic and Cultural Preservation Officer, Fernandeano Tataviam Band of Mission Indians

2015 Personal communication with study team members: Anne Dove, Project Manager; Gary Brown, Santa Monica Mountains National Recreation Area; Margie Steigerwald, Santa Monica Mountains National Recreation Area; and Barbara Butler Baunsgard, Landscape Architect, Pacific West Regional Office on June 25, 2015.

Page 414, 9th paragraph, revised as follows:

King, Chester and Thomas C. Blackburn

1978 "Tataviam Tataviam." In R. Heizer, ed. *Handbook of North American Indians. Vol. 8.* Washington DC: Smithsonian Institution. pp.535-537.

Page 416 [LADPW], revised as follows:

2006a Greater Los Angeles County Region Integrated Resource Water Management Plan. Available on the Internet at <<http://www.ladpw.org/wmd/irwmp/>>

2006b San Gabriel River Master Plan: Final Program Environmental Impact Report. Available on the Internet at <<http://www.ladpw.org/wmd/watershed/sq/mp/peir.cfm>>

Page 424, Soza et al., revised as follows:

Soza, V.L., L. Gross, S. Boyd, N. Fraga

in press "Vascular Flora of the Verdugo Mountains and San Rafael Hills, Los Angeles County, California." Crossoma.

Soza, V.L., L. Gross, S. Boyd, and N. Fraga.

2013. Vascular Flora of the Verdugo Mountains and San Rafael Hills, Los Angeles County, California. *Crossosoma* 39 (1 & 2): 1-140.

Page 427, before [USFWS] U.S. Fish and Wildlife Service, revised as follows:

U.S. Department of Energy.

2015 *The SRE Accident*. Available on the Internet at:

<http://www.eteenergy.gov/Operations/Major_Operations/SRE_Accident.html>

Accessed on October 14, 2015.

Page 427, after [USFWS] U.S. Fish and Wildlife Service 2011d, revised as follows:

2011e *Orcuttia californica* (California Orcutt grass) 5-Year Review: Summary and Evaluation.

Available on the Internet at:

<http://www.fws.gov/carlsbad/SpeciesStatusList/5YR/20110311_5YR_ORCA.pdf>

Accessed on October 19, 2015.

Page 429, before Wilcove et. al., revised as follows:

Virbila, S. Irene

2015 "What to do with grapes from 150-year-old vines at Olvera Street? Make wine, of course." *Los Angeles Times*, September 15, 2015.