

State Route 138 Safety Improvement Project

Los Angeles County, California

07-LA-138-PM 69.3/75.0

EA: 265600

Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

April 2013



SCH# _____
07-LA-138-PM 69.3/75.0
EA 265600

The State of California Department of Transportation proposes a safety improvement project that will widen the shoulders and provide median buffers with rumble strips on State Route 138 between the SR-138/SR-18 Junction (PM 69.3) and the San Bernardino County Line PM (75.0). All of the proposed work is within Caltrans right-of-way.

07-LA-138-PM 69.3/75.0
EA 265600

INITIAL STUDY with Proposed Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Resources Code

THE STATE OF CALIFORNIA
Department of Transportation



Ron Kosinski
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation



Date of Approval

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

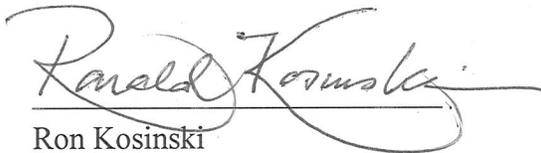
Project Description

The California Department of Transportation proposes a safety improvement project that will widen the shoulders from two to eight feet, provide two-foot wide rumble strips near the edge of traveling roadway in each direction and provide a four-foot wide median buffer with rumble strips on State Route 138 between the SR-138/SR-18 Junction (PM 69.3) and the San Bernardino County Line (PM 75.0). All of the proposed work is within Caltrans right-of-way.

Determination

The Department has prepared an Initial Study for this project and following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have minimal or no effect on cultural resources, noise, air quality, hazardous waste, traffic operations, socioeconomic, visual resources, hydraulics, water quality or geotechnical resources.
- The proposed project would have a less than significant effect on biological resources with the appropriate avoidance, minimization, and mitigation measures incorporated.



Ron Kosinski
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation

April 26, 2013
Date of Approval

Initial Study

Project Title

State Route 138 Safety Improvement Project

Lead Agency Name, Address and Contact Person

California Department of Transportation, District 7
100 S. Main St
Los Angeles, CA 90012

Karl Price, Senior Environmental Planner
California Department of Transportation
Division of Environmental Planning, District 7
(213) 897-0703
Karl_Price@dot.ca.gov

Project Location

The proposed project is located on State Route (SR) 138, in Los Angeles County southeast of the City of Palmdale and northwest of the community of Pinon Hills. The proposed safety improvements begin at the SR-138/SR-18 Junction at PM 69.3 and end at the Los Angeles County/San Bernardino County Line at PM 75.0.

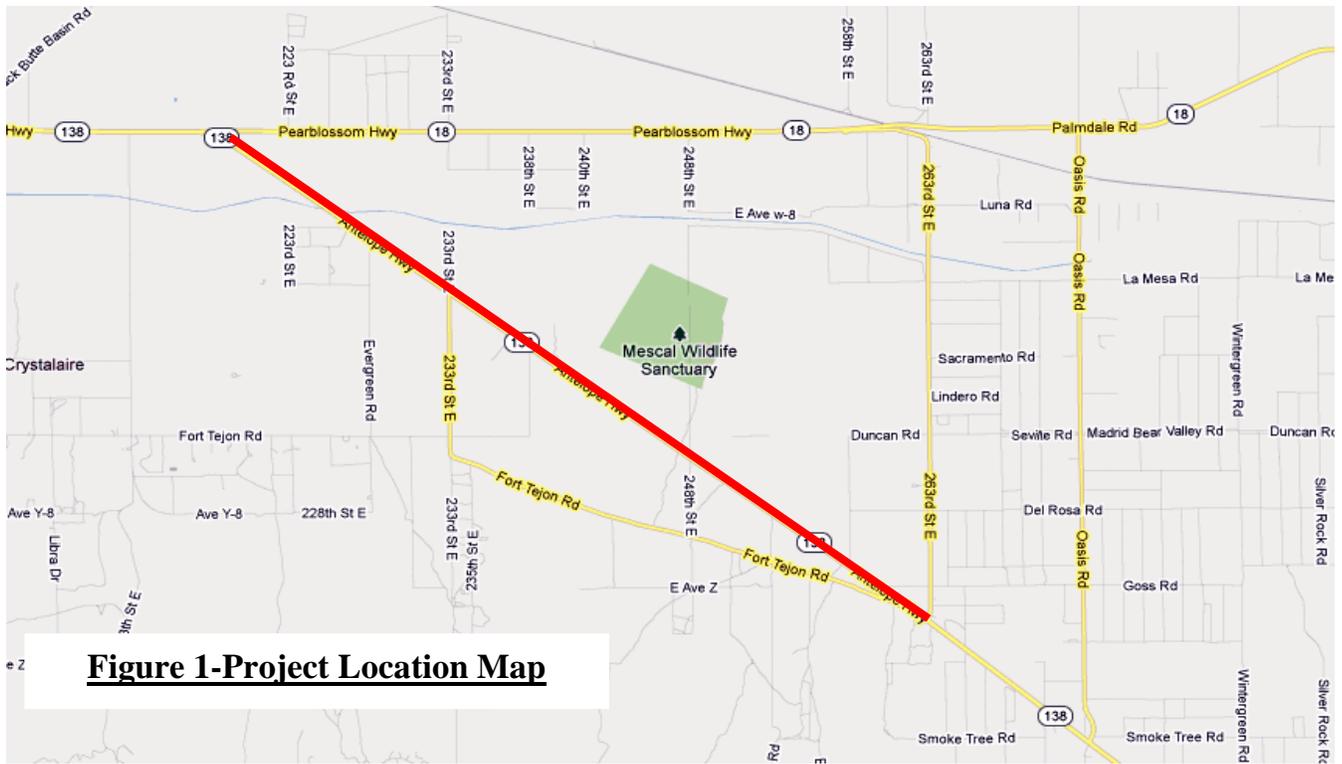


Figure 2- Regional Project Map



Purpose and Need

This project proposes to improve safety on State Route 138 by reducing accident rates, providing sufficient sight distances within the designated passing zones, and rehabilitating deteriorated asphalt pavement.

The project is needed because two segments within the project limits have higher actual accident rates than the statewide average for similar facilities. According to the Traffic Accident Surveillance and Analysis System (TASAS) report, over the 5.7 miles, there were a total of 84 accidents including three fatal accidents with eight fatalities during the latest five-year period ending in September 30, 2007. A summary of the actual rates of accidents along with the corresponding statewide average rates for similar facilities is given in Table 1 below. The higher than statewide average values are shown in **bold**. The types of accidents and the primary collision factors according to the TASAS Reports are summarized in Table 2.

Table 1-Summary of Accident Rates within the Project Limits

Location Description SR-138	Actual Accident Rates (within project limits) (MVM)*			Statewide Average Rates (MVM)*		
	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
PM 69.3-71	.031	.51	.88	.035	.045	.93
PM 71.001-73	.027	.35	.56	.035	.045	.93
PM 73.001-74.973	.027	.40	.94	.035	.045	.93

*MVM – Rates Per Million Vehicle Miles

Table 2-Type of Collisions and Primary Collision Factors

Type of Collision	Percent*	Primary Collision Factors
Hit Object	31%	Improper Turn, Run off, (Hit overturned objects on the shoulder, fence, guardrail, object on the road, cut slope or embankment, post mile stick, sign post, trees
Overturn	17%	Improper Turn, Speeding, Driving under the influence, other than driver (run off the road, snowy/icy)

Rear End	14%	Following too close, speeding
Sideswipe	13%	Improper turn, failure to yield, speeding, pass other, influence of alcohol
Broadside	12%	Improper Turn, Failure to Yield, Influence of Alcohol
Head On	11%	Cross into opposite lane, making U-turn, pass other vehicle
Other	2%	Speeding, other violations

*%of total number of Accidents

Description of Project

Within the limits of the proposed project, SR 138 is a two lane highway that traverses through flat rural terrain with a 150-foot wide right-of-way. The existing facility includes one 12-foot wide lane and a 2-foot wide paved shoulder in each direction of travel, with three designated passing zones, which provide an additional lane to allow safe passage by motorists. The posted speed limit is 55 mph.

There are 2 alternatives proposed for this project.

Alternative 1 is the no-build. This alternative would maintain the existing facility in its present condition.

Alternative 2 would provide an eight-foot wide outside paved shoulder with rumble strips, and a four-foot median buffer with rumble strips and channelizers within no-passing zones. The estimated cost for Alternative 2 is \$17.8 million in 2009 dollars. The escalated project cost in the proposed program year will be \$21.9 million. The proposed improvements for Alternative 2 in this 5.7 mile segment of SR-138 include the following:

- Provide a four-foot wide median buffer with rumble strips by shifting the existing centerline of the roadway two feet;
- Widen the paved shoulders from two to eight feet and provide two-foot wide rumble strips near the edge of the traveled way in both directions;
- Install Type FG-300 channelizers at 50 ft intervals in the center of the median buffer within the no-passing zones;
- Adjust the limits of the three existing passing zones;
- Re-stripe the highway segment and rehabilitate the deteriorating pavement;
- Install approximately 500-feet of Metal Beam Guard Rail at the Mescal Creek bridge;

Surrounding Land Uses and Setting

SR-138 is an east-west directed highway that connects Interstate 5 (I-5) near Gorman in Los Angeles County to Interstate 15 (I-15) near the Cajon Pass in San Bernardino County. SR-138 was originally constructed in 1934 and is classified as a conventional highway.

The proposed project area is in unincorporated Los Angeles County and is located southeast of the City of Palmdale and northwest of the community of Pinon Hills. The majority of land along this stretch of SR-138 is zoned Rural Land and Open Space. The County of Los Angeles General Plan and the Antelope Valley Area wide General Plan govern land uses within the study area. The proposed project is consistent with the circulation and land use elements of both documents.

The proposed project setting is in a completely rural area with open areas adjacent on all sides. There are no structures adjacent to the right-of-way. The regional context of this project is the Mojave Desert. To the northwest the California Aqueduct runs under SR-138 at PM 70.2 and to the southeast a dry wash with a man-made channel also runs under SR-138 at PM 72.2. Observations of wildlife include several species of birds, coyotes, and lizards. Additionally, this area falls within the historic range for the Desert Tortoise, a federally listed species and the Mohave ground squirrel, a state listed species. The dominant vegetation in this area includes desert scrub, Joshua Tree woodland, creosote bush, buckwheat and cactus.

Zoning

The proposed project area is in unincorporated Los Angeles County and is located southeast of the City of Palmdale and northwest of the community of Pinon Hills. The majority of land along this stretch of SR-138 is zoned Rural Land and Open Space. This area is not expected to experience significant growth in the future, as higher density and intensity uses will be structured within the existing urban areas of the Antelope Valley community. The project is being undertaken to improve safety and is not likely to stimulate growth within the area, allowing for the continued promotion and enhancement of a rural community character.

Permits and Approvals Needed

California Department of Fish and Wildlife 1602 Streambed Alteration Agreement

California Department of Water Resources Encroachment Permit

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

Impacts Checklist

The impacts checklist starting on the next page identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item. The checklist is followed by a focused discussion of biological issues relating to this project.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

I. AESTHETICS — Would the project:

- a) Have a substantial adverse effect on a scenic vista? X
Hydro-seeding/mulching is too used where necessary to minimize storm water impacts.
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? X
- c) Substantially degrade the existing visual character or quality of the site and its surroundings? X
- d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? X

“No Impact” determination in this section is based on the Visual Impact Assessment, April 2012.

II. AGRICULTURE RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? X
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? X
- c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? X

“No Impact” determinations in this section are based that there is no farmland within the project limits and the area is zoned rural and open space.

III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan? X

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

d) Expose sensitive receptors to substantial pollutant concentrations?

e) Create objectionable odors affecting a substantial number of people?

“No Impact” determinations in this section are based on the Air Quality Review Memo dated March 2012.

IV. BIOLOGICAL RESOURCES — Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

preservation policy or ordinance?

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Joshua Tree Woodland Alliance is ranked G4 S3 by CDFW and is considered to be vulnerable and highly imperiled. Based on the current project plans, approximately 321 Joshua Trees will be impacted with 81 Joshua Trees to be removed and 240 Joshua Trees to be properly relocated outside of the project impact area with the exception of those that do not meet the health criteria at the time of relocation.

Agustin Barajas initiated Section 7 Informal Consultation with the United States Fish and Wildlife Service (USFWS) through Carl T. Benz, Assistant Field Supervisor. A request for a Threatened and Endangered species list occurring within the project vicinity was submitted to his office on August 8, 2011. A letter was received on November 7, 2011 from USFWS concurring with our initial determination that the proposed project is not within designated critical habitat for the desert tortoise and no other federally listed, proposed or candidate species, or designated critical habitat are known to occur in the proposed project area.

The drainages within the Biological Study Area (BSA) are not considered jurisdictional waters of the U.S. by the ACOE Los Angeles District because the ephemeral streams within the BSA are located within a closed basin and do not connect to navigable waterways. The ephemeral streams are isolated waters and project activities would not require authorization under section 404 of the CWA. Water Quality Certification from RWQCB pursuant to section 401 of the CWA is not required as project activities are not subject to regulation under section 404 permits. Approximately 1.016 acres were identified as Waters of the State between PM 69.35-74.97. The 1.016 acres of Waters of the State consist of desert ephemeral drainage courses within CDFW jurisdiction.

V. CULTURAL RESOURCES — Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- d) Disturb any human remains, including those interred outside of formal cemeteries?

“No Impact” determinations in this section are based on the Historic Property Survey Report dated April 2012 and the Archaeological Survey Report dated April 2012.

VI. GEOLOGY AND SOILS — Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No Impact” determinations in this section are based on the Geotechnical Review Memo dated July 2012. There are no geological or geotechnical conditions that would preclude the construction of the proposed project.

VII. HAZARDS AND HAZARDOUS MATERIALS —

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

accident conditions involving the release of hazardous materials into the environment?

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No Impact” determinations in this section are based on the Hazardous Waste Assessment memo dated April 2012.

VIII. HYDROLOGY AND WATER QUALITY —

Would the project:

a) Violate any water quality standards or waste discharge requirements?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?

e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Result in inundation by a seiche, tsunami, or mudflow?

“No Impact” determinations in this section are based on the comments provided by the District 7 Stormwater Unit in March 2012 and the “no comment” email from Hydraulics dated July 2012. All appropriate BMP’s will be implemented during construction and post-construction to avoid impacts.

IX. LAND USE AND PLANNING — Would the project:

a) Physically divide an established community?

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

“No Impact” determinations in this section are based on the Community Impact Analysis memo dated April 2012.

X. MINERAL RESOURCES — Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

“No Impact” determinations in this section are based on the Geotechnical Review Memo dated July 2012.

XI. NOISE — Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

in the project area to excessive noise levels?

“No Impact” determinations in this section are based on the Noise Review memo dated April 2012. This is not considered a Type 1 project and there are no noise sensitive receptors with the project limits.

XII. POPULATION AND HOUSING — Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determinations in this section are based on the scope and location of the project. No relocations or displacements will occur with the proposed project.

XIII. PUBLIC SERVICES —

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determinations in this section are based on the scope and location of the project. This portion of State Route 138 would remain open during construction.

XIV. RECREATION —

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No Impact” determinations in this section are based on the scope and location of the project.

XV. TRANSPORTATION/TRAFFIC — Would the project:

a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

“No Impact” determinations in this section are based on the scope of this proposed project.

XVI. UTILITY AND SERVICE SYSTEMS — Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determinations in this section are based on the scope of this proposed project.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE —

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

The potential for biological impacts are discussed below in sections Affected Environment, Environmental Consequences and Mitigation Measures.

Affected Environment, Environmental Consequences, and Mitigation Measures

This section focuses only on the Biological Environment, as that is the only environmental factor potentially affected by the proposed project. All other physical, social, and economic factors have been determined to have no impact based on the checklist above and associated technical studies.

Biological Resources

Regulatory Setting

The California Department of Fish and Wildlife (CDFW) has regulatory responsibility for the protection of special-status plant and animal species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA).

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the Fish and Wildlife Code
- Section 4150 and 4152 of the Fish and Wildlife Code

Section 1602 of CDFW Code

Pursuant to Section 1602 of the California Department of Fish and Wildlife Code, CDFW has direct jurisdiction over any activities that will divert or obstruct the natural flow, or change the bed, channel, or bank of any river, stream, or lake designated by CDFW in which there is at any time an existing fish or wildlife resource, or from which these resources derive benefit pursuant to the California Department of Fish and Wildlife. The California Department Fish and Wildlife Code require that formal notification and subsequent agreement, including mitigation measures, must be completed prior to initiating such changes. General project plans must be submitted to CDFW, sufficiently indicating the nature of a project, including if the project would divert, obstruct, or change a streambed; use material from the streambeds; or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a stream. Section 1602 of the California Department of Fish and Wildlife Code requires a notification package be submitted in support of a Streambed Alteration Agreement for review by CDFW. The areas of jurisdiction are typically defined on a case-by-case basis for the location, nature and extent of disturbance, and mitigation recommendations.

Section 2081(b) of the California Fish and Wildlife Code

Section 2080 of the California Department of Fish and Wildlife Code prohibits "take" of any species that the Fish and Wildlife Commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Wildlife Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act (CESA) allows for take incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset losses of listed species populations and their essential habitats resulting from implementation of projects (CDFW 2003).

Affected Environment

The proposed project setting is located in the Mojave Desert floristic province in northeastern Los Angeles County with vegetation consisting of predominately low, widely spaced shrubs including creosote bush (*Larrea tridentata*), and widely spaced trees including California junipers (*Juniperus californica*) and Joshua trees (*Yucca brevifolia*); this growth pattern is typical of regions with arid conditions and high temperatures. A broad, high desert valley known as the Antelope Valley surrounds the project area. The Antelope Valley is interspersed with sprawled development and large tracts of open space. Los Angeles County has identified several Significant Ecological Areas in the Antelope Valley. These areas have unique plant communities and serve as habitat for threatened or endangered species. The Joshua tree woodlands designated as significant ecological areas are located in the western portion of the Antelope Valley west and northwest of the Antelope Valley California Poppy Reserve in an unincorporated area of the County approximately 40 miles away from the project limits. The proposed project lies in the desert-montane transect, a designated significant ecological area in the Antelope Valley, which consists of several desert and mountain vegetation communities including creosote bush scrub, sagebrush scrub, pinyon-juniper woodland, Joshua tree woodland, desert chaparral, and mixed conifer forest habitat. Excellent stands of Joshua tree woodland within the desert montane transect are found along Alpine Butte and Lovejoy Butte approximately 9 miles away from the project limits.

The Biological Study area (BSA) consists of creosote bush scrub, Joshua trees, and California junipers, with creosote bush as the dominate species west of Mescal Creek and California juniper as the dominate species east of Mescal Creek. Joshua tree is a co-dominant species occurring at a low density within the Joshua Tree Woodland Alliance and California Juniper Woodland Alliance within the BSA. Plant communities adjacent to the BSA are of high quality due to minimal impacts and Joshua tree occurs at a higher density in BSA adjacent communities. To the northwest the California Aqueduct runs under SR-138 at PM 70.3 and to the southeast an ephemeral stream, Mescal Creek, with a man-made channel runs under SR-138 at PM 72.66. Within the project footprint there are a total of five ephemeral streams. Within the project limits, there are no urbanized areas though there are sparsely vegetated areas. Rural areas associated with the town of Llano are northwest and residential developments associated with the town of Pinon Hills are southeast of the project limits. The land cover is primarily native vegetation with some ruderal species and invasive grasses. Within a 50 ft buffer of the roadway, there is an increased presence of invasive species and high human disturbance with evidence of trash dumping, off-road vehicles use, and vandalism.

The following plant communities were identified and characterized within the BSA during the field investigations: Joshua tree woodland, California juniper woodland, and ruderal. Most of the land within this segment is largely undeveloped except for dispersed rural residential development, roads, infrastructure of powerline corridors, and recreational activities. Roadway adjacent vegetation typically has a high occurrence of invasive species and does not have the species diversity and richness of interior habitat communities. Several sensitive desert flora and fauna species are known to occur within the vicinity of the project site such as: short-joint beavertail, white pygmy-poppy, Joshua Tree, desert tortoise, Mohave ground squirrel, Nelson's Antelope squirrel, western mastiff bat, San Diego desert woodrat, coast horn lizard, pallid San Diego pocket mouse, southern grasshopper mouse, Le Conte's thrasher and nesting migratory birds and raptors. Focused surveys will be conducted during the appropriate season prior to construction to determine presence/absence of special status species. The project limits are along SR-138 with a disturbed shoulder, presence of invasive species, and lack of endemic vegetation; therefore, the plant communities within the BSA should not be classified as suitable habitat and are marginal at best for sensitive desert flora and fauna. Joshua Tree Woodland Alliance is ranked G4 S3, and is considered to be vulnerable and highly imperiled by CDFW. Although the individual Joshua tree is not officially listed as sensitive by the California National Plant Society (CNPS), it is a plant of note for most counties and cities in which it occurs, including Los Angeles County.

The biological study area was defined by a review of the project plans, along with a study of the 2012 update of the California Natural Diversity Database (CNDDDB), USFWS Information, Planning, and Conservation System (IPAC), and the 2012 California Native Plant Society (CNPS) electronic database of the USGS 7.5 minute *Mescal Creek, Valyermo, LoveJoy Buttes, El Mirage, Shadow Mountain SE, and Phelan* quadrangles. These were reviewed to identify special-status plant and wildlife species (those species considered rare, threatened, endangered, or otherwise sensitive by various state and federal resource agencies) that have been known to historically occur in the vicinity of the project site. Due to the geographic and biological uniqueness of the project limits and the micro habitat of the area, the quadrangles of *Crystal Lake, Mount San Antonio, and Telegraph Peak* were not used in identifying regional species and habitat of concern. Photographs and a review of existing literature were conducted to gain additional information on the project location.

Caltrans has identified nine (9) sensitive animal species whose presence needed to be addressed by pre-project surveys and/or habitat assessments. Of the nine species identified, one, the San Diego Desert Woodrat was observed during surveys conducted by Caltrans biologists. Focused surveys will be conducted during the appropriate season prior to construction to determine presence/absence of the San Diego Desert Woodrat. Feasible measures will be implemented to minimize impacts to species present in the BSA.

The CNDDDB and IPAC species lists reported the potential for the federally and state threatened desert tortoise, the state threatened Mohave ground squirrel, the state threatened Nelson's Antelope squirrel, the state species of special concern western mastiff bat, the state species of special concern coast horn lizard, the state species of special concern pallid San Diego pocket mouse, the state species of special concern southern grasshopper mouse, the

state species of special concern San Diego desert woodrat, and the state species of special concern Le Conte's thrasher to occur within the proposed project area.

Special Status Plant Species

Joshua Tree Woodland Alliance (*Yucca brevifolia*)

Joshua Tree Woodland contains Joshua tree as an emergent small tree over a shrub or grass canopy with *Ambrosia dumosa*, *Artemisia tridentata*, *Ephedra nevadensis*, *Larrea tridentata*. The habitat exists on gentle alluvial fans, ridges, gentle to moderate slopes and occurs between the elevation of 2560-5240 feet. *Juniperus ssp.* may be present; however, they must be less than one percent absolute cover. Joshua Tree Woodland Alliance is ranked G4 S3 by CDFW, and is considered to be vulnerable and highly imperiled.

The Joshua tree is a yucca endemic to the Mojave Desert of California, southern Nevada, northwestern Arizona, and southeastern Utah. Joshua trees occur within desert grasslands and shrublands on well-drained sandy to gravelly alluvial fans adjacent to desert mountain ranges (Cole et al. 2011). Joshua tree is noted by CNPS as too common and is not designated as a state species of special concern by CDFW. Los Angeles County does not currently have ordinances protecting individual Joshua trees; however, many cities in the Antelope Valley do have such ordinances. Los Angeles County and the CDFW typically request that projects avoid impacts to or transplant Joshua trees.

Short-joint Beavertail (*Opuntia basilaris* var. *brachyclada*)

Short-joint beavertail is a small, spreading cactus species ranked by CNPS as 1B.2 or uncommon in the Rare Plant Ranking. The species typically occurs within chaparral, Joshua tree woodland, Mojavean desert scrub, and Pinyon-juniper woodland. These plant communities are present within the eastern portion of the project limits. According to CNDDDB, the nearest known occurrence of short-joint beavertail was in 1999 approximately 2.2 miles southwest of the BSA.

White Pygmy-poppy (*Canbya candida* Parry)

White pygmy-poppy is a low growing annual herb ranked by CNPS as 4.2 or uncommon in the Rare Plant Ranking. It occurs in Joshua tree woodland and Mojavean desert scrub. These plant communities are present within the eastern portion of the project limits. According to CNDDDB, the last known occurrence of white pygmy-poppy was in 1986 within the BSA between PM 73.0-74.0.

Special Status Animal Species

Pallid San Diego Pocket Mouse (*Chaetodipus fallax pallidus*)

Pallid San Diego pocket mouse is a small mammal that can be found in gravelly and sandy soils in southwestern California. General habitat typically consists of coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, and pinyon-juniper vegetation cover (Zeiner et al. 1990). According to

CNDDDB, the nearest known occurrence of pallid San Diego pocket mouse was in 1951 approximately 1.7 miles southwest of the BSA.

Southern Grasshopper Mouse (*Onychomys torridus Ramona*)

Southern grasshopper mouse is a small mammal that can be found in desert scrub habitats with friable soils for digging, with low to moderate shrub cover. General habitat typically consists of a variety of low, open and semi-open scrub habitats including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered scrubs (Collins 1998). According to CNDDDB, the nearest known occurrence of southern grasshopper mouse was in 1988 approximately 2.4 miles northwest of the BSA.

San Diego Desert Woodrat (*Neotoma lepida intermedia*)

The San Diego desert woodrat is a small mammal found in southern California inhabiting Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. Nest middens are built against a rock crevice, at the base of creosote or cactus or in the lower branches of trees (Zeiner et al. 1990).

Nelson's Antelope Squirrel (*Ammospermophilus nelsoni*)

Nelson's Antelope squirrel is a small mammal found on dry sparsely vegetated loam soils where they dig burrows or use kangaroo rat burrows for habitation. Vegetation usually consists of forbs and grasses growing on broken terrain with gullies and washes. According to CNDDDB, the nearest known occurrence of Nelson's Antelope squirrel was in 1954 approximately 800 feet northwest of the BSA, near the California Aqueduct. The species is typically found at lower elevations (200-1200 feet), and this 1954 occurrence was likely a misidentification.

Mohave Ground Squirrel (*Xerospermophilus mohavensis*)

Mohave ground squirrel is a ground dwelling mammal that occupies creosote bush scrub, saltbush scrub, and Joshua tree woodland type plant communities. The species is found in open areas of sandy and gravelly soils devoid of rocky areas in the eastern and northern parts of the Mojave Desert region. The species will utilize burrows found at the bases of shrubs for both cover and nesting purposes. They are active in the spring from February to July and estivate throughout most of the remaining months. Juveniles will remain above ground well into July and August, foraging in preparation for winter. According to CNDDDB, Mohave ground squirrel was observed in 1993 near the SR-138/SR-18 intersection within the BSA.

Le Conte's Thrasher (*Toxostoma lecontei*)

Le Conte's thrasher is primarily found in open desert wash, desert scrub, and desert succulent scrub habitat. The species commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground (Fitton 2008). According to CNDDDB, the nearest known occurrence of Le Conte's Thrasher was in 1986 within the BSA.

Western Mastiff Bat (*Eumops perotis californicus*)

The western mastiff bat is primarily a cliff-dwelling mammal that occurs in a variety of habitats such as dry desert washes, flood plains, chaparral, oak woodlands, open ponderosa pine forests, grasslands and montane meadows (Pierson and Rainey 1998). According to CNDDDB, the nearest known occurrence of western mastiff bat was in 1929 approximately 3.5 miles northeast of the BSA.

Coast Horned Lizard (*Phrynosoma blainvillii*)

Coast horned lizard frequents a wide variety of habitats and is most common in lowlands along sandy washes with scattered low bushes. The species utilizes open areas for sunning, bushes for cover, patches of loose soil for burial and needs abundant supply of ants and other insects (Zeiner et al. 1990). According to CNDDDB, the nearest known occurrence of coast horned lizard was in 1968 approximately 3.2 miles southwest of the BSA.

Desert Tortoise (*Gopherus agassizii*)

The desert tortoise is a large, herbivorous reptile found within the creosote, shadscale, and Joshua tree series of Mojavean desert scrub. Optimal habitat has been characterized as creosote bush scrub in which precipitation ranges from 2 to 8 inches, with a relatively high diversity of perennial plants and production of ephemeral streams. Soils must be friable enough for the digging of burrows and firm enough to prevent burrows from collapsing. Desert tortoises are most active during spring and early summer when annual plants are most common. Additional activity occurs during warmer fall months and occasionally after summer rainstorms. Desert tortoises spend the remainder of the year in burrows, escaping the extreme conditions of the desert (CDFW 2000). Consultation with USFWS has determined that the federally threatened desert tortoise (*Gopherus agassizii*) may occur in the subject project area, but the proposed project is not within designated critical habitat. According to CNDDDB, the nearest known occurrence of desert tortoise was in 2004 approximately 7.7 miles northeast of the BSA.

Impacts

Joshua Tree Woodland

Approximately 3.30 acres of degraded Joshua tree woodland will be permanently impacted by the shoulder widening. Temporary and indirect effects such as dust, noise and vibration from construction will be limited through the implementation of proper BMP's. Approximately 5.9 acres of degraded Joshua tree woodland will be temporarily impacted.

Based on the current project plans, approximately 321 Joshua trees will be impacted with 81 Joshua trees to be removed and 240 Joshua trees to be properly relocated outside of the project impact area with the exception of those that do not meet the health criteria at the time of relocation; avoidance and minimization measures will be implemented to minimize impacts to Joshua tree woodland and individual Joshua trees.

Short-joint Beavertail

There is a low potential for occurrence as the roadway adjacent habitat associated with the short-joint beavertail is marginal at best and should not be considered suitable

habitat. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species. Direct or indirect impacts to short-joint beavertail are not expected to occur.

White Pygmy-poppy

There is a low potential for occurrence as the roadway adjacent habitat associated with the white pygmy-poppy is marginal at best and should not be considered suitable habitat. Although there is a very low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species. Direct or indirect impacts to white pygmy-poppy are not expected to occur.

Pallid San Diego Pocket Mouse

The individual number of pallid San Diego pocket mouse expected to occur within the BSA is low, if at all, due to degraded habitat adjacent to the roadway. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species.

Southern Grasshopper Mouse

The individual number of southern grasshopper mouse expected to occur within the BSA is low, if any, due to degraded habitat adjacent to the roadway. The BSA is fragmented and isolated with the California Aqueduct acting as a geographic barrier from the higher quality habitat of the nearest known occurrence of the species. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species.

San Diego Desert Woodrat

San Diego desert woodrat were found during diurnal ground surveys, however, due to the degraded habitat adjacent to the roadway, the individual number of species expected to occur within the BSA is low. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species.

Nelson's Antelope Squirrel

Nelson's Antelope squirrel was not found during surveys and is not expected to occur within the BSA. Direct or indirect impacts to Nelson's Antelope squirrel are not expected to occur.

Mohave Ground Squirrel

The Mohave ground squirrel was not found during the surveys conducted from March 2012 to July 2012 and is not expected to occur within the BSA. Although the species is not expected to occur, further focused protocol surveys should be conducted to determine presence/absence of the species. According to CDFW, small mammal surveys have a shelf life of one year and should be conducted during the appropriate season prior to construction. If individuals are found during pre-construction surveys, construction activities will stop and Caltrans will coordinate with CDFW to initiate Section 2081 process of the CDFW Code, and implement all conditions and mitigation measures in the Section 2081 permit. If

individuals are not found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore, no further action would be necessary. Direct or indirect impacts to Mohave ground squirrel are not expected to occur.

Le Conte's Thrasher

The individual number of Le Conte's thrasher expected to occur within the BSA is low due to degraded habitat adjacent to the roadway. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species. Direct impacts to Le Conte's thrasher are not expected to occur.

Western Mastiff Bat

The individual number of western mastiff bat expected to occur within the BSA is low due to degraded habitat adjacent to the roadway. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species. Direct impacts to western mastiff bat are not expected to occur.

Coast Horned Lizard

The individual number of coast horned lizard expected to occur within the BSA is low due to degraded habitat adjacent to the roadway. Although there is a low potential for the species to occur, avoidance and minimization measures will be implemented to minimize potential impacts to the species.

Desert Tortoise

The individual number of desert tortoise expected to occur within the BSA is low due to degraded habitat adjacent to the roadway. The BSA is fragmented and isolated with the California Aqueduct acting as a geographic barrier from the higher quality habitat of the nearest known occurrence of the species. Although there is a very low potential for the species to occur, clearance surveys should be conducted to determine presence/absence of the species prior to construction. If tortoises are found, Caltrans will coordinate with CDFW per Section 2081 and USFWS per Section 7 respectively. If determined appropriate by the agencies, a permitted biologist would capture and relocate them outside of the project area. Installation of USFWS approved desert tortoise exclusion fencing would also be installed if necessary. If individuals are not found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore, no further action would be necessary. Direct or indirect impacts to desert tortoise are not expected to occur.

Avoidance, Minimization, and/or Mitigation Measures

Joshua Tree Woodland Alliance Mitigation

A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to Joshua tree woodland and if necessary, maintain a buffer around individual Joshua trees using Environmentally Sensitive Area (ESA) fencing during all phases of construction. Relocation of existing

Joshua trees and planting of associated endemic species will ensure a minimum 2.5 percent density of Joshua trees is maintained within the onsite restoration area of Joshua tree woodland.

To minimize impacts, trees will be relocated with the original soil material surrounding root ball and maintain proper orientation. All relocation will be performed by experienced tree workers and monitored by a qualified biologist with experience in Joshua tree relocation. Although the larger, branching Joshua trees have a much lower survival rate after being transplanted, smaller Joshua trees (two feet with minimal branching) typically survive being transplanted. Individual specimens will be properly relocated outside of the project impact area using a 90 inch tree spade.

As a biological provision, permanent impacts to 3.30 acres of Joshua tree woodland within the project impact area will be mitigated at no more than a 2:1 ratio. Temporary and indirect impacts to 5.9 acres of Joshua tree woodland will be mitigated through onsite restoration and enhancement.

Special Status Plant and Animal Protection-Avoidance and Minimization Measures

Short Joint Beavertail

A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to any short-joint beavertail potentially occurring in adjacent habitat outside of the BSA and, if necessary, maintain a buffer using ESA fencing during all phases of construction. Focused plant surveys should be conducted to determine presence/absence of the species during the appropriate season prior to construction. If the species is found in the project impact area, Caltrans will maintain a buffer around the individual specimens using ESA fencing during all phases of construction. If this is not possible, a qualified biologist will transplant individual species and/or remove seed bed material with soil to nearby equally suitable sites beyond the project impact area. If individuals are not found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore no further action would be necessary.

There is a low potential for occurrence of the short-joint beavertail within the BSA; nor will this project have a detrimental effect on short-joint beavertail populations, therefore, compensatory mitigation will not be necessary.

White Pygmy-poppy

A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. Focused plant surveys should be conducted to determine presence/absence of the species during the appropriate season prior to construction. If the species is found in the project impact area, Caltrans will maintain a buffer around the individual specimens using ESA fencing during all phases of construction. If this is not possible, a qualified biologist will transplant individual species and/or remove seed bed material with soil to nearby equally suitable sites beyond the project impact area. If individuals are not found, no impacts to this

species would occur as a result of the implementation of this proposed project; therefore no further action would necessary.

There is a low potential for occurrence of the white pygmy-poppy within the BSA; nor will this project have a detrimental effect on white pygmy-poppy populations, therefore, compensatory mitigation will not be necessary.

Pallid San Diego Pocket Mouse

The individual number of pallid San Diego pocket mouse expected to occur within the BSA is low, if at all. Although there is a low potential for the species to occur, a qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. A qualified biologist will also conduct focused surveys to determine presence/absence of the species. According to CDFW, small mammal surveys have a shelf life of one year and should be conducted during the appropriate season prior to construction. If individual species are found, feasible measures will be implemented to minimize impacts. Feasible measures may include, but are not limited to, having a qualified biologist monitor construction during clearing, grading and/or trenching activities for any occurrence of the species. If individuals are not found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore no further action would necessary.

Pallid San Diego pocket mouse is not known to occur within the project limits. No impacts to this species are expected; therefore, compensatory mitigation will not be necessary.

Southern Grasshopper Mouse

The individual number of southern grasshopper mouse expected to occur within the BSA is low, if any. Although there is a low potential for the species to occur, a qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. A qualified biologist will also conduct focused surveys to determine presence/absence of the species. According to CDFW, small mammal surveys have a shelf life of one year and should be conducted during the appropriate season prior to construction. If individual species are found, feasible measures will be implemented to minimize impacts. Feasible measures may include, but are not limited to, having a qualified biologist monitor construction during clearing, grading and/or trenching activities for any occurrence of the species. If individuals are not found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore no further action would necessary.

Southern grasshopper mouse is not known to occur within the project limits. No impacts to this species are expected; therefore, compensatory mitigation will not be necessary.

San Diego Desert woodrat

San Diego desert woodrat were found during diurnal ground surveys; however, due to the degraded habitat adjacent to the roadway, the individual number of this species expected

to occur within the BSA is low. To minimize impacts to individuals of this species a qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. A qualified biologist will also conduct focused surveys to determine presence/absence of the species. According to CDFW, small mammal surveys have a shelf life of one year and should be conducted during the appropriate season prior to construction. If individuals of this species are found, feasible measures will be implemented to minimize impacts. Feasible measures may include, but are not limited to, having a qualified biologist monitor construction during clearing, grading and/or trenching activities for any occurrence of the species, and any individual species found will be relocated outside of the project impact area. If individuals are no longer found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore, no further action would necessary.

San Diego desert woodrat were found during diurnal ground surveys; however, due to the degraded habitat adjacent to the roadway, the number of individuals of this specie expected to occur within the BSA is low; therefore, compensatory mitigation will not be necessary.

Nelson's Antelope Squirrel

Nelson's Antelope squirrel has a very low potential to occur within the BSA; therefore, avoidance and minimization efforts will not be necessary.

Nelson's Antelope squirrel was not found during surveys and is not expected to occur within the BSA; therefore, compensatory mitigation will not be necessary.

Mohave Ground Squirrel

Mohave ground squirrel has a very low potential to occur within the BSA; therefore, avoidance and minimization efforts will not be necessary.

Mohave ground squirrel was not found during surveys and is not expected to occur within the BSA; therefore, compensatory mitigation will not be necessary.

Le Conte's Thrasher

A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. To ensure the avoidance of Le Conte's thrasher, the following measures will be implemented pursuant to the Migratory Bird Treaty Act (MBTA). Clearing and grubbing of vegetation will be conducted outside of bird-nesting season. If clearing and grubbing of vegetation needs to be conducting during bird-nesting season (February 15th to September 1st) a qualified biologist will monitor construction during clearing, grading and/or trenching activities for any occurrence of the species nesting. In the event that Le Conte's thrasher is observed nesting, construction should stop until it is determined that the fledglings have left their nests. If this is not possible, coordination with a qualified biologist should take place in order to

minimize the risk of violating the Migratory Bird Treaty Act. A 150 ft. buffer should be maintained using ESA fencing during all phases of construction.

Impacts to Le Conte's thrasher are not expected to occur; therefore, compensatory mitigation will not be necessary.

Western Mastiff Bat

A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. To ensure the avoidance of western mastiff bat, pre-construction surveys will be conducted of rock faces adjacent to the roadway, and any trees designated for removal due to the initiation of construction related activities to assess any potential presence of the species. Clearing and grubbing of vegetation will be conducted outside of the bat maternity season. If clearing and grubbing of vegetation needs to be conducting during bat maternity season (March 1st to October 15th), a qualified biologist will monitor construction during clearing, grading and/or trenching activities for any occurrence of the species breeding. If any species are found during pre-construction surveys they will be excluded using CDFW, USFS, and USFWS approved methods. Alternate bat habitat will be provided for any excluded bats.

Impacts to western mastiff bat are not expected to occur; therefore, compensatory mitigation will not be necessary.

Coast Horned Lizard

The individual number of coast horned lizard expected to occur within the BSA is low. Although there is a low potential for the species to occur, a qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. A qualified biologist will also conduct clearance surveys to determine presence/absence of the species. According to CDFW, focused reptile surveys have a shelf life of one year and should be conducted during the appropriate season prior to construction. If individual species are found, feasible measures will be implemented to minimize impacts. Feasible measures may include, but are not limited to, having a qualified biologist monitor construction during clearing, grading and/or trenching activities for any occurrence of the species, and any individual species found will be relocated outside of the project impact area. If individuals are not found, no impacts to this species would occur as a result of the implementation of this proposed project; therefore, no further action would be necessary. Direct or indirect impacts to coast horned lizards are not expected to occur.

There is a low potential of occurrence of the coast horned lizard within the BSA; therefore, compensatory mitigation will not be necessary.

Desert Tortoise

The desert tortoise has a very low potential to occur and is not expected within the BSA; therefore, avoidance and minimization efforts will not be necessary.

Desert tortoise has a very low potential to occur within the BSA; therefore, compensatory mitigation will not be necessary.

Bird Protection

Migratory Bird Treaty Act and State Fish and Game Code § 3503.5 and § 3800

Migratory birds may nest within the trees and shrubs that are present within the desert wash habitat within the project area. To avoid any impacts to migratory birds, vegetation removal must take place outside of the bird-nesting season (February 15th to September 1st). If vegetation removal takes place during bird-nesting season, a qualified biologist will conduct surveys to determine if birds are nesting. In the event that nesting birds are observed, vegetation removal shall not be conducted until it is determined that the fledglings have left their nests. If this is not possible, a buffer of 150 ft for songbirds and 500ft for raptors must be maintained during all phases of construction to minimize the risk of violating the MBTA. Nesting birds may not be impacted by any construction activity including noise and dust pollution along with destruction of habitat.

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988, has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light duty trucks, other trucks, buses, and motorcycles make up the largest source (second to electricity generation) of GHG emitting sources. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels).

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing growth of vehicle miles traveled (VMT), 3) transitioning to lower GHG emitting fuels, and 4) improving vehicle technologies. To be most effective all four strategies should be pursued collectively. The following Regulatory Setting section outlines the state efforts to comprehensively reduce GHG emissions from transportation sources.

Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and pro-active approach to dealing with GHG emissions and climate change.

Assembly Bill 1493 (AB 1493), Pavley. Vehicular Emissions: Greenhouse Gases, 2002: requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year. In June 2009, the U.S. Environmental Protection Agency (U.S. EPA) Administrator granted a Clean Air Act waiver of preemption to California. This waiver allowed California to implement its own GHG emission standards for motor vehicles beginning with model year 2009. California agencies will be working with federal agencies to conduct joint rulemaking to reduce GHG emissions for passenger cars model years 2017-2025.

Executive Order (EO) S-3-05: (signed on June 1, 2005, by former Governor Arnold Schwarzenegger) the goal of this EO is to reduce California's GHG emissions to: 1) year 2000 levels by 2010, 2) year 1990 levels by the 2020, and 3) 80 percent below the year 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

AB 32, the Global Warming Solutions Act of 2006, Núñez and Pavley: AB 32 sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan, (which includes market mechanisms) and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases."

Executive Order S-20-06: (signed on October 18, 2006 by former Governor Arnold Schwarzenegger) further directs state agencies to begin implementing AB 32, including the recommendations made by the California's Climate Action Team.

Executive Order S-01-07: (signed on January 18, 2007 by former Governor Arnold Schwarzenegger) set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least ten percent by the year 2020.

Senate Bill 97 (SB 97) Chapter 185, 2007: required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Caltrans Director's Policy 30 (DP-30) Climate Change (approved June 22, 2012): is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. This policy contributes to the Department's stewardship goal to preserve and enhance California's resources and assets.

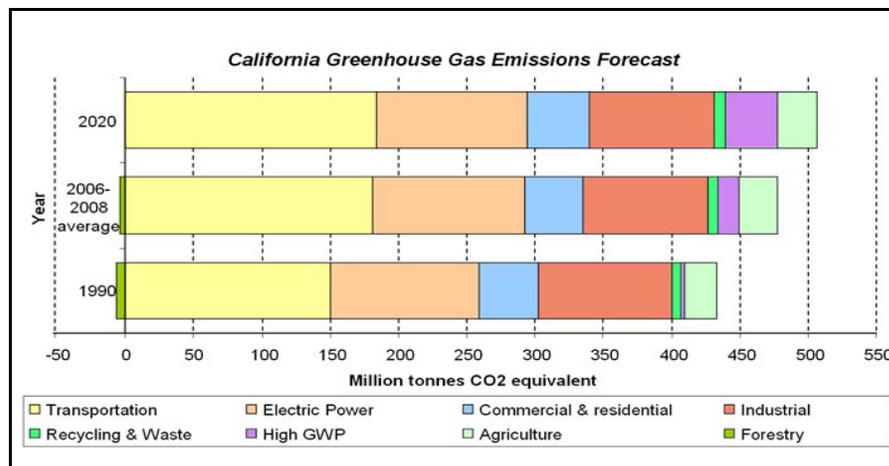
Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.

In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

California Greenhouse Gas Forecast



The Department and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, the Department has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.

The proposed shoulder widening project is not expected to increase GHG emissions during operation because the project would maintain the same number of through lanes and

would not increase the capacity of the highway within the project limits. In addition, the project would not generate new vehicular traffic trips since it would not construct new homes or businesses.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

It is proposed as part of this project to rehabilitate deteriorating sections of the existing pavement in order to improve ride quality and to reduce future need for frequent maintenance. Detailed stage construction plan will be developed in the design phase for this project. The roadway will be open to traffic at all times. For the temporary limited, short term impacts on traffic during construction, Caltrans will prepare a Traffic Management Plan (TMP) to be implemented in order to minimize localized congestion and travel delays. In addition, the construction contractor will be required to comply with all the Antelope Valley Air Quality Management District's rules, ordinances, and regulations in regards to air quality restrictions.

Greenhouse Gas Reduction Strategies

AB 32 Compliance

The Department continues to be actively involved on the Governor's Climate Action Team as ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies the Department is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Former Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding during the next decade. The Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together are expected to reduce congestion. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and

preservation, smart land use and demand management, and operational improvements as depicted below in the Mobility Pyramid.



The Department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. The Department works closely with local jurisdictions on planning activities but does not have local land use planning authority. The Department assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; the Department is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by U.S. EPA and ARB.

Table 2 below summarizes the Departmental and statewide efforts that the Department is implementing in order to reduce GHG emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

Table 2 Climate Change/CO₂ Reduction Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	.0045	.0065 .045 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries	2.5 % limestone cement mix	1.2	4.2	
			25% fly ash cement mix	.36	3.6	
			> 50% fly ash/slag mix			
Goods Movement	Office of Goods Movement	Cal EPA, ARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

To the extent that it is applicable or feasible for the project and through coordination with the project development team, the following measures will also be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

- According to the Department's Standard Specifications, the contractor must comply with all of the Antelope Valley Air Quality Management District's rules, ordinances, and regulations in regards to air quality restrictions.

Adaptation Strategies

Adaptation strategies" refer to how the Department and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the White House Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency report on October 14, 2010 outlining recommendations to President Obama for how Federal Agency policies and programs can better prepare the U.S. to respond to the impacts of climate change. The Progress Report of the Interagency Climate Change Adaptation Task Force recommends that the federal government implement actions to expand and strengthen the nation's capacity to better understand, prepare for, and respond to climate change.

Climate change adaption must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, former Governor Arnold Schwarzenegger signed EO S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

The California Natural Resources Agency (Resources Agency) was directed to coordinate with local, regional, state and federal public and private entities to develop. The California Climate Adaptation Strategy (Dec 2009), which summarizes the best known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08 that specifically asked the Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings.

The Resources Agency was also directed to request the National Academy of Science to prepare a Sea Level Rise Assessment Report by December 2010 to advise how California should plan for future sea level rise. The report is to include:

- Relative sea level rise projections for California, Oregon and Washington taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- The range of uncertainty in selected sea level rise projections.
- A synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- A discussion of future research needs regarding sea level rise.

Prior to the release of the final Sea Level Rise Assessment Report, all state agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data.

Interim guidance has been released by The Coastal Ocean Climate Action Team (CO-CAT) as well as the Department as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise.

All projects that have filed a Notice of Preparation as of the date of [EO S-13-08](#), and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of

the state. The Department continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Currently, the Department is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, the Department has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Department will be able to review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. The Department is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

Comments and Coordination

The Initial Study with Proposed Mitigated Negative Declaration was distributed to elected officials, state and federal agencies, and adjacent property owners on February 26, 2013. Also on February 28th, 2013, a Notice of Availability was placed in two local newspapers: The Mountaineer Progress and the Los Angeles Daily News. This notice provided the opportunity for a public hearing, however there was no request for one. Caltrans also provided hard copies at two local libraries: The Palmdale City Library and Serrano Library.

The Initial Study and Notice of Completion were submitted to the State Clearinghouse on March 1, 2013. There was a 30-day comment period and it concluded on April 2, 2013. Caltrans received comment letters from the Lahontan Regional Water Quality Control Board, California Department of Water Resources and the US Army Corps of Engineers. On the following pages, a copy of the comment letter is provided along with Caltrans response to the comments. Revisions in the Initial Study are highlighted by a solid line in the right margin.

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 942360001
(916) 653-5791



March 27, 2013

Mr. Karl Price
California Department of Transportation, District 7
100 S Main Street
Los Angeles, California 90012

Initial Study for Environmental Impact Report, California Department of Transportation
District 7, Los Angeles County, California Aqueduct, Approximate Milepost 374.0,
Southern Field Division, SCH 2013031006

Dear Mr. Price:

Thank you for the opportunity to review and comment on the Initial Study for the proposed widening of State Route 138 (SR-138) in Los Angeles County. In the study, California Department of Transportation (Caltrans) proposes to adopt a Mitigated Negative Declaration for the proposed road work, which falls within Caltrans right-of-way (ROW). The new road section is part of a safety improvement plan which will include the length of highway between the junction of SR-138/SR-18 and the San Bernardino County line. The proposed work will cross the Department of Water Resources (DWR) California Aqueduct ROW near DWR Milepost 374.0, or near the junction of SR-138 and SR-18.

The proposed project will cross DWR's ROW; therefore, the owner will be required to obtain an Encroachment Permit/Review from DWR prior to the start of any construction. Additionally, any modifications to DWR's bridge and access roads shall be reviewed and approved by DWR prior to construction. Information on obtaining an Encroachment Permit from DWR can be viewed at:

DWR-1

http://www.water.ca.gov/engineering/Services/Real_Estate/Encroach_Rel/

Please provide DWR with a copy of any subsequent environmental documentation when it becomes available for public review. Any future correspondence relating to this project should be sent to:

DWR-2

Leroy Ellinghouse, Chief
SWP Encroachments Section
Division of Operations and Maintenance
Department of Water Resources
1416 Ninth Street, Room 641-1
Sacramento, California 95814

Mr. Karl Price
March 27, 2013
Page 2

In addition, please continue to keep DWR informed of any future actions with respect to your project.

If you have any questions, please contact Leroy Ellinghouse, Chief of DWR's SWP Encroachments Section, at (916) 653-7168 or Mike Anderson at (916) 653-6664.

Sincerely,

David M. Samson, Chief
State Water Project Operations Support Office
Division of Operations and Maintenance

cc: State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

Response to DWR Comments

DWR-1

Caltrans will obtain an Encroachment Permit from the Department of Water Resources prior to the start of any construction. The DWR permit is now included on Page 8 under Permits and Approvals.

DWR-2

Caltrans will provide DWR with a copy of the Mitigated Negative Declaration when the comments have been addressed and the Notice of Determination has been sent to the State Clearinghouse.



Lahontan Regional Water Quality Control Board

April 4, 2013

File: Environmental Doc Review
Los Angeles County

Karl Price, Senior Environmental Planner
California Department of Transportation
Division of Environmental Planning, District 7
100 S. Main St.
Los Angeles, CA 90012

COMMENTS ON THE NOTICE OF COMPLETION OF AN INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE STATE ROUTE 138 IMPROVEMENT PROJECT, LOS ANGELES COUNTY, STATE CLEARINGHOUSE NO. 2013031006

California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Notice of Completion of an Initial Study and Mitigated Negative Declaration (IS/MND) for the above-referenced (Project) on March 4, 2013. The IS/MND was prepared by the California Department of Transportation (Caltrans) and submitted in compliance with provisions of the California Environmental Quality Act (CEQA). Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the IS/MND, we have determined that post-construction stormwater management must be considered a component of the Project. While we concur that preparation of an MND appears to be the most appropriate level of environmental review for this Project, best management practices (BMPs) that effectively treat post-construction stormwater runoff should be included as part of the Project. We recommend that Caltrans consider our comments and value our mission to protect waters of the State and maintain water quality in the Lahontan Region.

Project Description

The proposed Project is to widen a 5.7-mile portion of State Route 138 (SR-138) located southeast of the City of Palmdale and northwest of the community of Pinon Hills in the County of Los Angeles. As we understand it, the highway shoulders will be widened from a 2-foot unpaved width to an 8-foot paved width. The proposed Project will also include a 4-foot wide median buffer as well as the installation of metal guard rail at the Mescal Creek Bridge crossing. Construction will likely also consist of vegetation grubbing, grading, surfacing/paving, and revegetation of disturbed areas.

Specific Comments

Our specific comments on the Project are presented below.

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUCYUMDJIAN, EXECUTIVE OFFICER
14440 Civic Drive, Suite 200, Victorville, CA 92392 | www.waterboards.ca.gov/lahontan



Mr. Price

- 2 -

April 4, 2013

- 1. The IS/MND did not include an adequate review of the Project's post-construction conditions with respect to hydrology. Project implementation will result in a net increase in the amount of post-construction stormwater runoff. Lands to the north and south of SR-138 in the Project vicinity are for the most part undeveloped. We encourage maintaining natural drainage paths and landscape features to slow and filter runoff and utilizing vegetated areas for stormwater management and onsite infiltration. Without adequate design, the consequences of discharging concentrated stormwater flows to natural drainage systems could lead to scour and erosion and degradation of surface water resources. The IS/MND should evaluate the potential post-construction impacts, particularly potential post-construction hydrologic impacts, and describe specific BMPs that, when implemented, will reduce those potential impacts to a less than significant level.
2. The IS/MND did not identify existing surface waters within the Project vicinity other than Mescal Creek. A number of unnamed ephemeral drainages cross SR-138 within the Project area, most of which currently sheet-flow across the highway and reconnect with the natural drainage channel downstream of the roadway (at-grade crossings). Project implementation may permanently or temporarily impact these drainages by grading, infilling, and paving. Other Project impacts may result from the installation of new culverts or the extension of existing culverts to accommodate widening of the roadway. The IS/MND must accurately identify all surface water resources within the Project area and evaluate the Project's potential impacts to the environment including hydrology, water quality, and wildlife uses. Adequate mitigation must be provided to reduce potential Project impacts to a less than significant level.
3. The Project is located in part within both the El Mirage Hydrologic Area (Mojave Hydrologic Unit) and the Rock Creek Hydrologic Area (Antelope Hydrologic Unit) of the Lahontan Region. Water quality objectives and standards, both numerical and narrative, for waters of the State, including those within the El Mirage and Rock Creek Hydrologic Areas, are outlined in Chapter 3 of the Lahontan Water Quality Control Plan (Basin Plan). Implementation of the proposed Project must comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.
4. We request that construction staging areas be sited in upland areas outside stream channels and other surface waters on or around the Project site. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing the stream channel. Construction equipment should use existing roadways to the extent feasible.
5. All temporary impacts should be restored (recontoured and revegetated) to match pre-Project conditions.
6. Obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. The environmental document must specifically describe the BMPs and other measures used to mitigate Project impacts.

LRWQCB-1

LRWQCB-2

LRWQCB-3

LRWQCB-4

LRWQCB-5

LRWQCB-6

Permitting Requirements

A number of activities associated with the proposed Project appear to have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include:

- Land disturbances of more than 1 acre may require a Clean Water Act (CWA), section 402 (p) stormwater permit, including a National Pollution Discharge Elimination System (NPDES) General Construction Stormwater permit obtained from the Lahontan Water Board;
- Water diversion and/or dewatering activities may be subject to discharge and monitoring requirements under the NPDES General Permit, Limited Threat Discharges to Surface Waters, Board Order R6T-2008-0023; and
- Streambed alteration and or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board.

Please be advised that these permits may be required for the proposed Project, as outlined above. Should Project implementation result in activities that will trigger these permitting actions, the Project proponent is urged to consult with Water Board staff prior to Project implementation. Information regarding these permits, including application forms, can be downloaded from our web site at <https://waterboards.ca.gov/lahontan/>.

Thank you for the opportunity to comment. If you have any questions regarding this letter, please contact me at (760) 241-7376 (jzimmerman@waterboards.ca.gov) or Patrice Copeland at (760) 241-7404 (pcopeland@waterboards.ca.gov).

Sincerely,



Jan M. Zimmerman, PG
Engineering Geologist

cc: State Clearinghouse (SCH 2013031006)
(via email, state.clearinghouse@opr.ca.gov)
Jeff Brandt, California Department of Fish and Wildlife
(via email, jeff.brandt@wildlife.ca.gov)
Veronica Chan, United States Army Corps of Engineers
(via email, Veronica.C.Chan@usace.army.mil)

Response to LRWQCB comments

LRWQCB 1 – The Initial Study addresses the hydraulic and water quality impacts on the checklist found on pages 15 and 16. It was determined that there will be no significant impacts to these resources. The profile of the roadway will not change as a result of the project and there will be no change in the existing rate of erosion. The existing flow patterns will remain the same. Caltrans District 7 Stormwater Design Group will prepare a Corridor Stormwater Management Study which will recommend incorporation of post construction BMP's. If it is determined BMPs are necessary, infiltration trenches or infiltration basins (or a combination of both) would likely be appropriate. The specific BMPs used would depend on the type of flow that will be serviced such as sheet flow (along the side of the shoulder) or shallow-concentrated flow (through an AC dike opening). In addition to the above, Caltrans will also consider the following approved post-construction BMP's: Biofiltration Strips and Swales, Detention Devices, Traction Sand Traps, Dry Weather Flow Diversion, Gross Solids Removal Devices, Media Filters, Multi Chamber Treatment Train and Wet Basin.

LRWQCB 2 – A Natural Environmental Study was prepared and completed prior to releasing the Initial Study. This technical study identified the unnamed ephemeral streams and drainages and determined there would be minimal impacts. It was determined that the ephemeral streams are isolated within a closed basin with no hydrologic connection to traditionally navigable waters. The project would not change the elevation of the roadway nor would it change the flow of water. Appropriate BMP's will be implemented during the design phase of the project. In addition, Caltrans Design confirmed that no new culverts are being proposed as part of this project and there are no plans to extend any existing culverts (the existing bridge over Mescal Creek is already wide enough).

LRWQCB 3 – Caltrans will comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.

LRWQCB 4 – The construction staging areas will be located outside stream channels and other surface waters on or around the project site. Caltrans will prevent unauthorized vehicles or equipment from entering the project site. Where feasible, Caltrans construction equipment will use existing roadways.

LRWQCB 5 – Temporary disturbed soil will be re-contoured and re-vegetated to match pre-project conditions where feasible.

LRWQCB 6 – According to the Natural Environment Study, water quality certification from RWQCB pursuant to section 401 of the Clean Water Act is not required for the shoulder widening project as the project activities are not subject to regulation under section 404 permits. All appropriate BMPs will be implemented during and post-construction to help avoid impacts to water quality and hydrology (see response to comment #1). The Environmental Commitment Record (Appendix D) has been updated to reflect this.



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
VENTURA FIELD OFFICE
2151 ALESSANDRO DRIVE, SUITE 110
VENTURA, CALIFORNIA 93001

-2-

April 18, 2013

REPLY TO
 ATTENTION OF

Regulatory Division

Karl Price
 California Department of Transportation
 District 7
 100 S. Main Street
 Los Angeles, California 90012-3606

SUBJECT: Determination regarding requirement for Department of the Army Permit

Dear Mr. Price:

I am responding to a Mitigated Negative Declaration for the proposed State Route 138 Safety Improvement Project from Post Miles 69.3-75.0 project dated February 28, 2013 in which you conclude there is no U.S. Army Corps of Engineers jurisdiction under section 404 of the Clean Water Act (33 U.S.C. 1344). The proposed project would take place near the community of Phelan located southeast of the City of Palmdale, Los Angeles County, California.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. The first test determines whether or not the proposed project is located within or contains a water of the United States (i.e., it is within the Corps' geographic jurisdiction). The second test determines whether or not the proposed project includes an activity potentially regulated under Section 10 of the River and Harbor Act or Section 404 of the Clean Water Act. If both tests are met, and the activities in question are located within the Corps' geographic jurisdiction, then a permit would be required.

As part of our evaluation process, we have determined your project would affect isolated ephemeral drainages. Although some of the drainages may connect with Rogers Lake during extreme high rainfall and runoff events, Rogers Lake is a non-jurisdictional isolated basin. This determination is based on the U.S. Supreme Court decision on Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC, 2001) decision, and prior Corps actions which disclaimed jurisdiction in the Rogers Lake watershed in response to SWANCC (i.e., SPL-2002-00343-AOA).

Based on the discussion above, we have determined your proposed project is not subject to our jurisdiction under section 404 of the Clean Water Act and a section 404 permit would not be required from our office if the activity is performed in the manner described. Notwithstanding our determination, your proposed project may be regulated under other Federal, State, and local laws.

ACOE - 1

If you have any questions, please contact Theresa Stevens of my staff at 805-585-2146 or via e-mail at theresa.stevens@usace.army.mil. Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at: <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

Aaron O. Allen, Ph.D.
 Chief, North Coast Branch
 Regulatory Division

Response to ACOE comment

ACOE 1 – Comment noted.

Appendix A - List of Preparers

The following Caltrans staff contributed to the preparation of this Initial Study:

Ron Kosinski, Deputy District Director, Environmental Planning

Karl Price, Environmental Branch Chief

Carlos Montez, Environmental Branch Chief

Paul Caron, Environmental Branch Chief

David Lewis, Associate Environmental Planner

Eric Hanson, Associate District Biologist

Mary Ngo, District Biologist

Appendix B - References

- Best, T. L., et al. 1990. *Mammalian Species Ammospermophilus nelsoni*. American Society of Mammalogists.
- California Department Fish and Game. 2000. Reptiles: Species Accounts. Retrieved November 5, 2012, from http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/docs/2000/t_e10reptiles.pdf
- California Department of Transportation. 2012. Field surveys for flora and fauna resources.
- California Essential Habitat Connectivity Project*. California Department of Fish and Game. Retrieved November 5, 2012, from <http://www.dfg.ca.gov/habcon/connectivity/>
- Caltrans Earth*. Google Earth Enterprise. Retrieved November 29, 2012, from <http://ctearth.dot.ca.gov/>
- Cole, K. L., K. Ironside, J. Eischeid, G. Garfin, P. B. Duffy, and C. Toney. 2011. Past and ongoing shifts in Joshua tree distribution support future modeled range contraction. *Ecological Applications* 21:137–149
- Collins, S. 1998. Ramona grasshopper mouse, *Onychomys torridus Ramona* in *Terrestrial Mammal Species of Special Concern in California*, Bolster, B.C.
- Costello, R. and A. Rosenberger. Smithsonian National Museum of Natural History, North American Mammals. Retrieved September 13, 2011, from <http://www.mnh.si.edu/mna/about.cfm>
- County of Los Angeles, Department of Regional Planning. 2012. *The Joshua Tree Woodlands SEA Description*, Los Angeles, County, California.
- County of Los Angeles, Department of Regional Planning. 2012. *The Antelope Valley SEA Description*, Los Angeles, County, California.
- ECORP Consulting Inc. 2009 Jurisdictional Delineation Report State Route 138 Report. Prepared for Caltrans District 8.
- Fitton, S. 2008. San Joaquin Le Conte's Thrasher in *Studies of Western Birds* 1:321–326.
- Hickman, J. C. (ed.). 1993. *The Jepson Manual: Higher Plants of California*. University of California Press. Berkeley, California.

- IMAPS Viewer*. California Natural Diversity Database & Spotted Owl Data Viewer (CNDDDB). California Department of Fish and Game. Retrieved June 11, 2012, from <http://imaps.dfg.ca.gov/viewers/bios/app.asp>
- Inventory of Rare and Endangered Plants*. California Native Plant Society. Sacramento, CA. Accessed on Monday, January 27, 2012, from <http://www.rareplants.cnps.org/>
- IPaC System*. U.S. Fish and Wildlife Service. Retrieved June 11, 2012, from <http://ecos.fws.gov/ipac/>
- Jennings, H. 1994 Amphibian and Reptile Species of Special Concern in California. California Department of Fish and Game. Pages 126-130
- Khandoker, J. U. 2009 Project Study Report to Request for programming in 2010 SHOPP. Caltrans District 7. SR-138 Lane Widening Project. Pages 1-4
- Penrod, K., P. Beier, E. Garding, and C. Cabañero. 2012. *A Linkage Network for the California Deserts. Produced for the Bureau of Land Management and The Wildlands Conservancy*. Produced by Science and Collaboration for Connected Wildlands, Fair Oaks, CA www.scwildlands.org and Northern Arizona University, Flagstaff, Arizona <http://oak.ucc.nau.edu/pb1/>.
- Pierson, E.D. and W.E. Rainey. 1998. Western mastiff bat, *Eumops perotis* in *Terrestrial Mammal Species of Special Concern in California*, Bolster, B.C.
- Sawyer, J O., T. Keeler-Wolf, 2009. *A Manual of California Vegetation*. California Native Plant Society
- USDA, USDI. Ecological Subregions of California. Retrieved September 13, 2011, from <http://www.fs.fed.us/r5/projects/ecoregions/322a.htm>.
- West, Zachary. 2009. SR-138 4-Lane Widening, Natural Environment Study. California Department of Transportation District 8.
- U.S. Fish and Wildlife Service. *National Wetlands Inventory, Branch of Resource and Mapping Support*. Retrieved June 11, 2012, from <http://www.fws.gov/wetlands/Data/Mapper.html>
- Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.
- California Department of Transportation, Project Study Report, May 2009.

Appendix C - Distribution List

Elected Officials

The Honorable Dianne Feinstein
United States Senate
11111 Santa Monica Boulevard
Suite 915
Los Angeles, CA 90025

The Honorable Barbara Boxer
United States Senate
312 N. Spring St. Suite 1748
Los Angeles, CA 90012

The Honorable Steve Fox
California State Assembly - District 36
State Capitol
PO Box 942849
Sacramento, CA 94249

The Honorable Steve Knight
State Senator - 21st District
848 W Lancaster Blvd, Suite 101
Lancaster, CA 93534

The Honorable Michael D. Antonovich
Los Angeles Board of Supervisors
5th District
Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Federal, State, and Local Agencies

California Department of Fish and Wildlife
Attn: Jamie Jackson
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Richard Kite
City of Palmdale
Planning Director
38250 Sierra Highway
Palmdale, CA 93550

Phelan Piñon Hills
Community Services District
4176 Warbler Road
Phelan, CA 92371

Carl Benz
US Fish and Wildlife Service
2493 Portola Rd., Ste. B
Ventura, CA 93003

State Clearinghouse
Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812

Tracy Esoscue
Executive Officer
Regional Water Quality Control Board
320 W 4th St., Ste. 200
Los Angeles, CA 90012

California Native American Heritage
Commission
915 Capital Mall, Room 364 Sacramento,
CA 95814

U.S. Army Corps of Engineers
District Commander
Los Angeles District
915 Wilshire Boulevard
Los Angeles, CA 90017

California Public Utilities Commission
320 W. 4th Street, Suite 500
Los Angeles, CA 90012

Barry R. Wallerstein
SCAQMD, CEQA Division
869 Hall of Administration
500 W Temple St
Los Angeles, CA 90012

Lahontan Regional Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 92392

Leroy Ellinghouse
Department of Water Resources
1416 Ninth Street, Room 641-1
Sacramento, CA 95814

Property Owner Mailing List

SERRANO LIBRARY
9292 SHEEP CREEK ROAD
PHELAN, CA 92371

PALMDALE CITY LIBRARY
700 EAST PALMDALE BLVD.
PALMDALE, CA 93550

GIL, SYLVIA ETAL
PO BOX 2478
DEL MAR, CA 92014

GOLDSTEIN, MARC J
15850 GLEDHILL ST
NORTH HILLS, CA 91343

PEREZ, DELFINO & GERARDO
831 W 147TH ST
GARDENA, CA 90247

LEE, KEN W
5300 BEACH BLVD 100
BUENA PARK, CA 90621

LEE, CHUN H
PO BOX 1474
LITTLEROCK, CA 93543

AIM HIGH LLC
3530 WILSHIRE BLVD 230
LOS ANGELES, CA 90010

LEE, JOO S & INKIE
466 FOOTHILL BLVD 317
LA CANADA FLINTRIDGE, CA 91011

AIM HIGH LLC
3530 WILSHIRE BLVD 230
LOS ANGELES, CA 90010

YACAS, JULIET
1325 ELKWOOD DR
MILPITAS, CA 95035

IRA SERVICES CSTDN FBO
TOFFT, DON R
38838 JONQUIL DR
NEWARK, CA 94560

BLACKBURN, BETTY J TRUST
202 RAINBOW LN
OCEANSIDE, CA 92054

CADDY, ANNETTE M TRUST ETAL
5310 E HARCO ST
LONG BEACH, CA 90808

MAY, AMI
3122 SHADOW DUSK AVE
HENDERSON, NV 89052

CHIOU, LEE S
2005 SALEROSO DR
ROWLAND HGHTS, CA 91748

WORLEY, GEOFFREY C CO TRUST
11852 BORUM AVE
TUSTIN, CA 92782

IRA SERVICES CSTDN
368 E CHARLESTON RD
PALO ALTO, CA 94306

REALTY HOLDING CORPORATION
PO BOX 3458
QUARTZ HILL, CA 93586

OLIVA, FRANCISCO
PO BOX 630
MIRA LOMA, CA 91752

WORLEY, CURTIS C CO TRUST
741 GUADALUPE AVE
CORONADO, CA 92118

MAY, AMI
3122 SHADOW DUSK AVE
HENDERSON, NV 89052

YONG, SOON KIM ETAL
31 CALLE ARAGON D
LAGUNA WOODS, CA 92637

TOGNAZZINI, TERRY D CO TRUST
2677 N MAIN ST 470
SANTA ANA, CA 92705

HAUNE, AVRAHAM TR ETAL
PO BOX 40055
STUDIO CITY, CA 91614

GRAHAM, DONALD G TRUST
1033 CAMINO DE CHELLY
SANTA FE, NM 87505

LAGOTTA, CAROLE V & STEVEN S ETAL
5127 AVENIDA PLAYA CANCUN
SAN DIEGO, CA 92124

BAXTER, FOREST L & GUILLERMA C
3709 IVERSON LN
NORTH LAS VEGAS, NV 89032

ELEAZAR, DALMACIO & ZENAIDA
TR
494 WESTVIEW DR
CHULA VISTA, CA 91910

DELROSARIO, TEODORO D F &
JOVITA L
10760 GABACHO DR
SAN DIEGO, CA 92124

BENZ, MARGARET C TRUST
1240 15TH ST
HERMOSA BEACH, CA 90254

STEINSAPIR, LAURENCE D
31819 BROAD BEACH RD
MALIBU, CA 90265

ROFEH, MASOOD CO TRUST
17969 MEDLEY DR
ENCINO, CA 91316

OH, YOUNG C & HAE J
10223 PHELAN RD
OAK HILLS, CA 92344

YOUSSEF, A MALEK TRUST
468 CARUSO AVE
GLENDALE, CA 91210

LICHTER, REINHARD & MARIA
11741 LERDO AVE
GRANADA HILLS, CA 91344

ROFEH, MASOOD CO TRUST
17969 MEDLEY DR
ENCINO, CA 91316

WEST, LILLIAN J TR ETAL
22542 TARANTO
LAGUNA HILLS, CA 92653

ROFEH, MASOOD CO TRUST
17969 MEDLEY DR
ENCINO, CA 91316

KENNEDY, TERRI L
15141 CAMARILLO ST
SHERMAN OAKS, CA 91403

JACKSON, JAMES
6120 W TROPICANA AVENUE A16 158
LAS VEGAS, NV 89103

MORROW, JAMES & MEREDITH TR
30 GITANA AVE
CAMARILLO, CA 93012

SONG, HUAN & WEI XIAN X
1229 S ELECTRIC AVE
ALHAMBRA, CA 91803

TORCH MISSION CHURCH
PO BOX 720868
PINON HILLS, CA 92372

SIMKINS, TERRY A
PO BOX 429
PAHRUMP, NV 89041

VASSILAKIS, MARY A
2111 RUHLAND AVE
REDONDO BEACH, CA 90278

KARLAKIS, THEODORE & KATHRYN T
22144 CLARENDON ST 214
WOODLAND HLS, CA 91367

PETRILLO, THOMAS J
6470 E EL PASEO ST
LONG BEACH, CA 90815

MANGALINDAN, EMILIO C
6315 EDGEFIELD AVE
LAKEWOOD, CA 90713

DINH, PHUOC V & TUYET A TR
11455 LAKE SCRIPPS DR
SAN DIEGO, CA 92131

ACOSTA, PEDRO S & THELMA C
ETAL
3743 PRIMAVERA AVE
LOS ANGELES, CA 90065

TOLENTINO, ARTURO & OFELIA TR
810 W SUFFOLK AVE
MONTEBELLO, CA 90640

VILLACORTE, FERNANDO D &
ESTRELLA R
12576 KESTREL ST
SAN DIEGO, CA 92129

QUEBRAL, DONATO S CO TRUST
7714 HIGH CHAPARRAL ST
LAS VEGAS, NV 89113

LAYUS, AGUSTIN V & CARIDAD C
1497 CHEROKEE DR
SALINAS, CA 93906

MASTIN, THOMAS P
PO BOX 900895
PALMDALE, CA 93590

BAGHOOMIAN, JORES
710 ROSELLI ST
BURBANK, CA 91501

ABAT, FAUSTINO A & ESTRELLA B
265 S WESTERN AVE
LOS ANGELES, CA 90004

EDWARDS, K & L 2011 FAMILY TRUST
7658 HENBANE ST
ETIWANDA, CA 91739

CUNANAN, FRANCISCO S & CARMEN V
20201 38TH AVE W
LYNNWOOD, WA 98036

ABAT, FAUSTINO A & ESTRELLA B
265 S WESTERN AVE
LOS ANGELES, CA 90004

FERNWOOD GROUP INC TRUST
PO BOX 738
LEONA VALLEY, CA 93551

LE MY DANG
8207 MAHOGANY CIR
BUENA PARK, CA 90620

MOUNTAINS RECREATION
CONSERVATION AUTHORITY
5810 RAMIREZ CANYON RD
MALIBU, CA 90265

BRUCE, BRYON & VADEN
10360 FERNGLEN AVE
TUJUNGA, CA 91042

RACZ, JAMES
33048 223RD ST E
LLANO, CA 93544

SANDOVAL, FELIX
40637 173RD ST E
LANCASTER, CA 93535

RACZ, JAMES I
33048 223RD ST E
LLANO, CA 93544

ALLEN, GWENDOLYN G TRUST
1547 SOLEDAD CANYON RD
ACTON, CA 93510

BALTAZAR, REUBEN I
971 SANDALRIDGE CT
MILPITAS, CA 95035

RUSCITO, ANGELO R TRUST
1620 MARION DR
GLENDALE, CA 91205

ALLEN, VERN B & LISA M
PO BOX 202
LLANO, CA 93544

NICHOLERIS, NESTOR & CARRIE
6695 ALBATROSS ST
VENTURA, CA 93003

HALE, THOMAS E & KAREN J TRUST
PO BOX 69
JACKSON, CA 95642

KURATA, MORIO & YOSHIKO TR
2072 GLENTREE DR
LOMITA, CA 90717

AOKI, NOBUO & TAKAKO TR
26608 LIGHTFOOT PL
RANCHO PALOS VERDES, CA 90275

WHANG, KYUNG H & MYO S
4516 W 16TH PL
LOS ANGELES, CA 90019

CHIOU, LEE S & CHUAN H
2005 SALEROSO DR
ROWLAND HGHTS, CA 91748

OUYANG, WILLIAM & MIN H ETAL
122 COUNTRY FLOWER RD
NEWARK, DE 19711

HARMAN, LESTER H JR
10200 BOLSA AVE 6
WESTMINSTER, CA 92683

BREITROSE, SUE
PO BOX 178
PEARBLOSSOM, CA 93553

NERY, JOEL L & MILDRED F TR
9218 SIERRA MADRE VILLA AVE
VICTORVILLE, CA 92395

BORROMEO, JOSEFA M TRUST
9526 VERVAIN ST
SAN DIEGO, CA 92129

WILLIAMS, HAZEL J ETAL
23606 DELFORD AVE
CARSON, CA 90745

SPEES, FRANK W & EVELYN N
TRUST
1145 PACIFIC BEACH DR 106
SAN DIEGO, CA 92109

GLORIANI, ANTONIO J & MARILYN G
5535 GREEN HOLLOW LN
YORBA LINDA, CA 92887

RENAISSANCE PERINATAL MEDICAL
PO BOX 2149
SAN GABRIEL, CA 91778

HATHAWAY, GARY & PATRICIA TR
19 WIDELoop RD
ROLLING HILLS, CA 90274

ECONOMU, TRACY A
38710 26TH ST E
PALMDALE, CA 93550

VON HASELBERG, MARTIN
1222 16TH AVE S 3RD
NASHVILLE, TN 37212

CROW, STELLA S & RICHARD
2205 MARINE ST
SANTA MONICA, CA 90405

LEE, JOO S
466 FOOTHILL BLVD 317
LA CANADA, CA 91011

NICKAN ENTS LLC
PO BOX 64321
LOS ANGELES, CA 90064

BOUCHE, CHRISTOPHER
2575 SPINNAKER AVE
PORT HUENEME, CA 93041

EKEJIUBA, CHAMBERLINE O & ROSE
1458 E GLADWICK ST
CARSON, CA 90746

NC QUEEN INC
17405 VICTORY BLVD
VAN NUYS, CA 91406

CHE, PETER M & YEN D
15924 BENICHIA CIR
FOUNTAIN VALLEY, CA 92708

VINOGRAD, DANIEL & NORA L TR
3830 VALLEY CENTRE DR 705-15
SAN DIEGO, CA 92130

ESMAIL, YAQOUB & ROSAURA
13642 COBALT RD
VICTORVILLE, CA 92392

HWANG, JOE
PO BOX 1474
LITTLEROCK, CA 93543

APPEL, ALBERT TRUST
3771 SEASCAPE DR
HUNTINGTON BEACH, CA 92649

HWANG, CHUCK
PO BOX 1474
LITTLEROCK, CA 93543

NORTH, HARPER Q TRUST
18071 MIRASOL DR
SAN DIEGO, CA 92128

MAEMURA, AKEMI
9658 WHEATLAND AVE
SHADOW HILLS, CA 91040

MOLINA, FRANCISCO
743 N GREENWOOD AVE
ONTARIO, CA 91764

VINOGRAD, DANIEL & NORA L TR
3830 VALLEY CENTRE DR 705-15
SAN DIEGO, CA 92130

RINKER, MERYLE G
3735 E MAINSAIL BLVD
TUCSON, AZ 85739

VINOGRAD, DANIEL & NORA L TR
3830 VALLEY CENTRE DR 705-15
SAN DIEGO, CA 92130

BAYSOUTH GROUP INC
8888 CLAIREMONT MESA BLVD C
SAN DIEGO, CA 92123

ANTONIO, CATALINO T & MERIAM C
3174 MOUNT OSO DR
SAN JOSE, CA 95148

FREEDNER, J ERIC
11157 LEADWELL ST
SUN VALLEY, CA 91352

BARNUM, ROBERT S & DENISE M
4037 PHELAN RD A
PHELAN, CA 92371

BAGHOOMIAN, JORES
710 ROSELLI ST
BURBANK, CA 91501

FONTANA, SYLVIA M
2707 MARIETTA ST
CHALMETTE, LA 70043

AMANA LAND SERVICES LLC
40 E MAIN ST 3000
NEWARK, DE 19711

YUN, ERICA N
1817 ARAPAHOE ST
LOS ANGELES, CA 90006

MARUYAMA, CAROL C
2700 CAHUENGA BLVD E 4208
LOS ANGELES, CA 90068

CHOU, WU H & KUEI H TR
3087 EAGLE POINTE DR
FULLERTON, CA 92833

ALEX, LEONORE B LIVING TRUST
2975 BLUEGRASS LN 1222
HENDERSON, NV 89074

DER SARKISSIAN, SARKIS M CO
TRUST
2443 VENUS DR
LOS ANGELES, CA 90046

PETERSON, RICHARD E CO TRUST
605 SAN GORGONIO ST
SAN DIEGO, CA 92106

TRUONG, MICHELLE
15910 HEAGHER ST
FOUNTAIN VALLEY, CA 92708

HARRIS, GLADYS
31033 BIRKDALE WAY
HAYWARD, CA 94544

YAMAMOTO, TOSHIKO TRUST
300 ELLINGBROOK DR
MONTEBELLO, CA 90640

PETERSON, RICHARD E CO TRUST
605 SAN GORGONIO ST
SAN DIEGO, CA 92106

YAMAMOTO, TOSHIKO
815 SOUTHVIEW RD 8
ARCADIA, CA 91007

MASLOFF, MARIA
3203 FALCON RIDGE RD
DIAMOND BAR, CA 91765

KRAVETZ, RICHARD J
917 PRIMROSE LN
HENDERSON, NV 89011

SANCHEZ, CAMELIA C
4547 RIVERSIDE DR
CHINO, CA 91710

BROOKE, ROBERT J ETAL
1408 E LAKESHORE DR
LAKE STEVENS, WA 98258

PEREZ,GERDARDO & DELFINO
831 W 147TH ST
GARDENA, CA 90247

AHN, DANIEL ETAL
2546 VIA LA MESA
CHINO HILLS, CA 91709

FLANDERS, KATHRYN
5555 VERNON CT
MONTCLAIR, CA 91763

HARPER ,JAMES ODELL
PO BOX 720288
PINON HILLS, CA 92372

CARY, PAUL B & PATSY N
PO BOX 721207
PINON HILLS, CA 92372

BARNA, RONALD & SUSAN
194 AMADOR RD
PINON HILLS, CA 92372

GARZA, DEANNE M
176 STATE HWY 138
PINON HILLS, CA 92372

WARDLAW, LUDMILLA Z
13910 WAGON WH DR
VICTORVILLE, CA 92392

JUNG, SOON DUK
10308 OLIVE ST
TEMPLE CITY, CA 91780

GRAVES, VICKIE
PO BOX 720664
PINON HILLS, CA 92372

FLANDERS, WINFIELD S III &
JEFFREY S
5555 VERNON CT
MONTCLAIR, CA 91763

KEMERKO ENTERPRISES LLC
PO BOX 250341
WEST BLOOMFIELD, MI 48325

LEE, KEUN BAI & WON HEE
PO BOX 721434
PINON HILLS, CA 92372

WARDLAW, LUDMILLA Z
13910 WAGON WHEEL DR
VICTORVILLE, CA 92392

KIM, MAXINE & MICHAEL J ETAL
412A 1ST ST
PALISADES PARK, NJ 7650

WALL, STEPHEN P & NORA B
PO BOX 721679
PINON HILLS, CA 92372

RACE, MATTHEW M & MARGARET C
11277 E 263RD ST
PINON HILLS, CA 92372

WILSON, MARK S
PO BOX 720028
PINON HILLS, CA 92372

KIM, MAXINE & MICHAEL J ETAL
412A 1ST ST
PALISADES PARK, NJ 7650

MCNAMEE, ROBERT L & KIYOKO
PO BOX 720564
PINON HILLS, CA 92372

IM, NICHOLAS N
23329 ALMAROSA AVE
TORRANCE, CA 90505

NEWCOMER, FRANKLIN B & KATHY J
PO BOX 720795
PINON HILLS, CA 92372

NELSON, LISA
PO BOX 3613
FONTANA, CA 92334

JOHNSON, LEO
123 JASPER ST 5
ENCINITAS, CA 92024

COVINGTON, JAMES E TRUST
13603 EL ESPEJO RD
LA MIRADA, CA 90638

POULSEN, NORMAN L
PO BOX 912
SAUSALITO, CA 94966

LEE, JONG I & YOUNG S TR
8612 LOS COYOTES DR
BUENA PARK, CA 90621

Appendix D – Environmental Commitment Record

District 7 ENVIRONMENTAL COMMITMENTS RECORD

SR 138 Safety Improvement Project

EA 265600

07-LA-138 PM 69.3/75.0

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP# / NSSP#	Env Doc/ Permits/ Specs/ Plans/ Estimates REFERENCE	Commitment Measure	Completed Signature Page	Remarks
BIOLOGY									
1-1	Environmentally Sensitive Areas	Biologist	as required	All phases of construction		Initial Study/NES	A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to any sensitive plant species potentially occurring in adjacent habitat outside of the BSA and if necessary maintain a buffer using ESA fencing during all phases of construction.		
1-2	Bird Protection- Nesting Birds	Biologist	weekly/ as required between 02-15 and 09-01	Construction	S5-625	Initial Study/NES	Vegetation removal must take place outside of the bird-nesting season (February 15th to September 1st). If vegetation removal takes place during the bird nesting season, a qualified biologist will conduct surveys to determine if birds are nesting. *In the event that nesting birds are observed, vegetation removal shall not be conducted until it is determined that the fledglings have left their nests. If this is not possible, a buffer of 150 ft for songbirds and 500 ft for raptors must be maintained during all phases of construction.		
	Permits	Biologist/RE		All phases of construction		CDFW 1600/NES	California Department of Fish and Wildlife 1602 Streambed Alteration Agreement will be obtained. Every permit stipulation must be followed.		
1-6	Compensatory Measures-Joshua Tree Woodland	Biologist/RE/ Landscape	as required	All phases of construction		Initial Study/NES	Permanent Impacts to 3.30 acres of Joshua Tree Woodland within the project impact area will be mitigated at no more than a 2:1 ratio. Native endemic vegetation and relocated Joshua Trees should be included in the landscaping plan.		
1-9	Joshua Tree Woodland Removal	Biologist	as required	All phases of construction	NSSP	Initial Study/NES	A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes to minimize impacts to Joshua Tree Woodland and if necessary maintain a buffer around individual Joshua Trees using ESA fencing during all phases of construction. Individual specimens will be properly relocated outside of the project impact area using a 90 inch tree spade.		

District 7 ENVIRONMENTAL COMMITMENTS RECORD
 SR 138 Safety Improvement Project
 EA 265600
 07-LA-138 PM 69.3/75.0

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP# / NSSP#	Env Doc/ Permits/ Specs/ Plans/ Estimates REFERENCE	Commitment Measure	Completed Signature Page	Remarks
1-10	Plant Surveys	Biologist	as required	Pre-construction		Initial Study/NES	Focused plant surveys should be conducted to determine presence/absence of sensitive plant species during the appropriate season prior to construction. *If sensitive plant species are found in the project impact area, Caltrans will maintain a buffer around the individual specimens using ESA fencing during all phases of construction. If this is not possible, a qualified biologist will transplant individual species and/or remove seed bed material with soil to nearby equally suitable sites beyond the project impact area.		
1-11	Animal Surveys	Biologist	as required	Pre-construction		Initial Study/NES	A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes to minimize impacts to adjacent habitat. A qualified biologist will also conduct focused surveys to determine presence/absence of sensitive animal species. According to CDFW, small mammal surveys have a shelf life of one year and should be conducted during the appropriate season prior to construction. *If individuals are found during pre-construction surveys, construction activities will stop and Caltrans will coordinate with CDFG to initiate Section 2081 process of the CDFG Code, and implement all conditions and mitigation measures in the Section 2081 permit. Feasible measures may be implemented to minimize impacts and may include, but are not limited to, having a qualified biologist monitor construction during clearing, grading, and or trenching activities for any occurrence of the species.		
	Desert Tortoise Surveys	Biologist	as required	Pre-construction	NSSP	Initial Study/NES	A qualified biologist will conduct clearance surveys to determine presence/absence of the species prior to construction. If tortoises are found, Caltrans will coordinate with CDFW per Section 2081 and USFWS per Section 7 respectively. If determined appropriate by the agencies, a permitted biologist would capture and relocate them outside of the project area. Installation of USFWS approved desert tortoise exclusion fencing would also be installed if necessary.		

District 7 ENVIRONMENTAL COMMITMENTS RECORD

SR 138 Safety Improvement Project

EA 265600

07-LA-138 PM 69.3/75.0

Log No.	Commitment Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP# / NSSP#	Env Doc/ Permits/ Specs/ Plans/ Estimates REFERENCE	Commitment Measure	Completed Signature Page	Remarks
1-12	Bat Survey-Western Mastiff Bat	Biologist	as required	Pre-construction		Initial Study/NES	A qualified biologist will recommend approved limits of disturbance, including construction staging areas and access routes, to minimize impacts to adjacent habitat. Pre-construction surveys will be conducted of rock faces adjacent to the roadway and any trees designated for removal due to the initiation of construction related activities to assess any potential presence of the species. Clearing and grubbing of vegetation will be conducted outside of the bat maternity seson. If clearing and grubbing of vegetation need to be conducted during bat maternity season (March 1st to October 15th), a qualified biologist will monitor construction during clearing, grubbing and/or trenching activities for any occurance of the species breeding.		
WATER QUALITY REQUIREMENTS									
14-1	Stormwater Pollution Prevention Plan (SWPPP)/Water Pollution Control Program (WPCP)								
14-2	Erosion Control								
14-3	Permanent Storm Water Control Measures including Operations and Maintenance Information								
14-4	Monitoring Required								
14-5	Temporary BMPs	Stormwater	as required	Pre/Post Construction		Initial Study pgs 16 and 48	All appropriate BMP's will be implemented during construction and post-construction to avoid impacts.		
14-6	Impacted water bodies								
14-7	High risk water resources								
14-8	Permanent treatment controls								
14-9	DWR Encroachment Permit	Project Manager	as required	pre construction		Initial Study pages 8 and 45	The proposed work will cross DWR's ROW. An encroachment permit will be required prior to start of construction.		
14-10	(other - insert as necessary)								
14-11	(other - insert as necessary)								