FINAL

ENVIRONMENTAL ASSESSMENT
FOR THE PROPOSED IMPROVEMENTS OF INTERSTATE 8 AND HIGHWAY 80 CHECKPOINTS U.S. BORDER PATROL, SAN DIEGO SECTOR

Department of Homeland Security
U.S. Customs and Border Protection
U.S. Border Patrol

JULY 2012

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July 2012

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INTRODUCTION

1.0 INTRODUCTION

1.1 BACKGROUND

In 1924, Congress created the U.S. Border Patrol (USBP) to serve as the law enforcement entity of the Immigration and Naturalization Service (INS), and it did so until November 25, 2002, when Congress transferred all INS responsibilities to the newly created Department of Homeland Security (DHS) with the passage of the Homeland Security Act of 2002 (Public Law [PL] 107-296). USBP was officially transferred into the Office of Border Patrol (OBP), under DHS and U.S. Customs and Border Protection (CBP), on March 1, 2003.

CBP prepared this Environmental Assessment (EA) to address the potential effects, beneficial and adverse, resulting from the proposed improvements and maintenance of two USBP checkpoints in its San Diego Sector, California. The checkpoints are located on Interstate 8 (I-8) and Old Highway 80 (Highway 80) east of Alpine, California. The proposed improvements would be implemented to enhance safety of USBP agents and the general public and to allow the checkpoints to operate more effectively.

The proposed improvements would enhance the working environment for the USBP agents by providing shade and additional space outside the normal traffic lanes to conduct primary and secondary inspections. In addition, the proposed improvements would allow the free flow of traffic during times when the checkpoints are closed, alleviating some of the risks inherent with the current design that requires protective concrete barriers to be installed along the lanes.

1.2 STUDY LOCATION

The checkpoints are located along I-8 and Highway 80 between Buckman Springs Road and Pine Valley, California (Figure 1-1), within the USBP San Diego Sector. The San Diego Sector encompasses all of San Diego County, which is bordered by Orange and Riverside counties to the north, Imperial County to the east, Mexico to the south, and the Pacific Ocean to the west.

1.3 PURPOSE AND NEED

CBP and USBP propose several improvements to two USBP checkpoints for the purpose of facilitating the safe and effective operation of the checkpoints. At the I-8 checkpoint, USBP agents provide primary inspections of vehicles within the existing two lanes and, if necessary, secondary inspections are conducted in an area where vehicles can be removed from the normal traffic lanes but remain within the I-8 right-of-way (ROW). K-rails or Jersey barriers (i.e., concrete barriers) are placed along the outside of both lanes to ensure that no vehicles illegally bypass the checkpoint. USBP agents and K-9 units must stand within the traffic lanes with no shade or rain canopy to conduct the primary inspections. Consequently, during inclement weather the I-8 checkpoint is often closed, which provides opportunities for cross-border violators to evade detection and apprehension.

Figure 1-1. Vicinity Map

The current Highway 80 checkpoint is located approximately 300 yards west of the I-8 checkpoint, where Highway 80 and I-8 parallel each other. The Highway 80 checkpoint operates concurrently with the I-8 checkpoint to enhance detection and apprehension of illegal cross-border activities. Highway 80 is a two-lane road with no shoulders. Curves and hills are typical along Highway 80 and the checkpoint is located within one of the relatively few level, straight reaches of the highway. USBP agents conduct the primary inspections within the westbound traffic lane. If secondary inspections are required, traffic can be delayed, as there is little extra space for such detailed inspections.

The need for the Proposed Action Alternative is to provide the following:

- adequate space and facilities (e.g., administrative, detention, processing) for the agents and staff currently operating the checkpoints
- an increase to the width of approach lanes to allow sufficient space to safely conduct primary inspections and to allow for the free flow of public traffic during times when the checkpoints are closed
- adequate lighting to enhance security and detection capabilities
- a means to operate the checkpoint during extremely hot or other inclement conditions
- a more safe, effective, and efficient work environment

1.4 REGULATORY AUTHORITY

The primary sources of authority granted to USBP agents are the Immigration and Nationality Act (INA) of 1959 (PL 82-414) contained in Title 8 of the U.S. Code (USC) "Aliens and Nationality" and other statutes relating to the immigration and naturalization of aliens. The secondary sources of authority are administrative regulations implementing those statutes, judicial decisions, and administrative decisions of the Board of Immigration Appeals. In addition, the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (PL 104-208) and subsequently the Homeland Security Act of 2002 (PL 107-296) mandate that DHS acquire and improve equipment and technology along the border, hire and train new agents for the border region, and develop effective border enforcement strategies.

Subject to constitutional limitations, USBP agents may exercise the authority granted to them in the INA. The statutory provisions related to enforcement authority are found in 8 USC 1357(a, b, c, e), 1225, 1324(b, c), 1324(a), and 1324(c). Other statutory sources of authority are found in 18 USC "Crimes and Criminal Procedure," which has several provisions that specifically relate to enforcement of the immigration and nationality laws; 19 USC 1401(i) "Officer of the Customs; Customs Officer" relating to U.S. Customs Service cross-designation of immigration officers; and 21 USC 878 "Powers of Enforcement Personnel" relating to Drug Enforcement Agency cross-designation of immigration officers.

1.5 PUBLIC INVOLVEMENT

Consultation and coordination with Federal, state, and local agencies have occurred during preparation of the EA. Included are contacts that were made during the development of the

action alternatives and writing of the EA. Formal and informal coordination have been conducted with the following agencies:

- U.S. Fish and Wildlife Service (USFWS)
- California Department of Fish and Game (CDFG)
- U.S. Environmental Protection Agency (EPA)
- California State Historical Preservation Office (SHPO)
- Native American Tribes
- California Department of Transportation (Caltrans)
- California Department of Forestry and Fire Protection
- U.S. Forest Service (USFS), Cleveland National Forest
- California Environmental Protection Agency (CalEPA)
- California Regional Water Quality Control Board
- San Diego County

The draft version of the EA and Finding of No Significant Impact (FONSI) were made available for public review for 30 days, beginning the day the Notice of Availability (NOA) was published in the *San Diego Tribune* (see Exhibit 1-1). The draft EA and FONSI were also available electronically at http://ecso.swf.usace.army.mil/Pages/Publicreview.cfm. In addition, the draft EA and FONSI were available for review at the Pine Valley Branch Library, 28804 Old Highway 80, Pine Valley, California 91962. During this review period, only two comment letters were received. These letters and CBP's responses to the comments are included in Appendix B, along with other correspondence sent or received during the preparation of the EA.

1.6 SCOPE OF THE ANALYSIS

The scope of this EA will include the analysis of effects resulting from the improvements and maintenance of the checkpoints. This analysis does not include an assessment of operations conducted in the field and away from the checkpoint. USBP operations would continue unchanged regardless of whether the checkpoint improvements are implemented. Improvements to the checkpoint would occur primarily within areas that have been previously disturbed and/or are within existing USBP easements or Caltrans ROW. The potentially affected biological and human environment would include resources associated with San Diego County; however, most potential effects would be limited to the construction site and resources immediately adjacent to the proposed sites.

1.7 APPLICABLE ENVIRONMENTAL GUIDANCE, STATUTES, AND REGULATIONS

This EA was prepared by CBP in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 USC 4321-4347) and the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), as well as the DHS "Environmental Planning Directive" (Directive 023.1) and other pertinent environmental statutes, regulations, and compliance requirements, as summarized in Table 1-1.

Exhibit 1-1. Notice of Availability

U-T San Diego

P.O. Box 120191, San Diego, CA 92112-0191

AFFIDAVIT OF PUBLICATION

GULF SOUTH RESEARCH CORPORATION
8081 GSRI AVENUE
ATTN: CAREY L. PERRY
BATON ROUGE, LA 70820

STATE OF CALIFORNIA} ss.
County of San Diego}

The Undersigned, declares under penalty of perjury under the laws of the State of California: That she is a resident of the County of San Diego. That she is and at all times herein mentioned was a citizen of the United States, over the age of twenty-one years, and that she is not a party to, nor interested in the above entitled matter; that she is Chief Clerk for the publisher of

The San Diego Union-Tribune

a newspaper of general circulation , printed and published daily in the City of San Diego, County of San Diego, and which newspaper is published for the dissemination of local news and intelligence of a general character, and which newspaper at all the times herein mentioned had and still has a bona fide subscription list of paying subscribers, and which newspaper has been established, printed and published at regular intervals in the said City of San Diego, County of San Diego, for a period exceeding one year next preceding the date of publication of the notice hereinafter referred to, and which newspaper is not devoted to nor published for the interests, entertainment or instruction of a particular class, profession, trade, calling, race, or denomination, or any number of same; that the notice of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

May 11, 2012

Chief Clerk for the Publisher

5/11/12

Date

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NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED IMPROVEMENTS OF INTERSTATE 8 AND HIGHWAY 80 CHECKPOINTS DEPARTMENT OF HOMELAND SECURITY U.S. CUSTOMS AND BORDER PROTECTION U.S. BORDER PATROL SAN DIEGO SECTOR

The public is hereby notified of the availability of the Draft Environmental Assessment for the Proposed Improvements of Interstate 8 and Highway 80 Checkpoints, Department of Homeland Security, U.S. Customs and Border Protection, U.S. Border Patrol, San Diego Sector.

This EA addresses the potential effects resulting from the proposed improvements and maintenance of two U.S. Border Patrol (USBP) checkpoints located on Interstate 8 (I-8) and Old Highway 80 (Highway 80) east of Alpine in San Diego County, California. The proposed improvements would be implemented to enhance safety of USBP agents and the general public and to allow the checkpoints to operate more effectively. The proposed improvements would include expansion of the current footprint at the I-8 and Highway 80 checkpoints and would include installation of lights, shade canopies, and other minor improvements.

The Draft EA and FONSI will be available for review at the following locations:

Descanso Branch San Diego County Library 9545 River Drive Descanso, CA 91916	Pine Valley Branch San Diego County Library 28804 Old Highway 80 Pine Valley, CA 91962

The Draft EA and FONSI can also be viewed via the Internet at the following address:
http://ecso.swf.usace.army.mil/pages/publicreview.cfm

The 30-day public comment period begins with publication of this Notice of Availability, expected to occur on May 17, 2012, and closes on June 18, 2012. Any comments concerning the Draft EA and FONSI may be sent by mail to:

Mr. John Petrilla
U.S. Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Table 1-1. Relevant Policy Documents, Invoking Actions, Regulatory Requirements, and Status of Compliance*

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
Archaeological Resources Protection Act of 1979 16 USC § 470 et seq.	Department of Interior	Excavation, removal, damage, or other alteration or defacing; or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands 43 CFR 7.4	Because activities are exclusively for purposes other than the excavation and/or removal of archaeological resources, even though those activities might incidentally result in the disturbance of archaeological resources, no permit shall be required	No adverse impact on historic properties. Section 106 consultation is ongoing.
Clean Air Act of 1963 16 USC § 470 et seq.	EPA	Any Federal action where the total of direct and indirect emissions in a non-attainment area would equal or exceed the provided rates 40 CFR 51	Project emission levels were determined to be less than *de minimis* thresholds; therefore, a determination of conformity with applicable implementation plan is not required	Only minor emissions would occur during construction.
Comprehensive Environmental Response, Compensation and Liability Act of 1980 42 USC § 9601 et seq.	EPA	Release or threatened release of a hazardous substance 40 CFR 302	Development of emergency response plans, notification, and cleanup	To be completed by USBP during design and operation.
Endangered Species Act (ESA) of 1973 16 USC § 1531 et seq.	USFWS	All actions in which there is discretionary Federal involvement or control 50 CFR 402.03	Determination of no jeopardy to listed species and no destruction or adverse modification of critical habitat through consultation with the USFWS	Project may affect but is not likely to adversely affect the Quino checkerspot butterfly. Informal Section 7 consultation ongoing and concurrence has been requested.
Farmland Protection Policy Act of 1981 7 USC § 9601 et seq.	Natural Resource Conservation Service (NRCS)	Any Federal action that could affect soils designated as prime or unique 7 CFR 658	Identify and take into account the adverse effects on the protection of farmland	No prime farmland soils would be impacted.

Table 1-1, continued

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
Federal Water Pollution Control Act of 1977 (also known as Clean Water Act) 33 USC § 1251 et seq.	EPA	Storage, use, or consumption of oil and oil products, which could discharge oil in quantities that could affect water quality standards, into or upon the navigable waters of the United States 40 CFR 112	Preparation of a Spill Prevention, Control, and Countermeasures Plan	To be completed by CBP or contractor.
Clean Water Act (CWA)	EPA	Discharge of pollutants 40 CFR 122	Obtain a general National Pollutant Discharge Elimination System Permit	To be completed by CBP or contractor.
Migratory Bird Treaty Act of 1918 16 USC § 703	USFWS	Any CBP action resulting in the take of any migratory bird, or the parts, nests, or eggs of such bird 50 CFR 21.11	Avoidance of take or application for permit	Proposed surveys prior to any construction beginning during nesting season.
National Historic Preservation Act of 1966 16 USC § 470 et seq.	Advisory Council on Historic Preservation (ACHP)	Any undertaking by CBP 36 CFR 800.3	Assessment of effects through consultation with the ACHP	No adverse impact on historic properties. Section 106 consultation is ongoing.
Occupational Health and Safety Act of 1970 29 USC § 651 et seq.	Occupational Safety and Health Administration, Department of Labor	Employees performing in a workplace 29 CFR 1910.5 (a)	Adherence to occupational health and safety standards	To be completed by CBP during design and operation.

Table 1-1, continued

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
Resource Conservation and Recovery Act (RCRA) of 1976 42 USC § 6901 et seq.	EPA	Collection of residential, commercial, and institutional solid wastes and street wastes 40 CFR 243	Adherence to guidelines for waste storage and safety and collection equipment, frequency, and management	To be completed by CBP during design and operation.
		Procurement of more than $10,000 annually of products containing recovered materials 40 CFR 247	Procure designated items composed of the highest percentage of recovered materials practicable	To be completed by CBP during design and operation.
		Recovery of resources from solid waste through source separation 40 CFR 246	Recovery of high-grade paper, residential materials, and corrugated containers	To be completed by CBP during design and operation.
RCRA of 1976 42 USC § 6901 et seq.	EPA	Treatment, storage, or disposal of hazardous waste on-site 40 CFR 262.10(c)	Determination of hazardous or non-hazardous nature of solid waste, obtain a USEPA identification number if necessary, properly accumulate hazardous waste, and maintain a record	To be completed by CBP during design and operation.
Coastal Zone Management Act of 1972 16 USC § 1451 et seq.	National Oceanic and Atmospheric Administration	Development and other actions occurring within designated coastal zones 15 CFR 923	Submittal of Coastal Consistency Determination and concurrence from the affected state's coastal commission	Site is not within the California Coastal Zone.
Executive Order (EO) 11988: Floodplain Management 42 Federal Register (FR) 26,951 (May 24, 1997)	Water Resources Council, Federal Emergency Management Agency, Council on Environmental Quality	Acquisition and management of Federal lands; Federally undertaken, financed, or assisted construction; conducting Federal activities affecting land use	Determine whether the proposed action will occur in a floodplain, then evaluate potential effects of any action in a floodplain	No floodplains would be impacted by the Proposed Action.
EO 11990: Protection of Wetlands 42 FR 26,691 (May 24, 1977)	U.S. Army Corps of Engineers (USACE), EPA	Acquisition and management of Federal lands; Federally undertaken, financed, or assisted construction; conducting Federal activities affecting land use	Take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands	No waters of the United States, including wetlands, would be impacted by the Proposed Action.

Table 1-1, continued

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations 59 FR 7629 (February 11, 1994)	EPA	All programs or activities receiving Federal financial assistance that affect human health or the environment	Analyze the environmental effects, including human health, economic, and social effects of CBP actions, including effects on minority communities and low-income communities	No effects on minority communities or low-income communities. Item eliminated from EA.
EO 13045: Protection of Children from Environmental Health Risks and Safety Risks 62 FR 19883 (April 23, 1997)	EPA	Any Federal action that has the potential to place children at higher health and safety risks	Identify and assess environmental health risks and safety risks that may disproportionately affect children	No children would be affected by the Proposed Action. This item eliminated from EA.
EO 13101: Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition 63 FR 49648	EPA, Department of Energy (DOE)	Acquisition planning, development of procurement programs, operation of a Federal facility	Incorporate waste prevention and recycling in the agency's daily operations and work to increase and expand markets for recovered materials through greater Federal government preference and demand for such products	To be completed by CBP during design and operation.
EO 13123: Greening the Government Through Efficient Energy Management 64 FR 30851	EPA, DOE	Operation and maintenance of a Federal facility	Reduce emissions of greenhouse gases, reduce energy consumption, strive to expand use of renewable energy, reduce use of petroleum, and reduce water consumption	To be completed by CBP during design and operation.
EO 13148: Greening the Government Through Leadership in Environmental Management 65 FR 24593	EPA, DOE	Operation and maintenance of a Federal facility	Integrate environmental accountability into agency day-to-day decision making and long-term planning processes, across all agency missions, activities, and functions	To be completed by CBP during design and operation.

Table 1-1, continued

Policy Document	Administrative Authority	Invoking Action	Requirements for Compliance	Status of Compliance
EO 13514: Federal Leadership in Environmental, Energy, and Economic Performance 74 FR 52117 (October 8, 2009)	EPA, DOE	Construction, operation, and maintenance of a Federal facility; aircraft operations and worker commutes	Increase energy efficiency; measure, report, and reduce greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; design, construct, maintain, and operate high-performance sustainable buildings in sustainable locations	To be completed by CBP during design and operation.

*Not All-Inclusive

SECTION 2.0
PROPOSED ACTION AND ALTERNATIVES

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 ALTERNATIVE 1: NO ACTION ALTERNATIVE

Under the No Action Alternative, CBP would not improve the I-8 and Highway 80 checkpoints; maintenance and operation of each checkpoint, however, would continue in the current manner and frequency. The existing checkpoints would continue to be operated sporadically, subject to climatic conditions. Traffic delays are inherent at checkpoints and would continue at their current rate. Risks to the general public and USBP agents due to existing design and placement of checkpoint infrastructure would also continue. This alternative would hinder USBP's ability to effectively respond to high levels of illegal cross-border activity. The No Action Alternative does not meet the purpose and need for the proposed project, but will be carried forward for analysis, as required by the CEQ regulations. The No Action Alternative describes the existing conditions in the absence of any other alternative and will be used for comparison of other action alternatives. Figures 2-1 and 2-2 show the current conditions and infrastructure of the checkpoints.

2.2 ALTERNATIVE 2: PROPOSED ACTION ALTERNATIVE

The Proposed Action Alternative would include expansion of the current footprint at the I-8 and Highway 80 checkpoints and would include installation of lights, wastewater holding tanks, shade canopies, and other minor improvements. The expansion at I-8 would consist of construction of two new exit lanes from I-8 to the inspection area and construction of retaining walls and guard rails at the edge of the expansion area. This expansion would occur near the eastern end of the existing checkpoint, within existing cut slopes that were created during construction of I-8, as depicted on Figure 2-3. The expansion at the I-8 checkpoint would also provide a much safer traffic flow during the times the checkpoint is closed. The current situation consists of K-rail or Jersey barriers installed adjacent to the highway lanes to prevent illegal bypass of the checkpoint; however, these barriers reduce or eliminate the shoulder areas and compress the area in which USBP agents can safely work. A shade canopy would be placed over the expanded lane areas. A secondary inspection area/canopy would be adjacent to the administrative building, which would facilitate supervision of the checkpoint operation. New permanent lighting would be installed and consists of 10 light standards equipped with four luminaries each. Metal halide lamps would be used to provide the most accurate color-rendering index. Illumination would be directed down and toward the traffic lanes for inspection and safety purposes. Illumination intensity at ground level would be expected to achieve 24 foot-candles. Backshields would be placed on the lights to reduce or eliminate light trespass into vegetated areas adjacent to the checkpoint. Installation of the permanent lights would allow USBP to discontinue the use of all or most of the portable light generators that are currently used. Power for the lights would be provided by underground lines from existing, adjacent electrical power poles.

Some existing pavement would be demolished and reinstalled during the checkpoint improvements to allow relocation or support of some of the facilities such as the hydraulic vehicle lift and spike strips. The existing unimproved ramp that allows USBP agents at the I-8

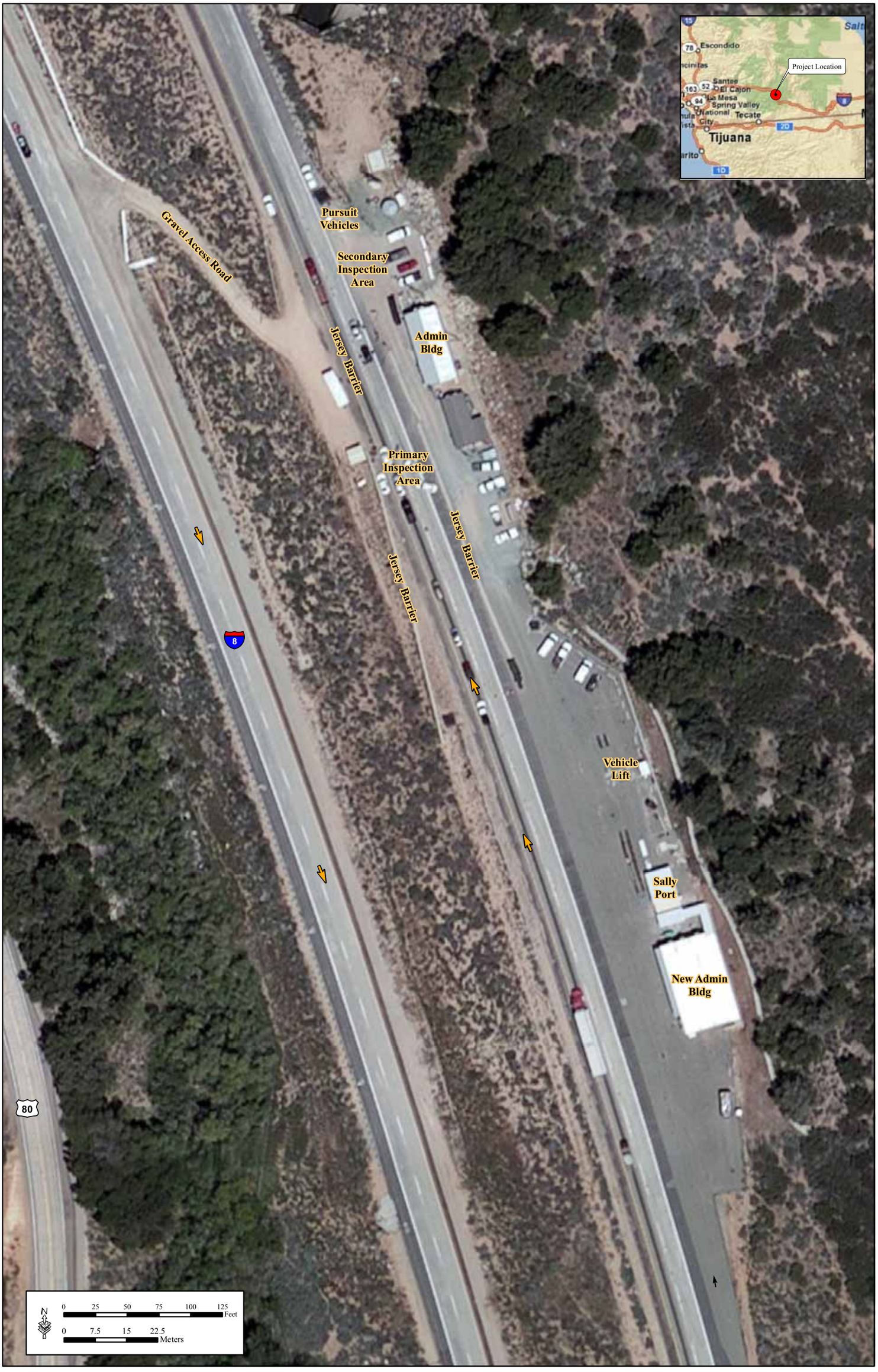

Figure 2-1. Existing Facilities at I-8 Checkpoint

GSRC

November 2011

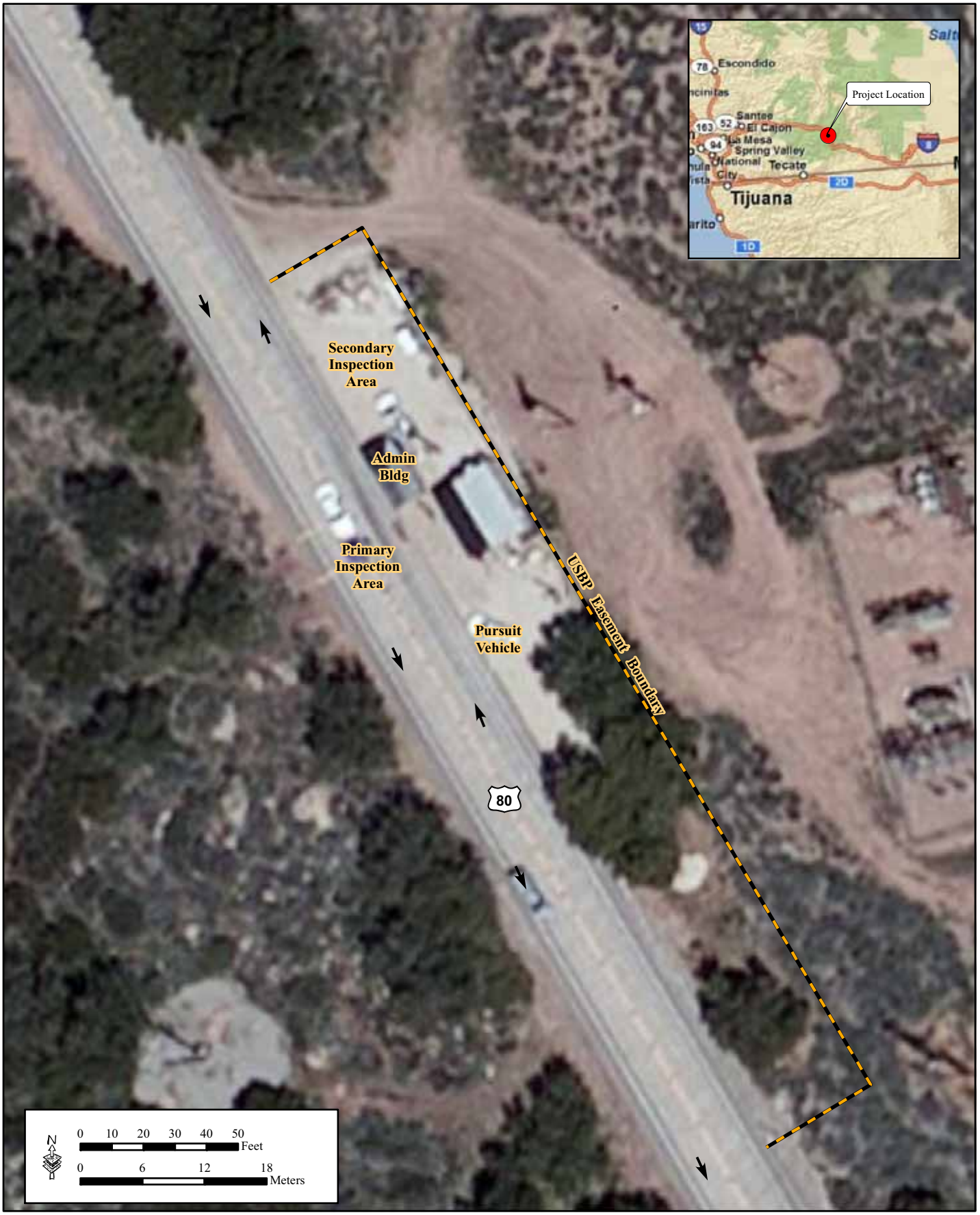

Figure 2-2. Existing Facilities at Highway 80 Checkpoint

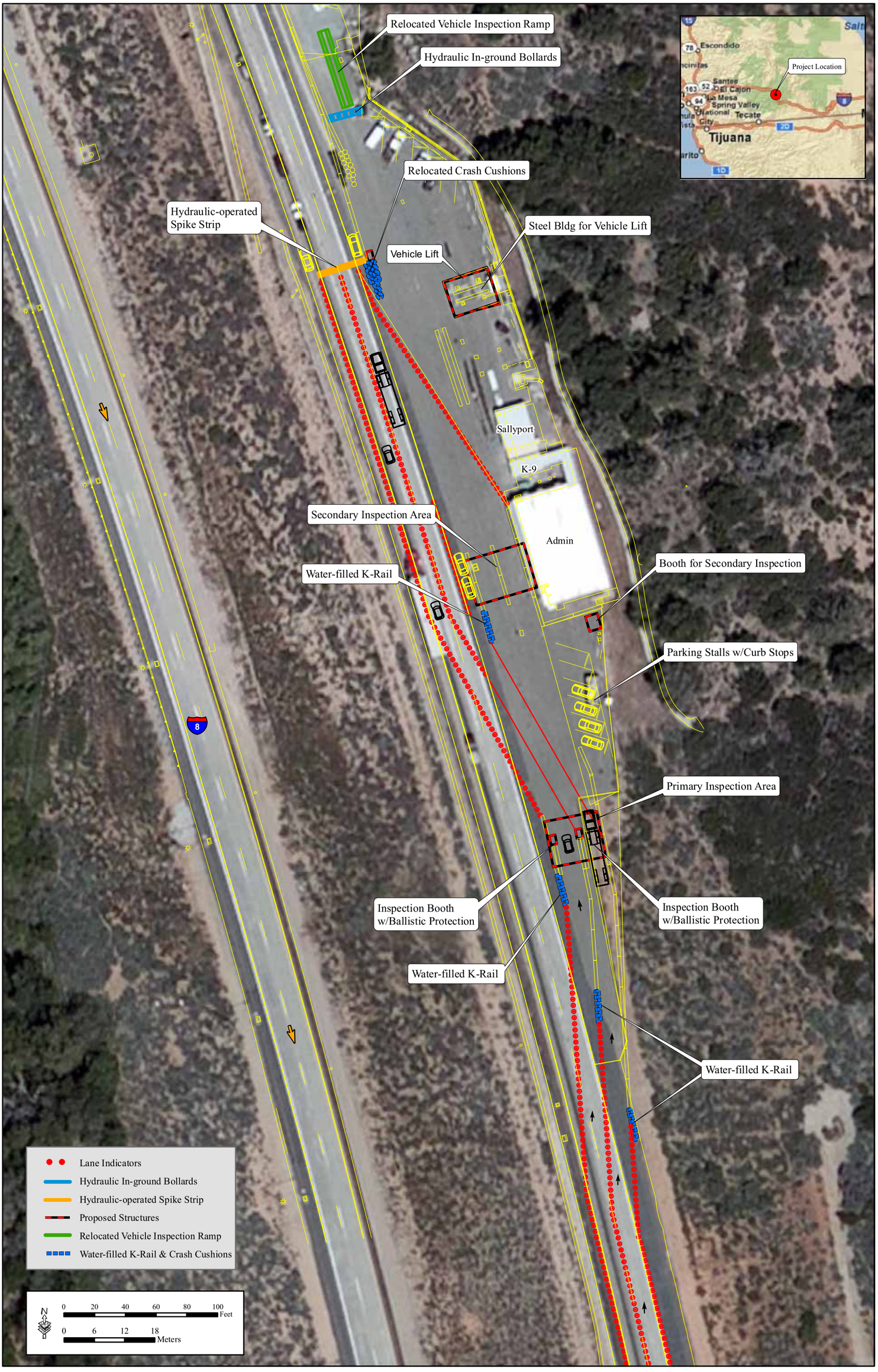

Figure 2-3. Alternative 2: Proposed Action for I-8 Checkpoint

checkpoint to access the eastbound lanes of I-8 would be paved with asphalt. This access road is approximately 60 feet long and 10 feet wide. Paving this road would reduce erosion and associated maintenance and increase the safety of USBP agents during inclement weather. Appropriate signage would be installed to note that this ramp is for emergency and authorized vehicles only.

The improvements at the Highway 80 checkpoint would involve ground disturbance and vegetation clearing to the current easement boundary, which is approximately 10 to 12 feet wide by 1,000 feet long. This area would be paved to facilitate parking and the expanded lanes/inspection area. The paved area would be expanded to accommodate access lanes to the inspection stations off of the Highway 80 road surface. Three coast live oak trees (*Quercus agrifolia*) are within this footprint, but every attempt would be made to avoid removing these trees. The easternmost tree might require removal due to safety concerns, as it is near the beginning of the expanded lanes. Limbs would be cut on all three trees to provide proper vehicle clearance and line of sight for the agents working the checkpoint. In the future, these trees would be maintained as needed to continue to provide this clearance and line of sight for agents.

Permanent lights would be installed to provide security and enhance inspection. The lighting design would be similar to that described for the I-8 checkpoint; however, nine light standards with five luminaries each would be required. Other improvements proposed at the Highway 80 checkpoint include installation of an underground wastewater holding tank, a new modular building, a dedicated water line from an adjacent USBP well, and additional parking. These components are depicted in Figure 2-4.

Completion of these improvements would provide a more safe, effective, and efficient work environment for agents. These improvements would also bring the facilities up to CBP operational standards for checkpoints. The checkpoints would be better suited for operation during hot and inclement weather, and provide adequate space to safely conduct primary inspections.

Completion of these improvements would require approximately 6 months. An encroachment permit would be required from Caltrans prior to implementation of the proposed activities. Improvements to the I-8 checkpoint would occur first, followed by the improvements to the Highway 80 checkpoint, as funding becomes available. Backhoes and bulldozers would be used to excavate and grade/level soils. A rock auger would be used to drill the holes (approximately 16 inches in diameter) for the light poles and (approximately 30 inches in diameter) for the shade canopies' column base support piers. The depth of the holes is expected to be approximately 10 feet below grade. The holes would be backfilled with concrete. A crane would also be used to assemble the shade canopies and set all light poles.

Additionally, the continued maintenance, as well as potential renovations of or minor additions to the checkpoints, would be expected. Such activities could include, but are not limited to, minor renovations and additions to buildings such as realigning interior spaces of an existing building, adding a small storage shed to an existing building, installing a small antenna on an already existing antenna tower that does not cause the total height to exceed 200 feet; and installing or maintaining kennels; security systems and lighting; parking areas; and stormwater

Figure 2-4. Alternative 2: Proposed Action for Highway 80 Checkpoint

detention basins. Other maintenance activities could include routine upgrade, repair, and maintenance of the checkpoint buildings, roofs, parking area, grounds, or other facilities that would not result in a change of functional use (e.g., replacing door locks or windows, painting interior or exterior walls, resurfacing a road or parking lot, culvert maintenance, grounds maintenance, or replacing essential station components such as an air conditioning unit). These types of activities are typically authorized under CBP's list of Categorical Exclusions (CATEX) under NEPA; consequently, they will not be addressed further in this EA. CBP will evaluate each future repair, maintenance, or improvement action to confirm that a CATEX would apply to the action; if not, supplemental NEPA documentation would be required.

2.3 ALTERNATIVE 3: NO LANE EXPANSION AT I-8

Under this alternative, the expansion of the lanes at the I-8 checkpoint would not occur. The shade canopy would be installed across the entire width of the westbound lanes of I-8 (Figure 2-5). All other improvements as described at both checkpoints would be implemented. This alternative would restrict the effective area in which USBP agents would conduct checkpoint operations. The placement of hard structures (i.e., canopy support pilings) adjacent to the travel lanes would increase risk to the general public when the checkpoint is closed and traffic is traveling at higher rates of speed on I-8.

2.4 OTHER ACTION ALTERNATIVES CONSIDERED BUT ELIMINATED

As the checkpoints are existing and relocation of these facilities would result in additional costs and environmental damages, no other alternative locations were considered. Both checkpoints have been strategically located so that they can be operated in tandem and with the same USBP agents; improvements to only one of the checkpoints, therefore, would not satisfy the purpose and need to enhance agent and public safety, enforcement effectiveness, and the workplace environment. Consequently, no other alternatives are considered further.

2.5 SUMMARY

The No Action Alternative, Proposed Action Alternative, and Alternative 3 will be carried forward for analysis in the EA. As shown in Table 2-1, only the Proposed Action Alternative meets the purpose and need as described in Section 1.5.

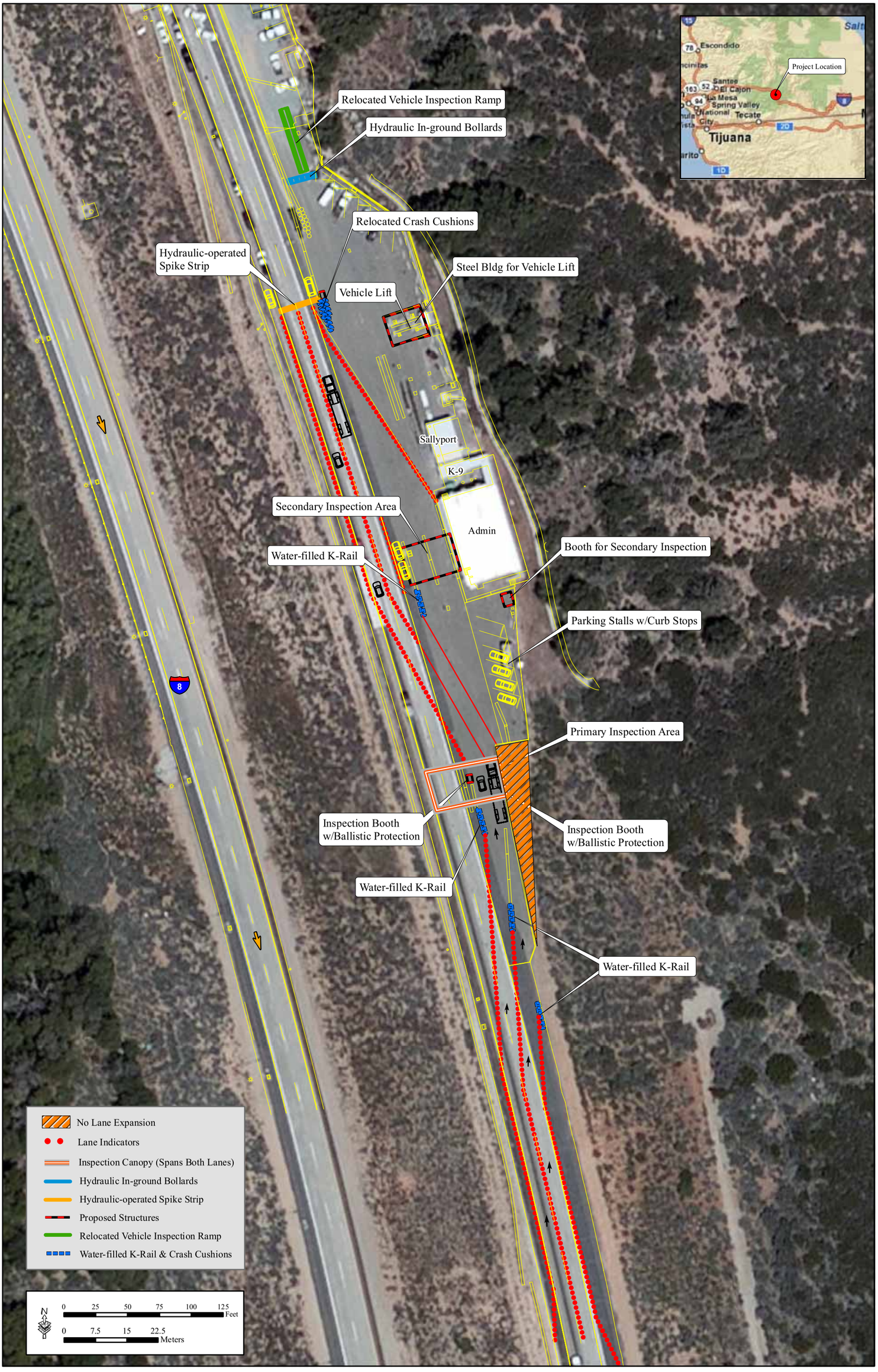

Figure 2-5. Alternative 3: No Lane Expansion Alternative for I-8 Checkpoint

Table 2-1. Alternatives Matrix

Purpose and Need	No Action Alternative	Proposed Action Alternative	Alternative 3: No I-8 Lane Expansion
Will the alternative provide adequate space and facilities (e.g., administrative, detention, processing) for the agents and staff currently operating the checkpoints?	No	Yes	Yes
Will the alternative increase the width of approach lanes to allow sufficient space to safely conduct primary inspections and allow for the free flow of public traffic during times when the checkpoints are closed?	No	Yes	No
Will the alternative provide adequate lighting to enhance security and detection capabilities?	No	Yes	Yes
Will the alternative provide a means to operate the checkpoint during extremely hot or other inclement conditions?	No	Yes	Yes
Will the alternative provide a more safe, effective, and efficient work environment?	No	Yes	Yes

SECTION 3.0
AFFECTED ENVIRONMENT AND CONSEQUENCES

3.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

Impacts (consequence or effect) can be either beneficial or adverse, and can be either directly related to the action or indirectly caused by the action. Direct impacts are those effects that are caused by the action and occur at the same time and place (40 CFR 1508.8[a]). Indirect impacts are those effects that are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable (40 CFR 1508.8[b]). As discussed in this section, the alternatives may create temporary (lasting the duration of the project construction), short-term (up to 3 years), long-term (3 to 10 years following construction), or permanent impacts or effects. Whether an impact is significant depends on the context in which the impact occurs and the intensity of the impact.

Impacts can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. Significant impacts are those effects that would result in substantial changes to the environment (40 CFR 1508.27) and should receive the greatest attention in the decision-making process. Minor impacts are those that would result in minimal changes to the environment. The following discussions describe and, where possible, quantify the potential effects of each alternative on the resources within or near the project sites. All impacts described below are considered to be adverse unless stated otherwise.

3.1 PRELIMINARY IMPACT SCOPING

This section of the EA describes the natural and human environment that exists within the alternative sites and region of influence (ROI), and the potential impacts of the No Action and the two action alternatives outlined in Section 2.0 of this document. The ROI for this project is San Diego County. Only those parameters that have the potential to be affected by any of the alternatives are described, as per CEQ guidance (40 CFR 1501.7 [3]). Some resource discussions are limited in scope due to the lack of direct effect from the proposed project on the resource, or because that particular resource is not located within the project area. Resources dismissed from further discussion are:

Climate
The proposed checkpoint improvements would have no effect on the climate.

Wild and Scenic Rivers
The proposed checkpoint improvements would not affect any reach of river designated as Wild and Scenic, as none are located in the vicinity of the checkpoints.

Geology
Geologic resources include physical surface and subsurface features. The proposed improvements would not disturb underlying geologic resources, since only near-surface modifications would be implemented. Therefore, no impacts on geologic features would be anticipated.

Utilities and Infrastructure
The checkpoint improvements would require only a negligible increase in electrical demand since the existing grid powers the other facilities at the checkpoint. No increased demand on other infrastructure is anticipated.

Roadways and Transportation
No new roads would be constructed, traffic patterns (including traffic volume or duration) would not be altered, and additional USBP patrol trips are not being generated as a result of the checkpoint improvements. Therefore, no impacts on roadways or transportation would be anticipated.

Aquatic Resources
There are no perennial or intermittent waterbodies near the project sites. Therefore, no impacts on aquatic environments or species would be anticipated.

Floodplains
There are no floodplains mapped by the Federal Emergency Management Agency within or near the checkpoints. Therefore, no impacts on floodplains or floodplain functions would be anticipated.

Hydrology and Groundwater
The proposed improvements would not alter any surface water hydrology. Minor amounts of water would be required for dust suppression during initial grading and demolition activities. Future maintenance and operation of the checkpoints would not result in additional demand on water supplies. Therefore, hydrology and groundwater issues are not discussed further.

Environmental Justice
EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires the consideration of impacts and adverse effects on minority populations and low-income populations. The project is located along existing highways in rural areas with no surrounding community. Adverse impacts on minority and low-income populations would not occur.

Protection of Children
EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires each Federal agency to identify and assess environmental health risks and safety risks that may disproportionately affect children and ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. No children live in proximity to the project site; therefore, the checkpoint improvements would not adversely affect any children.

3.2 LAND USE

3.2.1 Affected Environment
The major land uses in San Diego County include agriculture, rangeland, urban, forest, recreation, special use, and bodies of water. San Diego County encompasses approximately 4,255 square miles (County of San Diego 2004a). The State of California and the National Park

Service are the primary landholders in San Diego County. The City of San Diego is the primary urban center of the county. Government-owned land accounts for 54 percent (1.45 million acres) of the county, of which 51 percent (739,000 acres) is Federally owned, 40 percent (580,000 acres) is state-owned, and 9 percent (130,500 acres) is local government- or municipality-owned (County of San Diego 2004b). Waterbodies encompass approximately 16,360 acres of the county's total land area (County of San Diego 2004b).

Land use at the proposed sites is currently transportation/highways (i.e., Highway 80 and I-8). These highways are included in the Mobility Element of the San Diego County Land Use Plan. Surrounding lands are undeveloped and designated as National Forest, State Parks, or Public Agency Lands on the August 2011 General Plan Land Use Map. The proposed checkpoint station improvements would be located within existing highway ROWs; the Highway 80 checkpoint is currently leased by the County of San Diego from the Cleveland National Forest. The I-8 ROW is owned by Caltrans.

3.2.2 Environmental Consequences

3.2.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative, no improvements would be made to the existing checkpoints. Therefore, no new impacts, either beneficial or adverse, would occur on the land use within the project region.

3.2.2.2 Alternative 2: Proposed Action Alternative

Implementation of the Proposed Action Alternative would result in minor permanent impacts on currently undeveloped land; however, development would occur within the existing ROW. Land use would change slightly at the locations of the expanded roadways and additional structures, from undeveloped Caltrans or County of San Diego ROW to USBP checkpoints; however, the overall land use of the region would not change. No other changes would occur on land use on a local or regional basis under this alternative.

3.2.2.3 Alternative 3: No Lane Expansion at I-8

Impacts for this alternative would be similar to those outlined for the Proposed Action Alternative, but lessened by the elimination of the lane expansion at I-8. Any adverse impacts on land use would be negligible.

3.3 SOILS

3.3.1 Affected Environment

The NRCS web soil survey (2011) was reviewed to determine general soil types found within the proposed project sites. Reiff fine sandy loams occur at both checkpoints. This soil type is located on uplands and on slopes ranging from 5 to 9 percent. The Reiff soil type is typically characterized as fine sandy loam with a stratified sandy loam to loam subsoil. These well-drained, moderately deep soils (80 inches) are formed by alluvial fans and occur at the toe or base slopes of the uplands.

Prime farmlands are protected under the Farmland Protection Policy Acts (FPPA) of both 1980 and 1995. The FPPA's purpose is to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. The Reiff fine sandy loam is not considered prime farmland soil (NRCS 2011); however, it is considered a farmland soil of statewide importance.

3.3.2 Environmental Consequences

3.3.2.1 Alternative 1: No Action Alternative

The implementation of the No Action Alternative would result in no changes to the soils of the project area. No adverse impacts would occur with the implementation of this alternative.

3.3.2.2 Alternative 2: Proposed Action Alternative

Implementation of the Proposed Action Alternative would result in minor, localized impacts on soils. Construction of the expanded lanes at I-8 would result in conversion of a portion (0.015 acre) of an existing cut bank to impervious surface (pavement). The Highway 80 checkpoint improvements would convert 0.12 acre of soil to pavement and remove the soil from biological production.

3.3.2.3 Alternative 3: No Lane Expansion at I-8.

Impacts on soils would be similar to those identified for Alternative 2. Less clearing and grading would occur with the elimination of the expansion of lanes at the I-8 checkpoint. Adverse impacts would be negligible.

3.4 VEGETATION

3.4.1 Affected Environment

Reconnaissance surveys of both sites were conducted 25 July 2011 and 24 August 2011. A biological letter report describing the existing conditions at both checkpoint sites is included as Appendix D. Vegetation adjacent to the I-8 checkpoint consists of Great Basin sage communities with Great Basin sagebrush (*Artemisia tridentata*), Muller's scrub oak (*Quercus cornelius-mulleri*), and California buckwheat (*Eriogonum fasciculatum*) as the dominant plants. Other species observed include lilac (*Ceanothus leucodermis*), deer weed (*Lotus scoparius*), broom snakeweed (*Gutierrezia* sp.), rock rose (*Cistus creticus*), sunflower (*Vigueria* sp.), and goldenbush (*Hazardia squarrosa*). Dark-tip bird's beak (*Cordylanthus rigidus*) is also a common associate species found on this site and is one of the Quino checkerspot butterfly's (*Euphydryas editha quino*) larval host plants.

The Highway 80 checkpoint consists of oak woodland and chaparral with coast live oak, non-native grasses (e.g., *Bromus, Avena,* and *Hordeum*), and California buckwheat as dominant plants. Vegetation along Cottonwood Creek, located approximately 150 feet southeast of the project site, is comprised predominantly of coast live oak, great basin sage, arroyo willow (*Salix lasiolepis*), and mulefat (*Baccharis salicifolia*). This site also contains several dark-tip bird's beak plants.

3.4.2 Environmental Consequences

3.4.2.1 Alternative 1: No Action Alternative

The No Action Alternative would have no effect on existing vegetation and vegetative communities. The existing checkpoints would remain as they are currently designed and operated, and no impacts would occur on vegetation.

3.4.2.2 Alternative 2: Proposed Action Alternative

Minor permanent adverse impacts on vegetation would occur with the implementation of the Proposed Action Alternative, including disturbances of 0.015 acre at the I-8 checkpoint and 0.12 acre at the Highway 80 checkpoint. The vegetation at both locations has been disturbed by past highway construction projects and, thus, does not provide high-quality habitat for most wildlife species. However, the vegetation at the I-8 checkpoint does provide suitable habitat for the Quino checkerspot butterfly, and will be discussed further in Section 3.6. All limits of clearing would be identified prior to the commencement of construction. Staging of equipment would occur within the developed areas of the existing checkpoints. Additionally, as mentioned previously, the coast live oaks at the Highway 80 checkpoint would be avoided to the extent practicable. In the future, these trees would be maintained, as needed, to continue to provide a safe line of sight for USBP agents. If the oaks are removed, they would be replaced at up to a 5:1 ratio and their survival would be monitored for 7 years.

3.4.2.3 Alternative 3: No Lane Expansion at I-8

Implementation of this alternative would eliminate disturbance of the vegetation along the cut slope at the I-8 checkpoint. Clearing activities would occur at the Highway 80 checkpoint as with the Proposed Action Alternative.

3.5 WILDLIFE

3.5.1 Affected Environment

The project region lies within the Peninsular Range province. This province consists of northwest-southeast trending mountain ranges separated by long narrow valleys. The Peninsular Range province lies within the Californian biotic province and is part of the warm-temperate scrublands biotic community. These scrublands are dominated by California chaparral and coastal sage scrub communities (Dice 1943).

California is one of the most biologically diverse areas in North America. Within its 160,000 square miles, California harbors more unique animals than any other state (Steinhart 1990). The native faunal components of the Peninsular Range province support 432 species of birds, dominated by wood warblers (40 species), swans, geese, and ducks (34 species), sandpipers and phalaropes (30 species), gulls and terns (20 species), sparrows and towhees (20 species), and tyrant flycatchers (22 species). The majority of these species are present in spring and fall when neotropical migrants (e.g., flycatchers and warblers) pass through on their way to either summer breeding grounds or wintering grounds, and during winter when summer resident birds (i.e., robins, kinglets, and sparrows) from the north arrive for the winter (Holt 1990). The majority of the 94 mammalian species inhabiting the Peninsular Range province are evening bats and rodents, with rodents being the most common (Ingles 1957). Only 17 species of amphibians are found within this province, with frogs being the most abundant and common. A total of 54

species of reptiles inhabit the Peninsular Range province, with the iguanid lizards and colubrid snakes being the most dominant (Stebbins 1985).

No wildlife species were observed during either of the 2011 field investigations, presumably due to the close proximity of the project area to both I-8 and Highway 80. No evidence of owls (i.e., pellets) was observed under the coast live oak trees, and no bird nests were observed at either site. However, common wildlife species likely to occur in the habitats adjacent to the project area include the red-tailed hawk (*Buteo jamaicensis*), European starlings (*Sturnus vulgaris*), ravens (*Corvus corax)*, kangaroo rats (*Dipodomys nitratoides exilis*), desert cottontail (*Sylvilagus audubonii),* and ground squirrels (*Otospermophilus beecheyi*).

3.5.2 Environmental Consequences

3.5.2.1 Alternative 1: No Action Alternative

The No Action Alternative would have no effect on the existing wildlife and aquatic resources of the project area.

3.5.2.2 Alternative 2: Proposed Action Alternative

The proposed improvements and continued operation and maintenance of the checkpoints would have negligible impacts on the area's wildlife population or its habitat. The expansion of lanes at the I-8 checkpoint would require construction and impacts on the existing cut slope, which consists of limited potential wildlife habitat because of past disturbances and position along a major interstate. If wildlife did occur at either site, impacts on these specimens would be minor, as wildlife would be able to escape to adjacent habitats during the construction period.

The possibility exists for raptors and birds of prey to use the power poles as perches, which may increase predation upon smaller animals. If this were to occur, only negligible adverse impacts are expected because of the limited space occupied by the checkpoints and the abundant prey would be based in areas adjacent to the project sites. Measures to decrease the potential use of power poles as perches will be considered in the design of these poles. No long-term detrimental impacts would occur on wildlife species in the area as a result of this alternative.

Some wildlife specimens that occupy the Cottonwood Creek riparian community could be temporarily impacted by noise during construction. A bulldozer would be the loudest piece of heavy equipment that would likely be used and would generate noise levels of 82 decibels (dB) at 50 feet from the dozer. This noise would be attenuated to 73 dB at 150 feet (the distance to Cottonwood Creek) with no vegetation or topographic features. Given the amount of vegetation that exists between the project site and the stream channel, this noise would likely be attenuated even further. Still, the construction activities would occur during daylight hours only and sporadically for a short period of time. Consequently, minor and temporary impacts on wildlife species would occur as a result of construction noise. Replacement of light generators with permanent light standards would reduce the ambient noise levels and vibrations surrounding both checkpoints, and in particular, the Highway 80 checkpoint.

Lighting would be designed to focus illumination within the checkpoints. This would reduce the potential for adverse impacts on wildlife occupying areas along Cottonwood Creek and other areas outside the checkpoints.

3.5.2.3 Alternative 3: No Lane Expansion at I-8

Under this alternative, wildlife in the project corridor would experience the same temporary impacts due to construction as it would from the Proposed Action Alternative. Permanent impacts are similar to those from the Proposed Action Alternative in regards to the illumination effects. However, beneficial impacts are also expected to occur because of the elimination of the portable generators, which would create less noise within the project area and eliminate potential for fuel spills.

3.6 THREATENED AND ENDANGERED SPECIES

3.6.1 Affected Environment

3.6.1.1 Federal

A review of the USFWS Information, Planning, and Conservation System website indicated that five Federally protected species have the potential to occur in the region of the two checkpoints (USFWS 2011). These Federally protected species include one amphibian, two birds, two invertebrates, and one plant species, as presented in Table 3-1. Of these, only the least Bell's vireo (*Vireo bellii pusillus*) has been recorded within a 1.5-mile radius of the checkpoints (Figure 3-1), as reported by the California Natural Diversity Database (CNDDB 2011). In addition, however, the nearby Cottonwood Creek is considered to provide potentially suitable habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) and, thus, is also included in Table 3-1.

Table 3-1. Threatened and Endangered Species with the Potential to Occur Near the Project Sites

Common Name/Scientific Name	Federal Status	Habitat
AMPHIBIANS		
Arroyo toad *Bufo microscaphus californicus*	E	Found exclusively in streams in southern California and northern Baja California
BIRDS		
Least Bell's vireo *Vireo bellii pusillus*	E	Occurs in riparian habitats with well-developed overstories and understories
Southwestern willow flycatcher *Empidonax traillii extimus*	E	Occurs in riparian habitats
PLANTS		
San Bernardino bluegrass *Poa atropurpurea*	E	Found in meadow habitats
INVERTEBRATES		
Laguna Mountain skipper *Pyrgus ruralis lagunae*	E	Forest clearings, meadows, pastures, streamsides; from sea level to 10,000 feet
Quino checkerspot butterfly *Euphydryas editha quino*	E	Found on open grasslands near meadows, vernal pools, or lakes; also coastal sage scrub

Source: USFWS 2011
*Legend: T= threatened, E =endangered, C=candidate

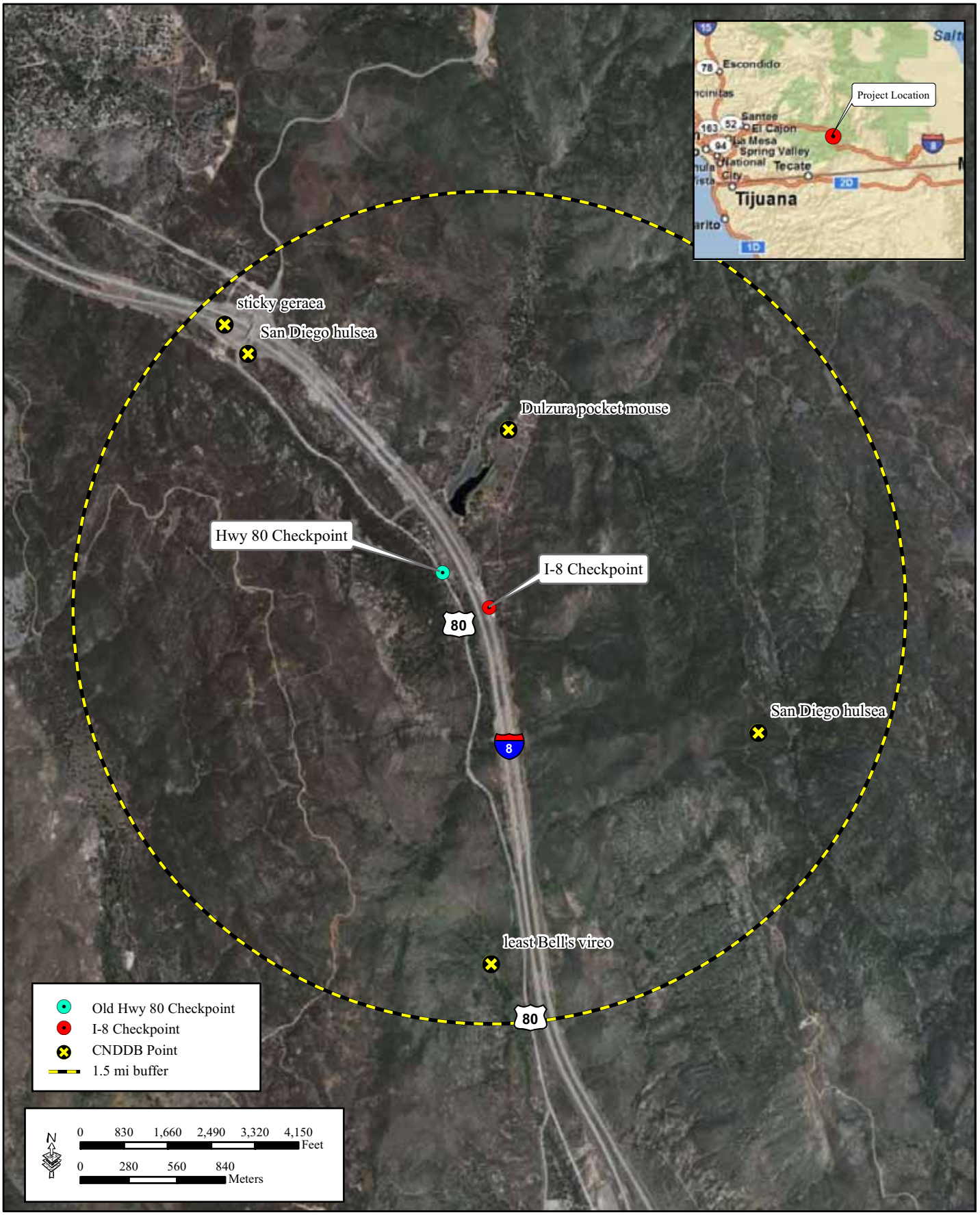

Figure 3-1. Federal and State Protected Species within 1.5 miles of the Checkpoints

The San Bernardino bluegrass (*Poa atropurpurea)* is found in meadow habitats in the Big Bear Valley in the San Bernardino Mountains and in seven montane meadow areas in the Laguna and Palomar mountains of San Diego County. This species generally occurs at elevations of 7,500 to 16,000 feet near the drier margins of the seasonally wet meadows. The Laguna Mountain skipper (*Pyrgus ruralis lagunae*) is restricted to the montane meadow habitat of the Laguna Mountains and Mount Palomar in San Diego County. Since these locations are greater than 40 miles away from the checkpoints, neither the San Bernardino bluegrass nor the Laguna Mountain skipper would be expected in the vicinity of the project sites. Brief descriptions of the four remaining species that have the potential to occur within the vicinity of the project sites are presented in the following paragraphs.

Southwestern Willow Flycatcher
General Description

The southwestern willow flycatcher is a small bird, approximately six inches long (Photograph 3-1). It has a grayish-green back and wing, whitish throat, light gray-olive breast, and pale yellowish body. Two wing bars are visible and the eye ring is faint or absent. The song is a sneezy "fitz-bew" or "fit-za-bew" and the call is a repeated "whitt" (USFWS 1995).

Photograph 3-1. Southwestern Willow Flycatcher
© Michael Moore

Habitat

The southwestern willow flycatcher occurs in riparian habitats where dense growths of willows (*Salix* sp.), marsh broom *(Baccharis* sp.*)*, arrowweed (*Pluchea* sp.), buttonbush (*Cephalanthus* sp.), tamarisk (*Tamarix* sp.), and Russian olive (*Eleagnus* sp.) are present, often with a scattered overstory of cottonwood (*Populus* sp.) (USFWS 1995). These habitats tend to be rare and widely separated by vast expanses of arid lands, or small. The southwestern willow flycatcher is found on breeding territories by mid-May; nest building and egg laying typically occur in late May and early June; and fledglings can be found in early to mid-July (Muiznieks et al. 1994; Sogge and Tibbits 1994). The migration routes and wintering grounds of this species are not well known (USFWS 1995). This species is endangered, due to the extensive loss and modification of its habitat. In addition, brood parasitism by the brown-headed cowbird (*Molothrus ater*) has significantly contributed to the endangered status of the southwestern willow flycatcher (Unitt 1987; Muiznieks et al. 1994; Sogge and Tibbits 1994).

Current Status

The southwestern willow flycatcher was listed as Federally endangered on February 27, 1995 (60 FR 10693). It is currently recognized as one of five subspecies of *Empidonax traillii* (American Ornithologists' Union [AOU] 1998). The breeding range for the flycatcher includes southern California, southern Nevada, southern Utah, Arizona, New Mexico, western Texas, and possibly northern Baja California, Mexico (Unitt 1987; USFWS 1995). However, current populations within its range continue to decline.

Least Bell's Vireo
General Description

The least Bell's vireo is a small, olive-gray songbird, averaging 4.75 inches in length (AOU 1998) (Photograph 3-2). The crown and back are gray and the wings and tail are darker. There is a faint wingbar and the whitish lores and eye ring form a spectacle. The underside is predominantly buffy white. Because of its relatively secretive behavior, the vireo is more detectable by its song, which has been described as a rapid "cheetle cheetle chee, cheetle cheetle chew."

Photograph 3-2. Least Bell's Vireo
© Greg Lasley

Habitat

The least Bell's vireo nests in riparian habitats, similar to the southwestern willow flycatcher, with well-developed overstories and understories. As discussed previously, riparian habitats have been fragmented into small disjunct, widely dispersed populations. The winter range is not well known; however, the least Bell's vireo generally appears to winter in southern Baja and southern Sonora, Mexico (Garrett and Dunn 1981). As mentioned previously, the least Bell's vireo was observed within 1.5 miles of the project sites (see Figure 3-1); however, neither project site supports this species' preferred habitat and it is not thought to reside near the proposed project sites (DiGregoria 2004). Although protocol surveys were not performed, biologists conducted site surveys at the Highway 80 checkpoint in August and September 2011 (or in previous years) and did not observe the least Bell's vireo at this site.

The decline of this species is attributed to the combination of the extensive loss of riparian habitats and the brood parasitism by the brown-headed cowbird (USFWS 1986; Brown 1993; USFWS 1998).

Current Status

The least Bell's vireo was listed as Federally endangered on May 2, 1986 (51 FR 16482), and is currently recognized as one of four subspecies of *Vireo bellii* (AOU 1998). Critical habitat was designated for this subspecies on February 2, 1994 (59 FR 4845), and includes streams in southern California from Santa Barbara County to San Diego County. Historically, they were described as common to abundant in riparian habitats from Tehama County, California, to northern Baja California, Mexico. In 1986, the number of pairs in southern California was estimated at 330. This number has increased through 1996, with an estimated number of pairs being approximately 1,346 (USFWS 1998).

Arroyo Toad
General Description

Photograph 3-3. Arroyo Toad
© Dan Holland

The arroyo toad (*Bufo microscaphus californicus)* is a relatively small (2 to 3 inches) olive green or gray to light brown colored frog (USFWS 1999) (Photograph 3-3). Distinguishing factors include non-paired, symmetrical dorsal blotches, bi-colored parotid glands that are dark posteriorly and light anteriorly, as well as a light spot on the sacral humps. Additionally, a prominent white "v-shaped" stripe crosses the top of the head between the eyes, and the belly is buff-white and often lacks spots or blotches. The arroyo toad also lacks a mid-dorsal stripe. Locomotion is generally in the form of hopping, as opposed to walking or taking large jumps. These toads are most active during late winter and early spring after seasonal rains, and are classified chiefly as nocturnal. The arroyo toad call is a long trill lasting 4-10 seconds that is roughly similar to some insect calls (Sweet 1993).

Habitat

The arroyo toad inhabits coastal southern California (the central portion of their range), preferring riparian habitats with sandy streambeds that support cottonwood (*Populus* sp.), sycamore (*Platanus racemosa*), and willow trees. However, some populations occur in streams within coniferous forests, although the typical stream setting usually has adjacent shallow pools where the toad may sit in the water while partially exposed above. Suitable migratory and upland foraging habitat exists near the Highway 80 checkpoint; however, as mentioned previously, the arroyo toad has not been observed within a 1.5-mile radius of the project site (see Figure 3-1).

The arroyo toad has special requirements, different from other Bufo species, for breeding habitats; more specifically, it requires shallow, slow-moving streams and riparian habitats that are disturbed on a regular basis by flooding, versus ponds and standing water (USFWS 1999). For example, breeding adult arroyo toads use open sites such as overflow pools and old flood channels.

Current Status

Federally listed as an endangered species, the arroyo toad is fully protected by USFWS and CDFG. The arroyo toad was listed as an endangered species on December 16, 1994 (USFWS 1994). The main cause of decline for this species in the United States is loss of habitat, which has been attributed to urbanization, agriculture, and dam construction within the toad's preferred habitat (USFWS 1999).

Quino Checkerspot Butterfly
General Description

The adult Quino checkerspot butterfly has a wingspan of approximately 1.5 inches. The dorsal (top) sides of the wings have a red, black, and cream colored checkered pattern; the ventral (bottom) sides are dominated by a checkered red and cream pattern. The abdomen of the Quino checkerspot butterfly has red stripes across the top. After their second molt, Quino checkerspot butterfly larvae can be recognized by the characteristic dark-black coloration and row of eight to nine orange tubercles (fleshy/hairy extensions) on their back. Before their first molt, larvae have a predominantly yellow coloration, and before their second molt they are grey with black markings. Pupae are mottled black on a pale blue-gray background and extremely cryptic (USFWS 2003).

Photograph 3-4. Quino Checkerspot Butterfly (public domain)

Habitat

The Quino checkerspot butterfly is found in association with topographically diverse open woody canopy landscapes containing low to moderate levels of nonnative vegetation compared to disturbed habitat. Vegetation types that support the Quino checkerspot butterfly include coastal sage scrub, open chaparral, juniper woodland, and native grassland. Soil and climatic conditions, as well as other ecological and physical factors, affect the suitability of habitat within the species' range. Urban and agricultural development, invasion of nonnative species, habitat fragmentation and degradation, and other human-caused disturbances have resulted in substantial losses of habitat and declines in habitat suitability throughout the species' historic range (USFWS 2003).

Current Status

Federally listed as endangered, the Quino checkerspot butterfly is protected by USFWS and CDFG. The Quino checkerspot butterfly was listed as an endangered species on January 16, 1997 (USFWS 1997). The Quino checkerspot butterfly is threatened primarily by urban and agricultural development, invasion by nonnative species, off-road vehicle use, grazing, and fire management practices (USFWS 1997).

3.6.1.2 Critical Habitat

The ESA also calls for the conservation of what is termed critical habitat, which is defined as the areas of land, water, and airspace that an endangered species needs for survival. Additionally, it includes such things as food, breeding sites, cover or shelter, and sufficient habitat area to provide for normal population growth and behavior. Section 7 of the ESA restricts destruction or adverse modification of critical habitat by any activity funded, authorized, or carried out by any Federal agency. One of the primary threats to many species is the destruction or modification of essential habitat by uncontrolled land and water development.

The USFWS designated critical habitat for the arroyo toad within California on March 7, 2001 (50 CFR 9414-9474) (USFWS 2001), but it was rescinded in November 2002. On April 13, 2005, the USFWS released a final designation of critical habitat to include approximately 11,695

acres as critical habitat for the arroyo toad (70 FR 19563). Although Cottonwood Creek was included in the proposed critical habitat (70 FR 7459), as per the final ruling, there is no designated critical habitat in San Diego County; therefore, the proposed project sites do not fall within the designated critical habitat.

Critical habitat for the southwestern willow flycatcher was originally designated as totaling 599 river miles within Arizona, California, and New Mexico on July 7, 1997 (62 FR 39129); however, during a hearing on March 25, 2001, the courts overturned the final ruling. In October 2004, the USFWS proposed to designate approximately 376,000 acres, which includes approximately 1,500 stream miles of critical habitat for the southwestern willow flycatcher (69 FR 60706). According to 69 FR 60706, proposed critical habitat for the southwestern willow flycatcher does not include the project sites.

Critical habitat for the Quino checkerspot butterfly was originally designated by USFWS on April 15, 2002 (67 FR 18356), and revised on June 17, 2009 (74 FR 28766). Three "units" of critical habitat in San Diego County were designated in the most recent critical habitat revision; however, all three units lie well to the south of the project sites.

USFWS designated critical habitat for the least Bell's vireo on February 2, 1994 (59 FR 4845). While several areas designated as critical habitat occur within San Diego County, no critical habitat is located near the project sites.

3.6.1.3 State

The CNDDB is a statewide inventory of the locations and condition of the state's rarest species and natural communities. These species are not necessarily the same as those protected by the Federal government under the ESA.

CDFG currently lists 42 species in San Diego County that are considered endangered, threatened, rare, or candidates (CNDDB 2011). A list of state protected species that potentially occur in San Diego County can be found in Appendix A.

Figure 3-1, presented previously, illustrates the locations where state and Federal species have been reported, in relation to the two checkpoints. As can be seen from Figure 3-1, only three state-listed and one Federally listed species (least Bell's vireo) have been reported within a 1.5-mile radius of the project sites.

3.6.2 Environmental Consequences

3.6.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative, no improvements to the checkpoints would be implemented. Therefore, no impacts would occur on any protected species that potentially inhabit the project area.

3.6.2.2 Alternative 2: Proposed Action Alternative

Implementation of this alternative could cause temporary and minor impacts on protected species that potentially occur within the project area. Temporary impacts on least Bell's vireo and southwestern willow flycatcher could occur if either of these species were present within

Cottonwood Creek during construction. However, noise levels generated by construction activities at the Highway 80 checkpoint would be expected to be between 70 and 75 A-weighted decibels (dBA), which is likely far less than the noise generated by traffic along I-8. Thus, CBP has determined that the proposed improvements would not affect these two species.

No work would occur within or near the stream channel of Cottonwood Creek, and all clearing and grading associated with the Highway 80 checkpoint would be conducted adjacent to the existing highway ROW. Therefore, CBP has determined that no effect on arroyo toad would occur as a result of the proposed activities.

This alternative would result in the permanent loss of 650 square feet (0.015 acre) of potentially suitable habitat for the Quino checkerspot butterfly at the I-8 checkpoint. Although dark-tipped bird's beak and California buckwheat are present at the Highway 80 checkpoint, this area was marginally suitable since the buckwheat was found sporadically and under the coast live oak trees, which shaded the buckwheat plants. Quino checkerspot butterfly larvae tend to avoid shaded areas during diapause. Because of the degraded nature of the habitat at both checkpoints, the small size of the impact area, and the proximity to busy highways, CBP has determined that the proposed improvements may affect, but are not likely to adversely affect, the Quino checkerspot butterfly. Concurrence of this determination has been requested from USFWS (Appendix B) and USFWS has indicated that they concur with CBP's determination. No effects on any other protected species are anticipated due to the small area of impact, project area habitat, short duration of the proposed construction activities, and the implementation of the proposed conservation measures mentioned in Section 5.3 of this document. CBP has committed to have an on-site biological monitor during clearing and grubbing activities to ensure that there are no effects on the Quino checkerspot butterfly. To further ensure that the least Bell's vireo and southwestern willow flycatcher would not be affected by construction noise, CBP has committed to restricting construction activities to the period between September 1 and March 1.

No impacts on state-protected species would be expected to occur due to the proposed improvements, since none are located within the project footprints. General operation of the two checkpoints would continue in much the same manner as they currently do, so no operational effects on the Dulzura pocket mouse, if it is present near the I-8 checkpoint, would occur.

Beneficial impacts would also occur with the implementation of this alternative. Generators would not be necessary to power the lights, which in turn would have beneficial impacts through the elimination of the generator noise and potential for spills.

3.6.2.3 Alternative 3: No Lane Expansion at I-8

Implementation of this alternative would result in impacts similar to those outlined in Alternative 2; however, without the lane expansion at the I-8 checkpoint, impacts on suitable habitat for the Quino checkerspot butterfly would be eliminated.

3.7 SURFACE WATERS AND WATERS OF THE UNITED STATES

3.7.1 Affected Environment

3.7.1.1 Surface Water

Section 305(b) of the CWA requires each state to provide a list, known as the 303(d) List, which identifies those streams or lakes that do not meet one or more surface water quality standards. These waters are known as "impaired waters." Under the CWA the Regional Water Quality Control Boards are required to develop Total Maximum Daily Loads (TMDLs) for impaired waters. The statute addresses how the department identifies impaired waters, develops TMDLs, and prepares implementation plans to achieve the needed pollution reductions in the watershed so that the impaired stream will meet applicable standards. The designation of beneficial uses for waters of the State of California is mandated by the Porter-Cologne Water Quality Control Act. Water quality for designated beneficial uses are protected by the state and should work in tandem with sections 303 and 305 of the CWA.

The project area is located in the Tijuana River watershed (CA 91111000) and adjacent to Cottonwood Creek (CA 91160000), which is a small, intermittent stream characterized by a sand and cobble channel (Figure 3-2) and is approximately 150 feet southeast of the Highway 80 checkpoint. Cottonwood Creek is listed on California's 303(d) List of impaired waters for selenium although the sources of this pollutant are unknown. The Tijuana River is also on California's 303(d) List of impaired waters for eutrophication, bacteria indicators, low dissolved oxygen, pesticides, synthetic organics, solids, trace elements, and trash. This subsegment of the Tijuana River is not meeting designations for beneficial uses of primary and secondary contact recreation and wildlife and fish propagation. Sources of pollution are non-point sources and point sources. The area has no official watershed management plan, due to the difficulties of trans-border management.

The Tijuana River has the following potential designated beneficial uses:

- Contact Water Recreation - includes uses of water for recreational activities involving body contact with water where ingestion of water is reasonably possible.
- Non-Contact Water Recreation - includes uses of water for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion is reasonably possible.
- Warm Freshwater Habitat - includes uses of water that support warm water ecosystems (e.g., aquatic habitat, vegetation, fish and wildlife).
- Wildlife Habitat - includes uses of water that support terrestrial ecosystems including preservation and enhancement of terrestrial habitats, vegetation, wildlife, or wildlife water and food sources (California Regional Water Quality Control Board 1994).

3.7.1.2 Waters of the United States and Wetlands

Section 404 of the CWA of 1933 (PL 95-213) authorizes the Secretary of the Army, acting through the USACE, to issue permits for the discharge of dredged or fill material into waters of the United States , including wetlands. EO 11990 (Protection of Wetlands) (42 FR 26961) was signed on May 24, 1983, and directed Federal agencies "to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands

Figure 3-2. Waters of the United States near Checkpoints

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and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative…" Cottonwood Creek would likely be considered a jurisdictional waters of the United States, although no determination has been issued by the USACE, Los Angeles District. While the riparian area adjacent to Cottonwood Creek is classified as palustrine, scrub-shrub, and seasonally flooded (Cowardin et al. 1979), there are no potentially jurisdictional wetlands present within or adjacent to the project sites.

3.7.2 Environmental Consequences

3.7.2.1 Alternative 1: No Action Alternative

Implementation of the No Action Alternative would not result in any impacts on surface waters or waters of the United States.

3.7.2.2 Alternative 2: Proposed Action Alternative

Implementation of the Proposed Action Alternative would not result in any impacts on surface waters or waters of the United States. No surface waters or waters of the United States are present at the project sites. Best management practices (BMPs), as outlined in Section 5.1, would be implemented to ensure that sediment from the project site would not be transported to Cottonwood Creek.

3.7.2.3 Alternative 3: No Lane Expansion at I-8

The impacts on these resources would be the same as described for Alternative 2.

3.8 AIR QUALITY

3.8.1 Affected Environment

The EPA established National Ambient Air Quality Standards (NAAQS) for specific pollutants determined to be of concern with respect to the health and welfare of the general public. Ambient air quality standards are classified as either "primary" or "secondary." The major pollutants of concern, or criteria pollutants, are carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), ozone (O_3), particulate matter less than 10 microns (PM-10), particulate matter less than 2.5 microns (PM-2.5), and lead (Pb). NAAQS represent the maximum levels of background pollution that are considered safe, within an adequate margin of safety, to protect the public health and welfare. The NAAQS (Federal) and California Ambient Air Quality Standards (CAAQS) are shown in Table 3-2. Areas that do not meet these NAAQS standards are called non-attainment areas; areas that meet both primary and secondary standards are known as attainment areas. The Federal Conformity Final Rule (40 CFR Parts 51 and 93) specifies criteria or requirements for conformity determinations for Federal projects. The Federal Conformity Rule was first promulgated in 1993 by the EPA, following the passage of Amendments to the Clean Air Act in 1990. The rule mandates that a conformity analysis must be performed when a Federal action generates air pollutants in a region that has been designated a non-attainment or maintenance area for one or more NAAQS.

Table 3-2. NAAQS and CAAQS Air Quality Status in the San Diego Air Basin

Pollutant	Federal Designation	State Designation
O_3	Non-attainment (Moderate)	Non-attainment (Serious)
CO	Maintenance	Attainment
PM-10	Attainment	Non-attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Pb	Attainment	Attainment
Sulfates	*(No Federal standard)*	Attainment
Hydrogen Sulfide	*(No Federal standard)*	Unclassified
Visibility-Reducing Particles	*(No Federal standard)*	Unclassified

A conformity analysis is the process used to determine whether a Federal action meets the requirements of the General Conformity Rule. It requires the responsible Federal agency to evaluate the nature of proposed actions and associated air pollutant emissions, and calculate emissions as a result of the proposed action. If the emissions exceed established limits, known as *de minimis* thresholds, the proponent is required to implement appropriate mitigation measures.

The EPA classifies San Diego County as a maintenance area for carbon monoxide and as a moderate non-attainment area for 8-hour ozone (EPA 2010). Air emissions from internal combustion engines produce volatile organic compounds (VOCs) and Nitrous Oxides (NO_x), which are precursor molecules that react with oxygen in the atmosphere to create ozone. The CARB classifies San Diego County to be in non-attainment for ozone, PM-2.5 and PM-10 (CARB 2010). Table 3-3 presents a summary of attainment and maintenance status for NAAQs and CAAQS in San Diego County.

Greenhouse Gases and Climate Change

Greenhouse gases (GHG) are gases that trap heat in the atmosphere. They include water vapor, CO_2, methane, nitrous oxide, fluorinated gases including chlorofluorocarbons and hydrochlorofluorocarbons, and halons, as well as ground-level O_3 (California Energy Commission 2007).

GHG Threshold of Significance

The CEQ provided DRAFT guidelines for determining meaningful GHG decision-making analysis, which are currently undergoing public comment at this time; however, the DRAFT guidance states that if the proposed action would be reasonably anticipated to cause direct emissions of 27,577 tons or more of CO_2 equivalent (CO_2 –E) GHG emissions on an annual basis, agencies should consider this an indicator that a quantitative and qualitative assessment may be meaningful to decision makers and the public. For long-term actions that have annual direct emissions of less than 27,577 tons of CO_2 -E, CEQ encourages Federal agencies to consider whether the action's long-term emissions should receive similar analysis. CEQ does

Table 3-3. California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)[3)]		
PM-10	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
PM-2.5	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15.0 µg/m^3		
CO	8 Hour	9.0 ppm (10mg/m^3)	Non-Dispersive Infrared Photometry	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
NO_2	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	53 ppb (100 µg/m^3)[8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)[8]	None	
SO_2	24 Hour	0.04 ppm (105 µg/m^3)	Ultraviolet Fluorescence	—	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)9
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)[9]	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m^3)[9]	—	
Pb[10]	30-Day Average	1.5 µg/m^3	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average[11]	—		0.15 µg/m^3		

Table 3-3, continued

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

California Air Resources Board (CARB 2010)
ppm = parts per million, mg/m^3 = milligrams per cubic meter, µg/m^3 = micrograms per cubic meter, * Parenthetical value is an approximate equivalent concentration

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^{3}is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
8. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010). Note that the EPA standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, the U.S. EPA established a new 1-hour SO2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. EPA also proposed a new automated Federal Reference Method (FRM) using ultraviolet technology, but will retain the older pararosaniline methods until the new FRM have adequately permeated State monitoring networks. The EPA also revoked both the existing 24-hour SO2 standard of 0.14 ppm and the annual primary SO2 standard of 0.030 ppm, effective August 23, 2010. The secondary SO2 standard was not revised at that time; however, the secondary standard is undergoing a separate review by EPA. Note that the new standard is in units of ppb. California standards are in units of ppm. To directly compare the new primary national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. National lead standard, rolling 3-month average: final rule signed October 15, 2008.

not propose this as an indicator of a threshold of significant effects, but rather as an indicator of a minimum level of GHG emissions that may warrant some description in the appropriate NEPA analysis for agency actions involving direct emissions of GHGs (CEQ 2010).

3.8.2 Environmental Consequences

3.8.2.1 Alternative 1: No Action Alterative

The No Action Alternative would not result in any direct impacts on air quality because there would be no construction activities. Air quality would remain at the current state and emissions produced by the use of lighting generators would continue.

3.8.2.2 Alternative 2: Proposed Action Alternative

Temporary and minor increases in air pollution would locally occur from the use of construction equipment (combustion emissions) and the disturbance of soils (fugitive dust) during construction of the improvements. At the completion of the project, these temporary and minor increases in air pollution would be eliminated. Fugitive dust emissions were calculated using the emission factor of 0.19 ton per acre per month (Midwest Research Institute 1996), which is a more current standard than the 1985 PM-10 emission factor of 1.2 tons per acre-month presented in AP-42 Section 13 Miscellaneous Sources 13.2.3.3 (EPA 2001).

EPA's NONROAD Model (EPA 2005a) was used, as recommended by EPA's *Procedures Document for National Emission Inventory, Criteria Air Pollutants, 1985-1999* (EPA 2001), to calculate emissions from construction equipment. Combustion emission calculations were made for standard construction equipment, such as front-end loaders, backhoes, cranes, and cement trucks. Assumptions were made regarding the total number of days each piece of equipment would be used, and the number of hours per day each type of equipment would be used.

Construction workers would temporarily increase the combustion emissions in the airshed during their commute to and from the project area. Emissions from delivery trucks would also contribute to the overall air emission budget. Emissions from delivery trucks and construction workers traveling to the job site were calculated using the EPA MOBILE6.2 Model (EPA 2005a, 2005b and 2005c).

The total air quality emissions were calculated for the construction activities to compare to the General Conformity Rule. Summaries of the total emissions for the Preferred Alternative are presented in Table 3-4. Details of the analyses are presented in Appendix C.

Several sources of air pollutants would contribute to the overall air impacts of the construction project. The air results in Table 3-4 included emissions from the following sources.

- Combustion engines of construction equipment
- Construction workers commuting to and from work
- Supply trucks delivering materials to construction site
- Fugitive dust from job-site ground disturbances

Table 3-4. Total Air Emissions (tons/year) from the Proposed Action Alternative Construction versus the *de minimis* Threshold Levels[1]

Pollutant	Total	*de minimis* Thresholds
CO	8.78	100
VOC	1.50	100
NOx	8.33	100
PM-10	3.66	100
PM-2.5	1.07	100
SO_2	1.02	100
CO_2 and CO_2 equivalents	3,503	27,557

Source: 40 CFR 51.853 and Gulf South Research Corporation (GSRC) model projections.
[1]Note that San Diego County is in non-attainment for 8-hour ozone (EPA 2010b). CARB classifies San Diego County as in non-attainment for ozone, PM-2.5 and PM-10 (CARB 2010).

As can be seen from Table 3-4, the air emissions associated with the proposed improvements do not exceed Federal *de minimis* thresholds for NAAQS and GHGs and, thus, would not require a Conformity Determination. In addition, a reduction/elimination of emissions from use of temporary lighting generators would be realized. As there are no violations of air quality standards and no conflicts with the state implementation plans, the impacts on air quality from the implementation of the proposed improvements would be negligible. During construction, proper and routine maintenance (i.e., appropriate oil change schedules, lubrication levels, and fuel for efficient performance) of all vehicles and other construction equipment would be implemented to ensure that emissions are within the design standards of all construction equipment. Dust suppression methods, such as applying water, should be implemented to minimize fugitive dust.

3.8.2.3 Alternative 3: No Lane Expansion at I-8

Impacts on air quality would be similar to those described in the Proposed Action Alternative but would be less extensive because the expansion of lanes at the I-8 checkpoint would not occur.

3.9 NOISE

3.9.1 Affected Environment

Noise is generally described as unwanted sound, which can be based either on objective effects (hearing loss, damage to structures, etc.) or subjective judgments (community annoyance). Sound is usually represented on a logarithmic scale with a unit called the dB. Sound on the decibel scale is referred to as a sound level. The threshold of human hearing is approximately 3 dB, and the threshold of discomfort or pain is around 120 dB.

Noise levels occurring at night generally produce a greater annoyance than do the same levels occurring during the day. It is generally agreed that people perceive intrusive noise at night as being 10 dBA louder than the same level of intrusive noise during the day, at least in terms of its potential for causing community annoyance. This perception is largely because background environmental sound levels at night in most areas are also about 10 dBA lower than those during the day. The dBA is a measure of sound pressure scale adjusted to conform with the frequency response of the human ear. Noise levels are computed over a 24-hour period and adjusted for

nighttime annoyances to produce the day-night average sound level (DNL). DNL is a community noise metric recommended by the EPA (EPA 1974) and has been adopted by most Federal agencies.

Several examples of noise levels are listed in Table 3-5. A DNL of 65 dBA is most commonly used for noise planning purposes and represents a compromise between community impact and the need for activities like construction. Areas exposed to DNL above 65 dBA are generally not considered suitable for residential use. A DNL of 55 dBA was identified by the EPA as a level below which there are effectively no adverse impacts (EPA 1974).

Table 3-5. A-Weighted (dBA) Sound Levels of Typical Noise Environments

dBA	Overall Level	Noise Environment
120	Uncomfortably Loud (32 times as loud as 70 dBA)	Military jet takeoff at 50 ft
100	Very loud (8 times as loud as 70 dBA)	Jet flyover at 1,000 ft
90	Very Loud	Heavy-duty truck, average traffic
80	Loud (2 times as loud as 70 dBA)	Propeller plane flyover at 1,000 ft Diesel truck 40 mph at 50 ft
70	Moderately loud	Freeway at 50 ft from pavement edge Vacuum cleaner (indoor)
65	Moderately loud	Gas-powered generator
60	Relatively quiet (1/2 as loud as 70 dBA)	Air condition unit at 10 ft Dishwasher at 10 ft (indoor)
50	Quiet (1/4 as loud as 70 dBA)	Large transformers Small private office (indoor)
40	Very quiet (1/8 as loud as 70 dBA)	Bird calls Lowest limit of urban ambient sound
10	Extremely quiet (1/64 as loud as 70 dBA)	Just audible
0	Threshold of hearing	

Source: Wyle Research Corporation 1992

Noise levels surrounding the proposed project sites are variable depending on the time of day and climatic conditions. Since the project sites are located along and adjacent to I-8, noise levels are often above normal (estimated at approximately 80-90 dBA) as a result of continuous vehicle traffic (Wyle Research Corporation 1992). CBP currently uses generators to power the portable lights to illuminate the checkpoints, which create noise levels (estimated at approximately 65 dB) far below the average noise experienced along a typical freeway. These generators create additional noise at the proposed project site; however, this noise is not present every day.

3.9.2 Environmental Consequences

3.9.2.1 Alternative 1: No Action Alternative

The No Action Alternative would have no new impacts on the project sites, as this alternative would preclude the modification of the checkpoint stations. Noise levels would remain at their current levels under this alternative, as the checkpoint stations would continue to operate on an

as-needed basis, which includes the use of portable generators to power lights for nighttime operations.

3.9.2.2 Alternative 2: Proposed Action Alternative

Implementation of this alternative would result in temporary increases in ambient noise levels during construction. Noise levels created by construction equipment would vary greatly depending on factors such as the type of equipment, the specific model, the operation being performed, and the condition of the equipment. The equivalent sound level of the construction activity also depends on the fraction of time that the equipment is operated over the time period of the construction.

The construction of the proposed improvements would require the use of common construction equipment. Table 3-6 describes noise emission levels for construction equipment, which range from 76 dBA to 82 dBA at a distance of 50 feet (Federal Highway Administration [FHWA] 2007).

Table 3-6. A-Weighted (dBA) Sound Levels of Construction Equipment and Modeled Attenuation at Various Distances[1]

Noise Source	50 feet	100 feet	200 feet	500 feet	1000 feet
Backhoe	78	72	66	58	52
Crane	81	75	69	61	55
Dump truck	76	70	64	56	50
Excavator	81	75	69	61	55
Front-end loader	79	73	67	59	53
Concrete mixer truck	79	73	67	59	53
Pneumatic tools	81	75	69	61	55
Bulldozer	82	76	70	62	56
Generator	81	75	69	61	55

Source: FHWA 2007 and GSRC

[1] The dBA at 50 feet is a measured noise emission (FHWA 2007). The 100- to 1,000-foot results are GSRC-modeled estimates.

Assuming the worst case scenario of 82 dBA, the noise model projected that noise levels of 82 dBA from a point source (i.e., bulldozer) would have to travel 370 feet before the noise would be attenuated to an acceptable level of 65 dBA. To achieve an attenuation of 82 dBA to a normally unacceptable level of 75 dBA, the distance from the noise source to the receptor would have to be 110 feet. Construction activities as a result of this alternative would produce only short-term noise level increases, and no sensitive receptors (e.g., schools, parks, churches, hospitals) are present within the project area. Construction noise could disturb wildlife; however, due to the sporadic schedule, proximity to a major thoroughfare, ambient noise levels, and short duration of the construction activities, these impacts would be considered temporary and minor.

Completion of construction would also eliminate the further need and use of the temporary lighting generators currently used at the checkpoints. Elimination of the generators would reduce the ambient noise level of the checkpoints.

3.9.2.3 Alternative 3: No Lane Expansion at I-8

Impacts from increased noise levels during construction would be less with this alternative than with Alternative 2, as less construction would be required. Impact would be temporary in nature, and would likely not last as long with the elimination of the lane expansion at the I-8 checkpoint.

3.10 CULTURAL RESOURCES

3.10.1 Affected Environmental

3.10.1.1 Cultural Overview

A full prehistory of the project area is presented in both Townsend (1986) and Wade (1995). The earliest period of occupation is the *San Dieguito Complex*, which dates from 10,000 to 11,000 years ago. It is distinguished by a preponderance of scrapers combined with leaf-shaped points, crescents, gravers, choppers, and hammerstones. The Milling Stone Horizon or *La Jolla Complex* began approximately 7,500 years ago. This period is distinguished primarily by the presence of milling tools (e.g., manos and metates). The *Late Prehistoric* period began approximately 1,200 to 600 years ago with the migration of the Shoshone and Yuman peoples into the area. Small triangular points, imported lithic materials, and pottery characterize this period.

Large village sites occurred and were usually associated with smaller hunting and gathering campsites. During the Protohistoric period (1700s-1800s), ethnohistoric sources indicate that a clan that primarily lived in Mexico and whose large village sites are primarily in Mexico occupied the Jacumba valley. However, there were village sites in the valley, including *Hakum* located near a hot spring. All sites appear to be occupied seasonally, with sites in some areas being occupied over and over again during the same season every year. This historic period occupation of the Jacumba Valley began in 1849 with the use of the Jacumba Hot Springs as a water supply station between San Diego and the Colorado River. In 1853, a fort was built to protect mail carriers, and farmers and ranchers moved into the area during the 1860s. The San Diego and Arizona Railway was constructed in the Jacumba Valley in 1918 and a railroad station established in 1919. The Hot Springs was also central to development in the 1920s through the 1940s with the advent of tourism and the establishment of resorts.

In the summer of 1940, the U.S. Army was assigned the task of safeguarding the United States borders against invasion. San Diego was identified as an important place of defense because of its strategic location, numerous military installations, and rapidly expanding war-related industries. As a result, the United States decided to station troops along the United States/Mexico border. Troops were stationed in Campo, located approximately 50 miles east of San Diego, and in December 1941, Camp Lockett in Campo was completed. This transformed the small border town into a bustling military post. The troops were prepared to stop an invasion that military strategists feared might come through Mexico. Camp Lockett was the last cavalry base built in the United States. The decision to maintain the site as a cavalry base was mostly focused on the local rugged terrain. At the height of the camp's activation, approximately 3,500 horse soldiers and hundreds of civilian support personnel occupied Camp Lockett. The camp would eventually expand to more than 500 buildings and cover nearly 7,000 acres. With the war confined to the European and Pacific theatres, the Southern Land Frontier Sector was deactivated at Camp Lockett. The Army placed Camp Lockett into caretaker status in the mid-1940s. The camp was briefly used as a hospital until 1946 when it was closed down and the property was

returned to civilian use (Vezina 1993). The old Campo USBP Station, located at the entrance of Camp Lockett, has occupied the site since the 1950s.

3.10.1.2 Current Investigations

Since the entire project at I-8 lies within the highway ROW and along cut banks that were established during the construction of the interstate, there is a very low potential for any intact cultural remains that have not been impacted by road construction. As a result, a cultural resources survey was deemed unnecessary given the extremely low potential for any intact cultural resources within the Area of Potential Effect (APE). The small area proposed for improvements at Highway 80 checkpoint was surveyed and no cultural resources sites were identified; likewise, there are no historic properties within the visual APE of the proposed improvements. Consultation with California SHPO has been completed; concurrence that the proposed improvements would have no effect on historical properties has been received from the California SHPO (Appendix B).

3.10.1.3 Tribal Concerns

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties and defines procedures governing Federal agencies' statutory responsibilities. Revisions to these procedures emphasized consultation with Native American tribes as part of the Section 106 processes for all Federal undertakings subject to Section 106 review, regardless of whether or not the undertaking is on tribal land. Consultation has taken place at all levels of Section 106 and the NEPA process with the potentially affected tribes.

3.10.2 Environmental Consequences

3.10.2.1 Alternative 1: No Action Alternative

No impacts on cultural resources would occur upon implementation of the No Action Alternative. No changes in ongoing operations would occur with this alternative.

3.10.2.2 Alternative 2: Proposed Action Alternative

No adverse impacts are expected to occur on any cultural resources or historic properties as a result of the Proposed Action Alternative. The proposed project area has been previously disturbed due to past and ongoing human activities. The expansion of lanes at the I-8 checkpoint would occur in a cut bank, and the likelihood of any intact cultural resources being located in this area is negligible. CBP made a determination of no adverse effects on historic properties, and concurrence with this determination was received from California SHPO. If any unknown cultural resources are found during construction, activities would temporarily stop in the immediate vicinity of the find(s) and a qualified archaeologist, along with the California SHPO, would be contacted to assess significance and determine appropriate mitigation procedures.

3.10.2.3 Alternative 3: No Lane Expansion at I-8

Implementation of this alternative would result in impacts similar to those outlined in the Proposed Action Alternative.

3.11 AESTHETICS AND VISUAL RESOURCES

3.11.1 Affected Environment

3.11.1.1 Unique and Sensitive Areas

San Diego County contains numerous unique and environmentally sensitive areas. The Cleveland National Forest is one of those areas. This forest encompasses approximately 420,000 acres and ranges in elevations from 650 feet to 6,271 feet. This area is used for sightseeing, hiking, bird watching, camping, and stargazing. The forest has over 630 individual campsites, 15 family campgrounds, 356 miles of trail, and 7 picnic areas. Within the forest there are four wilderness areas: Agua Tibia (15,933 acres), Hauser (7,547 acres), Pine Creek (13,480 acres), and San Mateo wilderness area (38,484 acres) (USFS 2004). The Cleveland National Forest surrounds the project area. Within the Cleveland National Forest is the Mount Laguna Observatory (MLO).

MLO is a research facility of San Diego State University (SDSU). Both scientists from SDSU and astronomers from other universities use the observatory. In conjunction with the ongoing scientific research at the observatory, many other local astronomers also utilize the facility to explore the night sky. MLO has recently expanded to include four telescopes, ranging in size from 21 to 50 inches. The 50-inch Philips Claud telescope is under construction and will be housed in the original dome of MLO's first telescope. High-speed Internet connectivity is provided by the High Performance Research and Education Network so that the telescopes can be operated remotely from the SDSU campus (SDSU 2011).

3.11.1.2 Light Pollution

Light pollution is a major obstacle for scientists and observers attempting to learn more about the physics of stars, galaxies, and plasmas. Light pollution occurs when too much artificial illumination enters the night sky and reflects off airborne water droplets and dust particles causing a condition known as skyglow. In general, light pollution does not come from light that goes directly into the equipment used by these scientist or observers; rather, it is often associated with the stray light that goes upward. Stray light that travels upward eventually is reflected off of dust particles or other molecules in the atmosphere and moves downward and into the equipment (telescopes) used for astrological studies, hindering the efforts of scientists and observers.

Light pollution has become a growing concern within the San Diego area due to the increased urbanization of San Diego, Tijuana, Mexicali, and surrounding inhabited areas. In particular, it has become a problem for the Mount Laguna and Mount Palomar Observatories. However, through the compliance with building codes and the use of street light controls these resources have received some protection from light pollution (Etzel 2004). The project area is located in the green zone (Figure 3-3), which, as indicated in Table 3-7, represents areas that have artificial light pollution of 50 percent over natural sky brightness and provide a modest impact on deep sky observing and imaging (Sipe 2002). However, SDSU (2011) reported that the sky glow from San Diego and other urban areas contributes only about 5 percent at the zenith on moonless nights for the MLO.

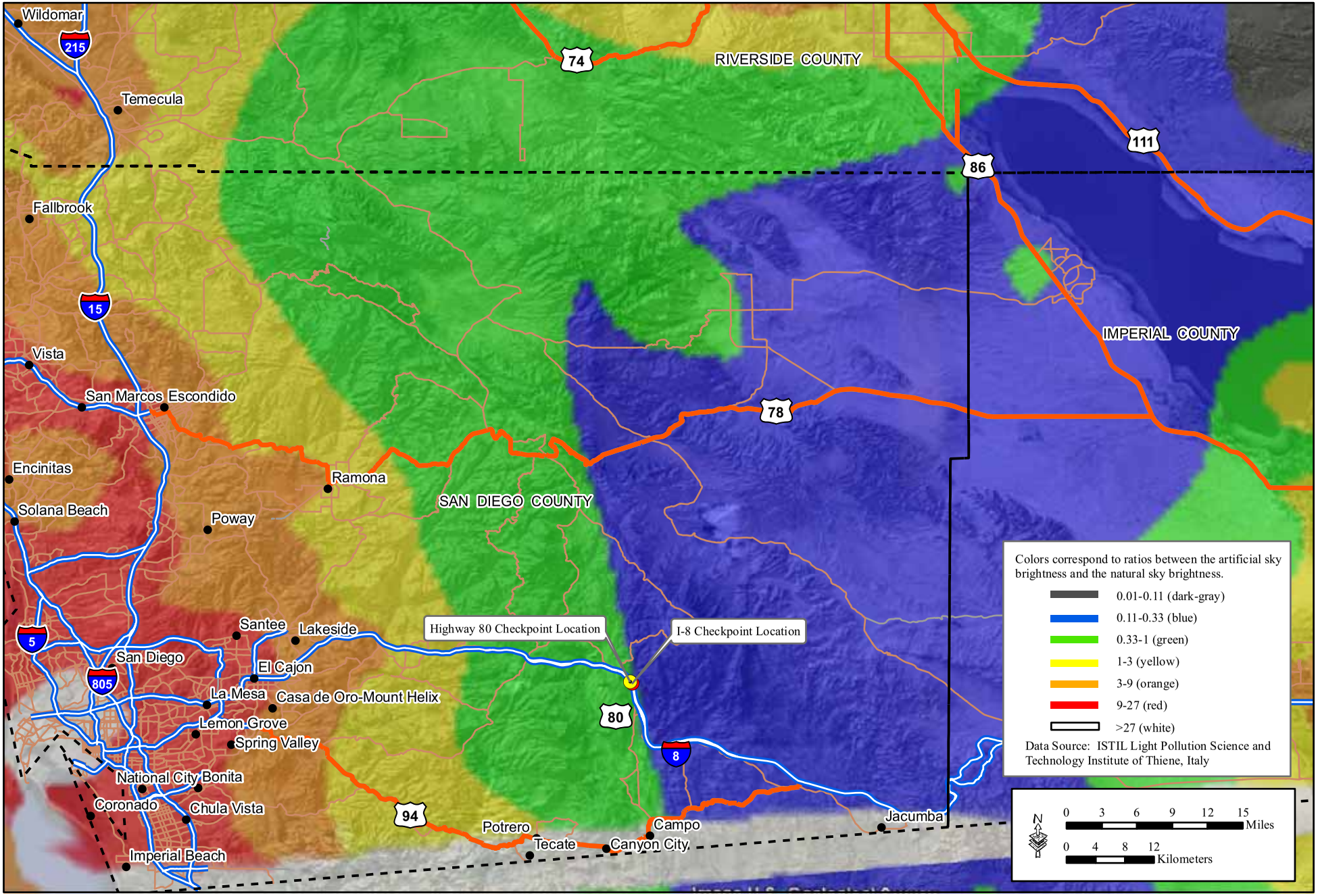

Figure 3-3. Southern California Light Pollution Map

Table 3-7. Southern California Light Pollution Map Legend

Zone	Color	Description
1	Black	Trace artificial Light Pollution
2	Blue	Artificial Light Pollution is 10 percent over natural sky brightness ("light polluted sky"). Long exposure astrophotos might show some light pollution gradient, but visual observing is relatively unimpaired.
3	Green	Artificial Light Pollution is 50 percent over natural sky brightness. Modest impact on deep sky observing and imaging. Milky Way shows structure.
4	Yellow	Artificial Light Pollution is equal to natural sky brightness (total sky brightness is doubled). Serious impact on deep sky observing and imaging. Milky Way visible but not crisp.
5	Orange	Milky Way not visible to average observer.
6	Red	Less than 100 stars visible over 30 degrees elevation.
7	White	Hopeless?

Source: Sipe 2002.

3.11.2 Environmental Consequences

3.11.2.1 Alternative 1: No Action Alternative

Implementation of the No Action Alternative would have no new impacts, either beneficial or adverse, on aesthetics and visual resources within the project area. No changes would be made to the existing facilities at the Highway 80 or I-8 checkpoints.

3.11.2.2 Alternative 2: Proposed Action Alternative

Implementation of this alternative would have no significant adverse impacts in regards to light pollution in the project area. The lights would be shielded for both vertical and back lighting purposes preventing stray light from escaping upward into the night sky or into Cottonwood Creek. In addition, the lights would be turned off when the checkpoint is non-operational, further reducing any potential impacts associated with this alternative.

Implementation of the Proposed Action Alternative would have negligible adverse impacts on unique and sensitive areas within or near the project area. However, minor visual impacts would occur due to the installation of light poles and operation of the lights. These impacts would be minor due to the existing power poles located adjacent to the project area and the existing light generators at each checkpoint. In addition, beneficial visual impacts are likely to occur due to the elimination of generator-powered lights. The reduction of noise, light glare, and light trespass would have an indirect beneficial impact on unique and sensitive areas.

3.11.2.3 Alternative 3: No Lane Expansion at I-8

Implementation of Alternative 3 would result in impacts similar to those outlined in the Proposed Action Alternative.

3.12 HAZARDOUS MATERIALS

3.12.1 Affected Environment

Although no site-specific environmental site assessments or environmental baseline surveys have been performed as part of due diligence, no evidence of hazardous waste sites or potential environmental liabilities were observed during February 2004 site visits conducted for the original establishment of the Highway 80 checkpoint (CBP 2007). In addition, no overt hazardous waste issues were observed during recent (August 2011) site visits to both sites.

3.12.2 Environmental Consequences

3.12.2.1 Alternative 1: No Action Alternative

No impacts would occur on hazardous materials upon implementation of the No Action Alternative, because no changes in ongoing operations would occur. However, the potential risk of petroleum, oil, and lubricant (POL) spills would continue to exist.

3.12.2.2 Alternative 2: Proposed Action Alternative

Temporary impacts could occur, as the potential exists that POL and other hazardous materials could be released during the demolition and construction activities, including installation of the lighting, power supply, and electrical poles. However, through the use of proper BMPs (see Section 5), frequent vehicle inspections, and careful handling of hazardous materials, the possibility of either leaks or spills would be minimized; thus, no or negligible impacts are expected to occur. Furthermore, beneficial impacts would occur by implementing this alternative, as the generators needed to power the existing portable lights and fuel storage tanks would be eliminated, further reducing the potential for spills of POL.

3.12.2.3 Alternative 3: No Lane Expansion at I-8

Implementation of this alternative would provide impacts similar to those listed in the Proposed Action Alternative.

3.13 SOCIOECONOMICS

3.13.1 Affected Environment

3.13.1.1 Population

The ROI for the proposed project is San Diego County, which is part of the San Diego Metropolitan area. The region around Campo lies within the San Diego Regional Planning Agency (San Diego Association of Governments [SANDAG] Mountain Empire subregion 2010).

The 2010 population of San Diego County was estimated to be 3,095,313, which ranked second in the State of California (U.S. Census Bureau 2010). This is an increase of 10.0 percent over the 2000 Census population of 2,813,834. The racial mix of San Diego County is primarily White (64 percent). The remainder is Asian (10.9 percent), Black (5.1 percent), Some Other Race (13.6 percent), and Two or More Races (5.1 percent). American Indian and Alaska Native and Native Hawaiian and Other Pacific Islander each account for less than one percent of the population. Approximately 32 percent of the total population claims to be of Hispanic origin, up from 27 percent in 2000 (U.S. Census Bureau 2010).

The population of the Mountain Empire subregion is estimated to be 6,041. This population is 44 percent Hispanic, with the non-Hispanic population made up of 39 percent White, six percent Black, and six percent American Indian. The remaining six percent is divided between Asian and other races (SANDAG 2010). This is a substantial change from 2001, when the subregion was predominantly White (65 percent) and Hispanic (26 percent).

3.13.1.2 Employment, Poverty Levels, and Income

The total number of jobs in the study area was 1,838,603 in 2009, which was an increase of 7 percent over the 2000 number of jobs of 1,717,490 (Bureau of Economic Analysis [BEA] 2011). The services industry provided the most jobs followed by the government sector and the retail trade industry. The government sector provided almost 19 percent of the county's nonfarm jobs. Of the private sector jobs, the professional, scientific, and technical services sector provided the most jobs (12.1 percent), followed by the Retail (11.2 percent), Health Care and Social Assistance (10 percent), and Accommodation and Food Services (9.5 percent) sectors. The annual unemployment rate for San Diego County in 2010 was 10.5 percent (California Employment and Development Department 2011).

Total personal income is the total of net earnings by place of residence, dividends, interest, rent, and personal current transfer receipts. The 2009 annual total personal income (TPI) for the ROI was $139.9 billion. This TPI ranked third in the state of California and accounted for 8.9 percent of the state total (BEA 2011). In 1999, the TPI of San Diego County was $87 billion and ranked third in the state. Over the past 10 years the average annual growth rate of TPI was 4.8 percent. This is higher than the annual growth rate of 4.3 percent for the State of California and 4.4 percent for the nation.

Per capita personal income (PCPI) for San Diego County in 2009 was $45,706. This PCPI ranked 13th in the state, and was 108 percent of the state average ($42,395) and 115 percent of the national average ($39,635). In 1999, the PCPI of San Diego County was $31,162 and ranked 14th in the state. The average annual growth rate of PCPI over the past 10 years was 3.9 percent, which was greater than the state's growth rate of 3.3 percent and the national growth rate of 3.4 percent (BEA 2011).

The median household income for San Diego County in 2009 was $60,103. The estimated number of people of all ages in poverty for San Diego County in 2009 was 372,782. The County's 12.5 percent poverty rate was lower than the estimated 14.2 percent of the state population that lives in poverty (U.S. Census Bureau 2009). The 2009 median household income for the Mountain Empire sub-region was estimated to be $47,379 (in current dollars) (SANDAG 2010).

3.13.1.3 Housing

The total number of housing units in San Diego County in 2009 was 1,142,245 (U.S. Census Bureau 2010). This is a 9.8 percent increase over the 2000 total number of housing units of 1,040,149 (U.S. Census Bureau 2010). This represents 8.5 percent of the total housing units reported for the State of California in 2009.

The home ownership rate in San Diego County for 2005-2009 was 57.1 percent, which was slightly below the home ownership rate for the State of California of 57.9 percent. The total number of owner-occupied housing units was 596,414. Renter-occupied housing units totaled 448,845 (U.S. Census Bureau 2009). The estimated total number of housing units within the Mountain Empire subregion is 2,884, of which 2,311 are occupied, for a vacancy rate of 19.9 percent (SANDAG 2010).

3.13.2 Environmental Consequences

3.13.2.1 Alternative 1: No Action Alternative

The No Action Alternative would result in no new impacts on socioeconomics within the region, as the operation of the checkpoints would continue in their current state and no construction would occur.

3.13.2.2 Alternative 2: Proposed Action Alternative

No significant adverse impacts on the regional economy or demographics are anticipated from the Proposed Action Alternative. This alternative would enhance the probability of success for the USBP agents identifying and apprehending cross-border violators. This increased success in controlling illegal drug activity and the increasing flow of cross-border violators into the area would benefit all populations, regardless of income, nationality, or ethnicity. Long-term positive impacts would occur on local, regional, and national levels by the reduction of illegal cross-border activities, including drug trafficking and the associated social costs.

3.13.2.3 Alternative 3: No Lane Expansion at I-8

Implementation of this alternative would provide positive effects similar to those noted in the Proposed Action Alternative; however, some of the public safety measures would be eliminated without the I-8 lane expansion. No adverse socioeconomic impacts would be anticipated with this alternative.

3.14 HUMAN HEALTH AND SAFETY

3.14.1 Affected Environment

Human health effects occur in a variety of forms, such as exposure to chemicals, extreme temperatures, weather, and physical security and safety. Generally, human health factors are driven by factors that differ substantially by geographic area. In the Alpine/Pine Valley area, factors that could impact human health range from automobile accidents, extreme weather such as thunderstorms with lightning, wildfires, high temperatures, and physical security on the site, as well as minimizing the chance that non-site workers could venture on the project site and be harmed. However, the general area surrounding the project sites consists of highway ROW and national forest. No residences or parks are located within 2 miles of either checkpoints.

3.14.2 Environmental Consequences

3.14.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative, operation of the checkpoint would continue without the proposed improvements. Consequently, risks to the health and safety of USBP agents and the general public would continue at the same rate.

3.14.2.2 Alternative 2: Proposed Action Alternative

The improvements proposed under this alternative would provide a much safer and more secure environment for the USBP agents operating the checkpoints. Approach lanes would be widened to allow sufficient space for USBP agents to conduct primary inspections and to allow for the free flow of public traffic during times when the checkpoints are closed. Traffic delays would likely occur at the same level as is currently experienced; however, some improvements could be realized given that the USBP agents could operate in a more efficient space. Lighting would be improved to further enhance security and detection capabilities. The canopy over the checkpoint would provide shade for USBP agents on extremely hot days, as well as shelter during inclement weather. In addition, during times when the checkpoints are closed, risks to the general public would be reduced by removal/relocation of hardened structures from the driving lanes.

3.14.2.3 Alternative 3: No Lane Expansion at I-8

Impacts under this alternative would be similar to those of the Proposed Action Alternative. However, the shade canopy would be installed over the entire I-8 ROW, which would not reduce risks to the driving public as much as the Proposed Action Alternative.

3.15 SUSTAINABILITY AND GREENING

3.15.1 Affected Environment

In accordance with EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management (72 FR 3919), CBP would incorporate practices in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner in support of its mission. CBP implements practices throughout the agency to 1) improve energy efficiency and reduce greenhouse emissions, 2) implement renewable energy projects, 3) reduce water consumption, 4) incorporate sustainable environmental practices such as recycling and the purchase of recycled-content products, and 5) reduce the quantity of toxic and hazardous materials used and disposed of by the agency. DHS will also reduce total consumption of petroleum products as set forth in the EO and use environmentally sound practices with respect to the purchase and disposition of electronic equipment.

3.15.2 Environmental Consequences

3.15.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative, the improvements would not be installed and the USBP agents would continue to use the existing checkpoints under normal operating procedures.

3.15.2.2 Alternative 2: Proposed Action Alternative

The new improvements would be designed to qualify for Leadership in Energy and Environmental Design Silver certification by the U.S. Green Building Council. These design criteria require pollution prevention of construction activities, use of low emission and fuel-efficient vehicles or use of alternative fuels, reduction of light pollution and the heat island effect (thermal gradient differences between developed and undeveloped areas), use of water-efficient landscaping, reduced generation of wastewater and reduction of demand on drinking water, optimization of energy use, management of refrigerants, storage and collection of recyclables, construction waste management, and other measures to ensure sustainable growth.

3.15.2.3 Alternative 3: No Lane Expansion at I-8

Impacts under this alternative would be similar to those of the Proposed Action Alternative.

SECTION 4.0
CUMULATIVE IMPACTS

4.0 CUMULATIVE IMPACTS

This section of the EA addresses the potential cumulative impacts associated with the implementation of the Proposed Action and other projects/programs that are planned for the region. The following paragraphs present a general discussion regarding cumulative effects that would be expected irrespective of the alternative selected.

CEQ defines cumulative impacts as the incremental impact of multiple present and future actions with individually minor but collectively significant effects. Cumulative impacts can be concisely defined as the total effect of multiple land uses and developments, including their interrelationships, on the environment.

With continued funding and implementation of CBP's environmental conservation measures, including environmental education and training of its agents, use of biological and archaeological monitors, wildlife water systems, and restoration activities, adverse impacts of future and ongoing projects will be prevented or minimized. However, recent, ongoing, and reasonably foreseeable proposed projects will result in cumulative impacts. General descriptions of these types of activities are discussed in the following paragraphs.

Past Actions. Past actions are those within the cumulative effects analysis areas that have occurred prior to the development of this EA. The effects of these past actions are generally described throughout the previous sections. For example, the establishment of the existing checkpoints has contributed to the existing environmental conditions of the area. Past actions considered in the cumulative effects analysis include the following:

- CBP recently constructed a new Campo Border Patrol Station near Kitchen Creek in east San Diego County. The station footprint affected approximately 25 acres, including a helipad and buffer zone. Construction was completed in May 2008.
- CBP recently completed additional border fencing throughout San Diego County as part of CBP's Primary Fence (PF) program. These projects involved construction of roads adjacent to the fence to facilitate construction and future maintenance. The PF 225 projects resulted in approximately 292 acres, consisting primarily of coastal sage scrub communities being converted to border infrastructure. Approximately 14.6 miles of the 16.8-mile planned project were completed.
- The 14-mile border infrastructure system, which includes secondary and tertiary fences, patrol and maintenance roads, lights, and integrated surveillance and intelligence system resources, starts at the Pacific Ocean and extends eastward for 14 miles. Approximately 12 miles of the 14-mile project have been completed. When completed, the infrastructure system will impact approximately 297 acres consisting of disturbed/developed lands, coastal sage scrub, maritime succulent scrub, and grasslands.
- CBP/USBP recently completed the expansion and improvement of the Highway 94 Checkpoint, near Dulzura, California, within the Brown Field Station's Area of Responsibility. One 1.5-acre parcel of land on the eastern side of the Highway 94 checkpoint was developed as parking areas. Other modular buildings, lights, and a portable car wash were added as part of the improvements. Restoration activities to

remove exotic plant species along Dulzura Creek are currently being implemented as mitigation for the loss of the 1.5 acres.

***Present Actions*.** Present actions include current or funded construction projects, USBP or other agency actions in close proximity to the checkpoints, and current resource management programs and land use activities within the cumulative effects analysis areas. Present actions considered include:

- Ongoing maintenance of approximately 104 miles of required roads throughout the USBP Brown Field, El Cajon, and Campo stations' areas of responsibility. The roads adjacent to or nearest the project area are the border fence roads near Campo, approximately 15 miles to the south of I-8.

***Reasonably Foreseeable Future Actions*.** Reasonably foreseeable future actions consist of activities that have been approved and can be evaluated with respect to their effects. CBP currently has no plans within the vicinity of the checkpoints for any new projects. However, projects are currently being planned by other Federal entities, which could affect areas in use by CBP. The following is a list of projects that the Bureau of Land Management (BLM) is conducting or has completed within the United States/Mexico border region:

- The BLM is proposing to prepare an amendment to the South Coast Range Management Plan for BLM-administered public lands in the Border Mountains area of San Diego County. The plan amendment proposes to establish management guidelines for lands acquired since 1994 and designate a route of travel network.
- San Diego Gas & Electric (SDG&E) has proposed to construct a new 150-mile transmission line between the cities of El Centro and San Diego. The stated purpose of this project is to achieve greater reliability of renewable energy sources within San Diego from Imperial County, reduce energy costs, and improve the reliability of electrical services within San Diego. SDG&E has submitted an application with the California Public Utilities Commission (CPUC) to construct the Sunrise Powerlink Project. Currently, a joint Environmental Impact Statement/Environmental Impact Report is being developed between BLM and the CPUC.

A summary of the anticipated cumulative impacts is presented in the following sections. These discussions are given for each of the resources described previously.

4.1 LAND USE

This project is consistent with the authorized land use and, when considered with other potential alterations of land use, would not be expected to have a major cumulative adverse impact. The permanent alteration of less than 0.14 acre of highway ROW as a result of this project, when combined with other public and private land alterations near the checkpoints, would be considered to have a negligible cumulative impact on land use in the region.

4.2 SOILS

The proposed improvements and other USBP actions have not reduced prime farmland soils or agricultural production. Pre- and post-construction Stormwater Pollution Prevention Plan (SWPPP) measures will be implemented to control soil erosion, particularly for the Highway 80 checkpoint. No inappropriate soil types are located at the project sites that would present a safety risk for the types of improvements planned. The permanent impact on 0.14 acre, when combined with past and proposed projects in the region, would constitute a negligible cumulative adverse impact.

4.3 VEGETATION

Removal of 0.14 acre of locally and regionally common plant communities would not have major cumulative impacts on vegetation communities because of the vast amounts of similar vegetation communities surrounding the project sites and the current disturbance of the vegetation communities at the checkpoints. The long-term viability of species and communities in the project region would not be threatened. The loss of 0.14 acre, when combined with other ground-disturbing or development projects in the region, would have negligible cumulative impacts on vegetation communities.

4.4 WILDLIFE

The loss of 0.14 acre of disturbed wildlife habitat, when combined with other ground-disturbing or development projects in the project region, would have negligible cumulative impacts on the region's biological resources. This additional loss of habitat would not cumulatively affect the long-term viability and fecundity of the general wildlife population. CBP has also committed to restricting the initial site preparation to the period between September 1 and March 1 and to have an on-site biological monitor during this time, in an attempt to further reduce or avoid potential impacts on migratory birds, protected species, and the general wildlife populations.

4.5 THREATENED AND ENDANGERED SPECIES

CBP has maintained close coordination with USFWS regarding the Quino checkerspot butterfly and other protected species throughout the planning of all its projects. USFWS has provided valuable guidance to CBP regarding these species. Through the use of BMPs developed in coordination with USFWS, the potential impacts as a result of the Proposed Action Alternative, as well as other past, present, and future actions, would ensure that major cumulative impacts on protected species do not occur. The conservation measures proposed herein, as described in Section 5.3, would offset any potential effects on the Quino checkerspot butterfly, least Bell's vireo, and southwestern willow flycatcher, so that no cumulative effect on these species would occur. In addition, CBP is currently providing funding to the Department of the Interior to purchase conservation habitat to compensate for potential impacts on listed species, including the Quino checkerspot butterfly. This effort minimizes cumulative effects on listed species.

4.6 SURFACE WATERS AND WATERS OF THE UNITED STATES

Construction and maintenance of proposed improvements would not impact surface water resources, wetlands, or waters of the United States. The implementation of BMPs would reduce erosion and sedimentation during construction to negligible levels and would eliminate post-construction erosion and sedimentation from the site. The same measures would be implemented for other construction projects; therefore, cumulative impacts would be considered negligible.

4.7 AIR QUALITY

The emissions generated during and after the construction of the improvements would be short-term and minor. Replacement of the generator lights with permanent lights would have long-term minor cumulative benefits on the region's airshed. These adverse and beneficial impacts are considered minor, even when combined with the other proposed developments in the border region.

4.8 NOISE

Most of the noise generated by the Proposed Action Alternative would occur during construction and thus would not contribute to cumulative impacts on ambient noise levels. Potential sources of noise from other projects are not enough (temporally or spatially) to increase ambient noise levels at the project sites. Replacement of the generator lights with permanent lights would have long-term minor cumulative benefits on the ambient noise levels at the checkpoints, particularly the Highway 80 checkpoint.

4.9 CULTURAL RESOURCES

The Proposed Action Alternative would have no effect on historic properties, as none were identified within the construction footprint or the visual APE. Therefore, this action, when combined with other existing and proposed projects in the region, would not contribute to cumulative impacts on cultural resources.

4.10 AESTHETICS AND VISUAL RESOURCES

There would be no major impacts on visual resources from implementing the Proposed Action Alternative, due in part to the existing checkpoints and the previous highway construction. The installation of metal halide luminaries on light standards would make the checkpoints more visible from further distances. However, the light standards would replace existing generator lights and thus the illumination and light trespass would not be a substantial increase to the existing conditions. Therefore, construction and maintenance of the proposed improvements, when considered with existing and proposed developments in the surrounding area, would result in minor cumulative impacts on the visual quality of the region.

4.11 HAZARDOUS MATERIALS

Only minor increases in the use of hazardous substances (e.g., POL) would occur as a result of the construction and maintenance of proposed improvements. However, elimination of the portable light generators would reduce the amount of POV used and stored on-site and thus reduce potential for spills.

4.12 SOCIOECONOMIC

Construction of the proposed improvements would have temporary cumulative beneficial impacts on the region's economy due to temporary employment and sales taxes generated through the purchase of construction-related items such as fuel and food. When combined with the other currently proposed or ongoing projects within the region, the Proposed Action Alternative is considered to have minor beneficial cumulative impacts.

4.13 HUMAN HEALTH AND SAFETY

No health or safety risks would be created by the Proposed Action Alternative. In fact, the improvements are intended to reduce safety risks to USBP agents and the public, especially when the checkpoints are not in operation. When combined with other ongoing and proposed projects in the region, the Proposed Action Alternative would have a negligible cumulative effect.

SECTION 5.0
BEST MANAGEMENT PRACTICES

5.0 BEST MANAGEMENT PRACTICES

This chapter describes the BMPs that will be implemented as part of the Proposed Action Alternative to reduce or eliminate impacts from the proposed improvements. Due to the limited nature of the Proposed Action Alternative, construction impacts are expected to be slight; therefore, mitigation measures are only described for those resources with potential for impacts.

5.1 WATER RESOURCES

Proper maintenance of construction equipment and BMPs implemented during construction activities will minimize the possibility of accidental POL spills that could affect surface and groundwater quality. A SWPPP is not necessary due to the project area being less than 1 acre in size. However, a Water Pollution Control Plan will be prepared pursuant to the June 2011 Caltrans SWPPP and Water Pollution Control Plan Preparation Manual. A Spill Prevention Control and Countermeasures Plan will be maintained to ensure that all are aware of its implementation requirements in the event of a spill. Proper BMPs, such as drip pans and absorbent mats under idle vehicles, as well as the use of silt fencing, straw bales, and construction during the dry season, will be implemented to prevent runoff (i.e., sediment flow) into Cottonwood Creek.

5.2 AIR QUALITY

In order to minimize the amount of project-related dust emissions, the following management practices shall be implemented during project construction: (1) minimization of land disturbance; and (2) the use of water trucks to saturate exposed areas and control emissions of fugitive dust caused by hauling activities and vehicular travel on unpaved road surfaces. In addition, all construction equipment shall be maintained and operated in a manner that produces the least amount of emissions and maintains the lowest possible noise levels. Standard noise attenuation equipment, such as mufflers, must be used on all construction equipment, and vehicles and must be maintained in good operating condition, free from leaks.

5.3 PROTECTED SPECIES

Although CBP made the determination of no effect on southwestern willow flycatcher and least Bell's vireo, construction activities at the Highway 80 checkpoint will be scheduled outside the birds' breeding/nesting season (i.e., construction would occur between September 1 and March 1). This would ensure no effect, should either species occupy the Cottonwood Creek corridor in the future. No nighttime construction will occur. Lighting will be shielded and pointed in a direction to prevent or substantially reduce trespass into the Cottonwood Creek riparian area.

CBP has requested concurrence from USFWS regarding its determinations that the proposed improvements would not likely adversely affect the Quino checkerspot butterfly and would have no effect on the least Bell's vireo and southwestern willow flycatcher (Appendix B). CBP has committed to providing a biological monitor during all clearing and grubbing activities to ensure that there are no impacts on the Quino checkerspot butterfly. If the presence of this species is noted during the clearing and grubbing activities, the on-site monitor will immediately contact

the on-site construction manager, who will have the authority to halt all construction actions until an agreement with USFWS can be reached regarding potential conservation measures to offset the potential impacts. The presence of an on-site biological monitor during the initial site preparation (i.e., clearing, grubbing, and grading) would also help to reduce or avoid impacts on other wildlife species, including migratory birds. If the oaks are removed, they would be replaced depending on their diameter at breast height (DBH) at the following ratios and would be monitored for 7 years: oaks between 5 and 12 inches DBH would be replaced at 3:1; oaks between 12 and 24 inches DBH would be replaced at 4:1; and oaks greater than 24 inches DBH would be replaced at 5:1."

5.4 CULTURAL RESOURCES

Consultation with the California SHPO has been completed and concurrence with the determination that no historic properties are adversely affected has been received. Consultation, in accordance with the Section 106 process, is therefore complete. If, during construction, cultural materials are uncovered, construction will cease until a qualified archaeologist can examine and evaluate the nature of the cultural resource, and the California SHPO will be notified.

5.5 LIGHT POLLUTION

In order to minimize the possibility of stray light affecting the night sky or Cottonwood Creek, both vertical and back lighting shields will be installed on each light fixture. All lights will be turned off when the checkpoint is not in operation and, to the greatest extent practicable, the lights' angle of elevation will be below the horizon to minimize upward pointing components.

SECTION 6.0
REFERENCES

6.0 REFERENCES

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SECTION 7.0
ACRONYMS AND ABBREVIATIONS

7.0 ACRONYMS AND ABBREVIATION

ACHP	Advisory Council on Historic Preservation
AOU	American Ornithologists Union
APE	Area of Potential Effect
BEA	Bureau of Economic Analysis
BLM	Bureau of Land Management
BMP	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBP	U.S. Customs and Border Protection
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CO	Carbon Monoxide
CO_2-E	CO_2 equivalent
CPUC	California Public Utilities Commission
CWA	Clean Water Act
dB	Decibel
dBA	A-Weighted Decibel
DHS	Department of Homeland Security
DNL	Day-Night Sound Level
DOE	U.S. Department of Energy
EA	Environmental Assessment
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FR	Federal Register
FRM	Federal reference method
GHG	greenhouse gases
GSRC	Gulf South Research Corporation
Highway 80	Old Highway 80
I-8	Interstate 8
INA	Immigration and Nationality Act
INS	Immigration and Naturalization Service
mg/m^3	milligram per cubic meter
MLO	Mount Laguna Observatory
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_2	Nitrogen Dioxide

NOA	Notice of Availability
NO_x	nitrous oxide
NRCS	Natural Resources Conservation Service
O_3	Ozone
OBP	Office of Border Patrol
Pb	Lead
PCPI	Per Capita Personal Income
PF	Primary fence
PL	Public Law
PM-10	Particulate Matter <10 micrometers
PM-2.5	Particulate Matter <2.5 micrometers
POL	petroleum, oil, and lubricant
ppb	Parts Per Billion
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
ROW	Right-of-Way
SANDAG	San Diego Association of Governments
SDG&E	San Diego Gas & Electric
SDSU	San Diego State University
SHPO	State Historic Preservation Office
SO_2	Sulfur Dioxide
SWPPP	Stormwater Pollution Prevention Plan
TMDL	total maximum daily load
TPI	Total Personal Income
U.S.	United States
USACE	U.S. Army Corps of Engineers
USBP	United States Border Patrol
USC	United States Code
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compounds
$\mu g/m^3$	micrograms per cubic meter

SECTION 8.0
LIST OF PREPARERS

8.0 LIST OF PREPARERS

The following people were primarily responsible for preparing this EA.

Name	Agency/Organization	Discipline/Expertise	Experience	Role in Preparing EA
John Petrilla	U.S. Customs and Border Protection	NEPA/CBP PM and Regional Environmental Officer	5 years Environmental Management and Review	EA Review
Mike McGregor	U.S. Customs and Border Protection	Engineering and Planning	20 years in engineering design and planning	CBP Program Manager
Charles McGregor	USACE, Fort Worth District, ECSO	Environmental Planning	20 years NEPA and environmental studies	ECSO Program Manager
Hope Pollman	USACE, Fort Worth District	Environmental Planning	12 years NEPA and environmental studies	USACE Project Manager
Chris Ingram	Gulf South Research Corporation (GSRC)	Ecology; Wetlands Environmental Planning	33 years Natural Resources and NEPA studies	GSRC Project Manager; DOPAA; Technical Review
Dennis Peters	GSRC	Biology/Ecology	28 years EA/EIS studies	Technical Review
Steve Oivanki	GSRC	Hazardous Waste	20 years EA and Remediation	Hazardous Waste and QA/QC Review
Steve Kolian	GSRC	Environmental Science	13 years Natural Resources	Noise, Air and Water Quality
Josh McEnany	GSRC	Natural Resources	12 years Natural Resources and Environmental Studies	Land Use/Biological Resources
Ann Guissinger	GSRC	Economics	30 years socioeconomic studies	Socioeconomics
David Hart	GSRC	Cultural Resources	20 years Professional Archaeologist/Cultural Resources	Cultural Resources
Nicole Forsyth	GSRC	Environmental Engineer	10 years of Environmental Planning and Engineering	QA/QC Review
Sharon Newman	GSRC	GIS/Graphics	22 years GIS/Graphics	GIS/Graphics

APPENDIX A
PROTECTED SPECIES

State of California
The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Biogeographic Data Branch
California Natural Diversity Database

STATE & FEDERALLY LISTED ENDANGERED & THREATENED ANIMALS OF CALIFORNIA

January 2011

This is a list of animals found within California or off the coast of the State that have been classified as Endangered or Threatened by the California Fish & Game Commission (state list) or by the U.S. Secretary of the Interior or the U.S. Secretary of Commerce (federal list).

The official California listing of Endangered and Threatened animals is contained in the California Code of Regulations, Title 14, Section 670.5. The official federal listing of Endangered and Threatened animals is published in the Federal Register, 50 CFR 17.11. The California Endangered Species Act of 1970 created the categories of "Endangered" and "Rare". The California Endangered Species Act of 1984 created the categories of "Endangered" and "Threatened". On January 1, 1985, all animal species designated as "Rare" were reclassified as "Threatened".

Animals that are candidates for state listing and animals proposed for federal listing are also included on this list. A state candidate species is one that the Fish and Game commission had formally noticed as being under review by the Department for addition to the State list. A federal proposed species is one for which a proposed regulation has been published in the Federal Register.

Code Designation:	Totals as of January 2011
SE = State-listed as Endangered	46
ST = State listed as Threatened	35
SR = State listed as Rare – old designation, all animals reclassified to Threatened on 1/1/85	0
FE = Federally listed as Endangered (21.2% of all U.S. listed endangered animals as of 1/10/11)	88
FT = Federally listed as Threatened (24.4% of all U.S. listed threatened animals as of 1/10/11)	40
SCE = State candidate (Endangered)	2
SCT = State Candidate (Threatened)	0
SCD = State Candidate (Delisting)	1
FPE = Federally proposed (Endangered)	1
FPT = Federally proposed (Threatened)	1
FPD = Federally proposed (Delisting)	0
Total number of animals listed (includes subspecies & population segments)	157
Total number of candidate/proposed animals for listing	4
Number of animals State listed only	31
Number of animals Federally listed only	71
Number of animals listed under both State & Federal Acts	55

Common and scientific names are shown as they appear on the state or federal lists. If the nomenclature differs for a species that is included on both lists, the state nomenclature is given and the federal nomenclature is shown in a footnote. Synonyms, name changes, and other clarifying points are also footnoted.

Critical Habitat is defined in Section 3 of the federal Endangered Species Act as specific areas, both occupied and unoccupied, that is essential to the conservation of a listed species and that may require special management considerations or protection.

Recovery Plans are discussed in Section 4 of the federal Endangered Species Act. Each plan incorporates site-specific management actions necessary for the conservation and survival of the species.

The "List Date" for **final** federal listing and **final** Critical Habitat designation is the date the listing or designation becomes effective, this is usually <u>not</u> the date of publication of the rule in the Federal Register; it is usually about 30 days after publication, but may be longer.

If a taxa that was previously listed or proposed for listing no longer has any listing status the entry has been grayed out.

For taxa that have more than one status entry, the current status is in bold and underlined.

Changes to this update of the list are denoted by *

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
GASTROPODS								
Trinity bristle snail *Monadenia setosa*[1]	ST[2]	10-02-80						
Morro shoulderband (=banded dune) snail *Helminthoglypta walkeriana*			FE	1-17-95	Final	3-09-01	Final	1998
White abalone *Haliotis sorenseni*			FE	6-28-01	Not prudent	6-28-01	Final	2008
Black abalone *Haliotis cracherodii*			FE	2-13-09	*Proposed	9-28-10		
CRUSTACEANS								
Riverside fairy shrimp *Streptocephalus woottoni*			FE	8-03-93	Final[3] Proposed Final	5-12-05 4-27-04 6-29-01	Final	1998
Conservancy fairy shrimp *Branchinecta conservatio*			FE	9-19-94	Final[4] Proposed Final Proposed	2-10-06 12-28-04 8-06-03 9-24-02	Final	2005
Longhorn fairy shrimp *Branchinecta longiantenna*			FE	9-19-94	Final 4 Proposed Final Proposed	2-10-06 12-28-04 8-06-03 9-24-02	Final	2005
Vernal pool fairy shrimp *Branchinecta lynchi*			FT	9-19-94	Final 4 Proposed Final Proposed	2-10-06 12-28-04 8-06-03 9-24-02	Final	2005
San Diego fairy shrimp *Branchinecta sandiegoensis*			FE	2-03-97	Final Proposed[5] Final	1-11-08 4-22-03 10-23-00	Final	1998
Vernal pool tadpole shrimp *Lepidurus packardi*			FE	9-19-94	Final 4 Proposed Final Proposed	2-10-06 12-28-04 8-06-03 9-24-02	Final	2005
Shasta crayfish *Pacifastacus fortis*	**SE** ST	2-26-88 10-02-80	FE	9-30-88			Final	1998
California freshwater shrimp *Syncaris pacifica*	SE	10-02-80	FE	10-31-88			Final	1998
INSECTS								
Zayante band-winged grasshopper *Trimerotropis infantilis*			FE	2-24-97	Final	3-09-01	Final	1998

[1] Current taxonomy is *Monadenia infumata setosa.*

[2] On January 1, 1985, all species designated as "rare" were reclassified as "threatened", as stipulated by the California Endangered Species Act.

[3] The Federal Circuit Court vacated critical habitat for the Riverside fairy shrimp on 10-30-02. The judge instructed the USFWS to begin the process of re-designating critical habitat for this species. New critical habitat was proposed 4-27-04 and finalized effective 5-12-05.

[4] On October 28, 2004 the courts ordered the USFWS to reconsider the areas excluded from the final critical habitat designation made August 6, 2003. The December 28 2004 proposed rule is only for lands previously excluded and does not affect the areas included in the August 6, 2003 final rule. The non-economic exclusions made to the August 6, 2003 final rule were confirmed effective March 8, 2005

[5] Due to court order the previously designated critical habitat was vacated and the USFWS was directed to re-proposed critical habitat.

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Mount Hermon June beetle *Polyphylla barbata*			FE	2-24-97			Final	1998
Casey's June beetle *Dinacoma caseyi*			FPE	7-09-09	Proposed	7-09-09		
Delta green ground beetle *Elaphrus viridis*			FT	8-08-80	Final	8-08-80	Final Final	2006 1985
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*			FT	8-08-80	Final	8-08-80	Final	1984
Ohlone tiger beetle *Cicindela ohlone*			FE	10-03-01			Final	1998
Kern primrose sphinx moth *Euproserpinus euterpe*			FT	4-08-80	Proposed	7-03-78	Final	1984
Mission blue butterfly *Icaricia icarioides missionensis*[6]			FE	6-01-76	Proposed	2-08-77	Final	1984
Lotis blue butterfly *Lycaeides argyrognomon lotis*[7]			FE	6-01-76	Proposed	2-08-77	Final	1985
Palos Verdes blue butterfly *Glaucopsyche lygdamus palosverdesensis*			FE	7-02-80	Final	7-02-80	Final	1984
El Segundo blue butterfly *Euphilotes battoides allyni*			FE	6-01-76	Proposed	2-08-77	Final	1998
Smith's blue butterfly *Euphilotes enoptes smithi*			FE	6-01-76	Proposed	2-08-77	Final	1984
San Bruno elfin butterfly *Callophrys mossii bayensis*			FE	6-01-76	Proposed	2-08-77	Final	1984
Lange's metalmark butterfly *Apodemia mormo langei*			FE	6-01-76	Proposed	2-08-77	Revised	1984
Bay checkerspot butterfly *Euphydryas editha bayensis*			FT	10-18-87	Final Proposed Final	9-25-08 8-22-07 5-30-01	Final	1998
Quino checkerspot *Euphydras editha quino (=E.e.wrighti)*			FE	1-16-97	Proposed[8] Final Proposed	1-17-08 5-15-02 2-07-01	Final	2003
Carson wandering skipper *Pseudocopaeodes enus obscurus*			FE	8-07-02			Final Draft	2007 2005
Laguna Mountains skipper *Pyrgus ruralis lagunae*			FE	1-16-97	Final	1-11-07		
Callippe silverspot butterfly *Speyeria callippe callippe*			FE	12-05-97	Proposed	3-28-80		
Behren's silverspot butterfly *Speyeria zerene behrensii*			FE	12-05-97			Draft	2004
Oregon silverspot butterfly[9] *Speyeria zerene hippolyta*			FT	7-02-80	Final	7-02-80	Revised	2001
Myrtle's silverspot butterfly *Speyeria zerene myrtleae*			FE	6-22-92			Final	1998
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*			FE	9-23-93			Final	1997

[6] Current taxonomy is *Plebejus icarioides missionensis*

[7] Current taxonomy is *Plebejus idas lotis*

[8] Proposed rule is to revise designated Critical Habitat

[9] Current common name is Hippolyta frittilary

	LISTING STATUS				CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
FISHES								
Green sturgeon – southern DPS *Acipenser medirostris*			FT[10]	6-06-06	Final Proposed	11-09-09 9-08-08		
Chinook salmon-Winter-run[11] *Oncorhynchus tshawytscha*	SE	9-22-89	**FE**[12] FE	8-29-05 2-03-94	Final	3-23-99	Draft	2009 1997
Chinook salmon-California coastal ESU[13] *Oncorhynchus tshawytscha*			**FT**[14] FT[15]	8-29-05 11-15-99	Final Proposed Rescinded Final	1-02-06 12-10-04 4-30-02 2-16-00		
Chinook salmon-Spring-run *Oncorhynchus tshawytscha*	ST[16]	2-05-99	**FT**[17] FT[18]	8-29-05 11-15-99	Final Proposed Rescinded Final	1-02-06 12-10-04 4-30-02 2-16-00	Draft	2009
Coho salmon-Central California Coast ESU *Oncorhynchus kisutch*	SE[19]	3-30-05	**FE**[20] FT[21]	8-29-05 12-02-96	Final	6-04-99	Final (state)	2004
Coho salmon-So. Oregon/No. Calif ESU *Oncorhynchus kisutch*	ST[22]	3-30-05	**FT**[23] FT[24]	8-29-05 6-05-97	Final	3-17-00	Final (state)	2004
Little Kern golden trout *Oncorhynchus mykiss whitei*			FT	4-13-78	Final	4-13-78	Exempt	
Lahontan cutthroat trout *Oncorhynchus clarki henshawi*			**FT** FE	7-16-75 10-13-70			Final	1995
Paiute cutthroat trout *Oncorhynchus clarki seleniris*			**FT** FE	7-16-75 3-11-67[25]			Revised Final	2004 1985
Steelhead-Northern California DPS[26] [27] *Oncorhynchus mykiss*			**FT**[28] FT	2-06-06 8-07-00	Final Proposed	1-02-06 12-10-04		

[10] Includes all spawning populations south of the Eel River

[11] Federal: Sacramento River winter run Chinook salmon

[12] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

[13] ESU = Evolutionarily Significant Unit

[14] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

[15] Naturally spawned coastal spring & fall Chinook salmon between Redwood Creek in Humboldt County & the Russian River in Sonoma County.

[16] State listing is for the Sacramento River drainage.

[17] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

[18] Federal: Central Valley Spring-Run ESU. Includes populations spawning in the Sacramento River & its tributaries.

[19] The Coho south of San Francisco Bay were state listed in 1995; in February 2004 the Fish and Game Commission determined that the Coho from San Francisco to Punta Gorda should also be listed as Endangered. This changed was finalized by of Office of Administrative Law on March 30, 2005.

[20] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

[21] The Federal listing is limited to naturally spawning populations in streams between Punta Gorda, Humboldt County & the San Lorenzo River, Santa Cruz County.

[22] The Fish and Game Commission determined that the Coho from Punta Gorda to the Oregon border should be listed as Threatened on February 25, 2004. This determination was finalized by the Office of Administrative Law on March 30, 2005.

[23] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs, 10 of these in California. The 29 Aug 2005 list date refers to the final designations made as a result of those status reviews.

[24] The Federal listing is for populations between Cape Blanco, Oregon & Punta Gorda, California.

[25] All species with a list date of 03-11-67 were listed under the Endangered Species Preservation Act of Oct 15, 1966.

	LISTING STATUS				CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Steelhead-Central California Coast DPS[29]			**FT**[30]	2-06-06	Final	1-02-06		
Oncorhynchus mykiss			FT	10-17-97	Proposed	12-10-04		
					Rescinded	4-30-02		
					Final	3-17-00		
Steelhead-South/Central Calif Coast DPS[31]			**FT**[32]	2-06-06	Final	1-02-06		
Oncorhynchus mykiss			FT	10-17-97	Proposed	12-10-04		
					Rescinded	4-30-02		
					Final	3-17-00		
Steelhead-Southern California DPS[33]			**FE**[34]	2-06-06	Final	1-02-06	Draft	2009
Oncorhynchus mykiss			FE	10-17-97	Proposed	12-10-04		
					Rescinded	4-30-02		
					Final	3-17-00		
Steelhead-Central Valley DPS[35]			**FT**[36]	2-06-06	Final	1-02-06	Draft	2009
Oncorhynchus mykiss			FT	5-18-98	Proposed	12-10-04		
					Rescinded	4-30-02		
					Final	3-17-00		
Bull trout	SE	10-02-80	FT	12-01-99	*Proposed (revised)[37]	1-14-10		
Salvelinus confluentus					Final	10-26-05		
Delta smelt	**SE**	1-20-10	FT	3-05-93	Final	12-19-94	Final	1996
Hypomesus transpacificus	ST	12-09-93						
Longfin smelt	**ST**	4-09-10						
Spirinchus thaleichthys	SCE	2-02-08						
Eulachon – southern DPS			FT	5-17-10	*Proposed	1-05-11		
Thaleichthys pacificus								
Mohave tui chub	SE	6-27-71	FE	10-13-70			Final	1984
Gila bicolor mohavensis[38]								
Owens tui chub	SE	1-10-74	FE	8-05-85	Final	8-05-85	Final	1998
Gila bicolor snyderi[39]								
Cowhead Lake tui chub			withdrawn	10-11-06				
Gila bicolor vaccaceps			FPE	3-30-98				

[26] Naturally spawned populations residing below impassable barriers in coastal basins from Redwood Creek in Humboldt County to, and including, the Gualala River in Mendocino County.

[27] DPS = Distinct Population Segment

[28] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

[29] Coastal basins from the Russian River, south to Soquel Creek, inclusive. Includes the San Francisco & San Pablo Bay basins, but excludes the Sacramento-San Joaquin River basins.

[30] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

[31] Coastal basins from the Pajaro River south to, but not including, the Santa Maria River.

[32] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

[33] Coastal basins from the Santa Maria River (inclusive), south to the U.S.-Mexico Border.

[34] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

[35] The Sacramento and San Joaquin Rivers and their tributaries.

[36] The NMFS has completed comprehensive status reviews for 27 west coast salmon & steelhead ESUs. The 6 Feb 2006 list date refers to the final designations made as a result of those status reviews. There was no change in listing status for the steelhead ESUs in California.

[37] There is no designated or proposed Critical Habitat for bull trout in California.

[38] Current taxonomy: *Siphateles bicolor mohavensis*

[39] Current taxonomy: *Siphateles bicolor snyderi*

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Tecopa pupfish (**Extinct)** *Cyprinodon nevadensis calidae*	delisted SE	1987 6-27-71	delisted FE	1-15-82 10-13-70				
Bonytail[40] *Gila elegans*	**SE** SR	1-10-74 6-27-71	FE	4-23-80	Final	3-21-94	Revised Revised	2002 1990
Sacramento splittail *Pogonichthys macrolepidotus*			deleted[41] FT	9-22-03 3-10-99				
Colorado squawfish[42] *Ptychocheilus lucius*	SE	6-27-71	FE	3-11-67	Final	3-21-94	Revised Revised	2002 1991
Lost River sucker *Deltistes luxatus*	**SE** SR	1-10-74 6-27-67	FE	7-18-88	Proposed	12-01-94	Final	1993
Modoc sucker *Catostomus microps*	**SE** SR	10-02-80 1-10-74	FE	6-11-85	Final	6-11-85	Exempt	
Santa Ana sucker *Catostomus santaanae*			FT[43]	5-12-00	*Final Proposed (revised) Final	1-13-11 12-09-09 2-03-05		
Shortnose sucker *Chasmistes brevirostris*	**SE** SR	1-10-74 6-27-71	FE	7-18-88	Proposed	12-01-94	Final	1993
Razorback sucker *Xyrauchen texanus*	**SE** SR	1-10-74 6-27-71	FE	10-23-91	Final	3-21-94	Revised Final	2002 1998
Desert pupfish *Cyprinodon macularius*	SE	10-02-80	FE	3-31-86	Final	3-31-86	Final	1993
Cottonball Marsh pupfish *Cyprinodon salinus milleri*	ST	1-10-74						
Owens pupfish *Cyprinodon radiosus*	SE	6-27-71	FE	3-11-67			Final	1998
Thicktail chub (**Extinct**) *Gila crassicauda*	delisted SE	10-02-80 1-10-74						
Unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	SE	6-27-71	FE	10-13-70	Designation should not be made [44] Proposed	9-17-02 11-17-80	Final	1985
Tidewater goby *Eucyclogobius newberryi*			With-drawn FPD[45] **FE**	12-09-02 6-24-99 2-04-94	Final Proposed Final	3-03-08 11-28-06 11-20-00	Final	2005
Rough sculpin *Cottus asperrimus*	ST	1-10-74						

[40] Federal: Bonytail chub

[41] On 23 June 2000, the Federal Eastern District Court of Calif. found the final rule to be unlawful and on 22 Sept 2000 remanded the determination back to the USFWS for a reevaluation of the final decision. After a thorough review the USFWS removed the Sacramento splittail from the list of threatened species.

[42] Current nomenclature and federal listing: Colorado pikeminnow

[43] Populations in the Los Angeles, San Gabriel and Santa Ana River basins.

[44] Full explanation of this situation is given in the Federal Register notice.

[45] Proposal to delist refers to populations north of Orange County only.

	LISTING STATUS				CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
AMPHIBIANS								
California tiger salamander (central valley DPS) *Ambystoma californiense*	ST[4647]	5-20-10	FT[48]	9-03-04	Final[49] Proposed[50]	9-22-05 8-10-04		
California tiger salamander (Santa Barbara County DPS) *Ambystoma californiense*	(ST)		FE [48]	9-15-00	Final[51]	11-24-04		
California tiger salamander (Sonoma County DPS) *Ambystoma californiense*	(ST)		FE [48]	3-19-03	Proposed[52]	8-18-09 8-02-05		
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	SE	6-27-71	FE	3-11-67	Proposed	6-22-78	Draft	1999
Siskiyou Mountains salamander *Plethodon stormi*	SCD **ST**	9-30-05 6-27-71						
Scott Bar salamander *Plethodon asupak*	ST[53]	6-27-71						
Techachapi slender salamander *Batrachoseps stebbinsi*	ST	6-27-71						
Kern Canyon slender salamander *Batrachoseps simatus*	ST	6-27-71						
Desert slender salamander *Batrachoseps aridus*[54]	SE	6-27-71	FE	6-04-73			Final	1982
Shasta salamander *Hydromantes shastae*	ST	6-27-71						
Limestone salamander *Hydromantes brunus*	ST	6-27-71						
Black toad *Bufo exsul*[55]	ST	6-27-71						
Arroyo toad[56] *Bufo californicus*[57]			FE	1-17-95	Proposed (Revised) Final Proposed[58] Final	10-13-09 5-13-05 2-14-05 4-27-04 3-09-01	Final	1999

[46] The state listing refers to the entire range of the species.

[47] The Office of Administrative Law approved the listing on Aug 2, 2010. The regulations become effective on Aug 19, 2010.

[48] In 2004 the California tiger salamander was listed as "threatened" statewide. The Santa Barbara County and Sonoma County Distinct Vertebrate Population Segments (DPS), formerly listed as "endangered", were reclassified to "threatened". On Aug 19 2005 U.S. District court vacated the downlisting of the Sonoma and Santa Barbara populations from "endangered" to "threatened". Therefore, the Sonoma & Santa Barbara populations are once again listed as "endangered"

[49] Final rule published Aug 23, 2005 is for the central valley population only.

[50] Critical Habitat proposal published Aug 10, 2004 is for the central valley population only.

[51] Final rule published Nov 24, 2004 is for the Santa Barbara County population only.

[52] Proposed rule published Aug 2, 2005 is for the Sonoma County population only. The proposed rule published Aug 18, 2009 encompasses the same geographic area as the Aug 2, 2005 proposal.

[53] Since this newly described species was formerly considered to be a subpopulation of *Plethodon stormi,* and since *Plethodon stormi* is listed a Threatened under the California Endangered Species Act (CESA), *Plethodon asupak* retains the designation as a Threatened species under CESA.

[54] Current taxonomy: *Batrachoseps major aridus.*

[55] Current taxonomy: *Anaxyrus exsul*

[56] Former taxonomy: *Bufo microscaphus californicus.*

[57] Current taxonomy: *Anaxyrus californicus*

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
California red-legged frog[59] *Rana aurora draytonii*			FT	5-20-96	Final Proposed[60] Final	4-16-10 9-16-08 4-12-01	Final	2002
Mountain yellow-legged frog – Southern California DPS[61][62] *Rana muscosa*	*SCE or SCT[63]	9-21-10	FE	8-01-02	Final Proposed	10-16-06 9-13-05		
Mountain yellow-legged frog Rana sierrae	*SCE or SCT	9-21-10						
REPTILES								
Desert tortoise *Gopherus agassizii*	ST	8-03-89	FT	4-02-90	Final	2-08-94	Draft Revised Final	2008 1994
Green sea turtle *Chelonia mydas*			**FT** FE	7-28-78 10-13-70	Final	3-23-99	Revised	1998
Loggerhead sea turtle – North Pacific DPS[64] *Caretta caretta*			FPE **FT**	3-16-10 7-28-78	Proposed	3-19-80	Revised	1998
Olive (=Pacific) Ridley sea turtle *Lepidochelys olivacea*			FT	7-28-78	Proposed	3-19-80	Revised	1998
Leatherback sea turtle *Dermochelys coriacea*			FE	6-02-70	Proposed (Revised) Final	1-05-10 3-23-99	Revised	1998
Barefoot banded gecko[65] *Coleonyx switaki*	ST	10-02-80						
Coachella Valley fringe-toed lizard *Uma inornata*	SE	10-02-80	FT	9-25-80	Final	9-25-80	Final	1985
Blunt-nosed leopard lizard *Gambelia silus*[66]	SE	6-27-71	FE	3-11-67			Final	1998
Flat-tailed horned lizard *Phrynosoma mcallii*			Withdrawn[67] FPT[68]	6-28-06 11-29-93				
Island night lizard *Xantusia riversiana*			FT	8-11-77			Final	1984
Southern rubber boa *Charina bottae umbratica*[69]	ST	6-27-71						

[58] The Federal Circuit Court vacated critical habitat for the Arroyo toad on 10-30-02. The judge instructed the USFWS to begin the process of re-designating critical habitat for this species. New critical habitat was first proposed on 4-27-04 and proposed with revisions on 2-14-05. A new final rule became effective 5-13-05.

[59] Current taxonomy: *Rana draytoni*

[60] Proposed rule is for revised Critical Habitat boundaries

[61] Federal listing refers to the distinct population segment (DPS) in the San Gabriel, San Jacinto & San Bernardino Mountains only.

[62] The current common name for this species is Sierra Madre yellow-legged frog.

[63] The Fish and Game Commission notice of finding states that the mountain yellow-legged frog, Rana muscosa and Rana sierrae are candidates for listing as either endangered or threatened species.

[64] 1978 listing was for the worldwide range of the species. The Mar 16, 2010 proposed rule is for the north pacific DPS (north of the equator & south of 60 degrees north latitude).

[65] Current nomenclature: Barefoot gecko.

[66] Current taxonomy: *Gambelia sila.*is the scientific name and bluntnose leopard lizard is the common name

[67] On June 28, 2006 the USFWS determined that the posposed listing was not warranted and the proposed rule that had been reinstated on Nov 17, 2005 was withdrawn.

[68] On November 17, 2005, the U. S. District Court for the District of Arizona vacated the January 3, 2003 withdrawal of the proposed rule to list the flat-tailed horned lizard and reinstated the 1993 proposed rule.

[69] Current taxonomy: *Charina umbratica.*

	LISTING STATUS				CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Alameda whipsnake *Masticophis lateralis euryxanthus*	ST	6-27-71	FT	12-05-97	Final Proposed [70] Vacated[71] Final	11-01-06 10-18-05 5-09-03 10-03-00	Draft	2003
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	SE	6-27-71	FE	3-11-67			Final	1985
Giant garter snake *Thamnophis couchi gigas*[72]	ST	6-27-71	FT	10-20-93			Draft	1999
BIRDS								
Short-tailed albatross *Phoebastria albatrus*			FE	8-30-00			Final	2009
California brown pelican[73] (**Recovered**) *Pelecanus occidentalis californicus*	**delisted** SE	6-03-09 6-27-71	**delisted** FE	12-17-09 2-20-08 10-13-70			Final	1983
Aleutian Canada goose **(Recovered)** *Branta canadensis leucopareia*[74]			**delisted** FT FE	3-20-01 12-12-90 3-11-67			Final	1991
California condor *Gymnogyps californianus*	SE	6-27-71	FE	3-11-67	Final	9-22-77	Revised	1996
Bald eagle *Haliaeetus leucocephalus*	**SE**(rev) SE	10-02-80 6-27-71	**delisted**[75] FT FE(rev) FE	8-08-07 7-06-99 8-11-95 2-14-78 3-11-67			Final	1982
Swainson's hawk *Buteo swainsoni*	ST	4-17-83						
American peregrine falcon **(Recovered)** *Falco peregrinus anatum*	**delisted** SE	11-04-09 6-27-71	**delisted** FE	8-25-99 6-02-70	Final	9-22-77	Final	1982
Arctic peregrine falcon **(Recovered)** *Falco peregrinus tundrius*			**delisted** FT FE	10-05-94 3-20-84 6-02-70				
California black rail *Laterallus jamaicensis coturniculus*	ST	6-27-71						
California clapper rail *Rallus longirostris obsoletus*	SE	6-27-71	FE	10-13-70			Final	1984
Light-footed clapper rail *Rallus longirostris levipes*	SE	6-27-71	FE	10-13-70			Revised Final	1985 1979
Yuma clapper rail *Rallus longirostris yumanensis*	**ST** SE	2-22-78 6-27-71	FE	3-11-67			Final	1983

[70] The proposed rule redesignates Critical Habitat that was vacated in 2003.

[71] Due to legal action on 9 May 2003, the Critical Habitat designation has been completely vacated; there is currently no Critical Habitat for Alameda whipsnake.

[72] Current taxonomy and Federal listing: *Thamnophis gigas.*

[73] Federal: Brown pelican, *Pelecanus occidentalis.*

[74] Current taxonomy: *Branta hutchinsii leucopareia,* and common name is now cackling goose.

[75] The Post-delisting Monitoring Plan will monitor the status of the bald eagle over a 20 year period with sampling events held once every 5 years.

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Greater sandhill crane *Grus Canadensis tabida*	ST	4-17-83					Draft (state)	
Western snowy plover[76] *Charadrius alexandrinus nivosus*			FT	4-05-93	Final Proposed Final	10-31-05 8-16-05 12-07-99[77]	Final Draft	2007 2001
Mountain plover[78] *Charadrius montanus*			FPT	6-29-10				
California least tern *Sterna antillarum browni*[79]	SE	6-27-71	FE	10-13-70			Revised Final	1985 1980
Marbled murrelet *Brachyramphus marmoratus*[80]	SE	3-12-92	FT	9-30-92	Proposed[81] Final	7-31-08 5-24-96	Final	1997
Xantus's murrelet *Synthliboramphus hypoleucus*	ST[82]	12-22-04						
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	**SE** ST	3-26-88 6-27-71						
Elf owl *Micrathene whitneyi*	SE	10-02-80						
Northern spotted owl *Strix occidentalis caurina*			FT	6-22-90	Final Proposed Final	9-12-08 6-17-07 1-15-92	Final Draft	2008 2007
Great gray owl *Strix nebulosa*	SE	10-02-80						
Gila woodpecker *Melanerpes uropygialis*	SE	3-17-88						
Gilded northern flicker[83] *Colaptes auratus chrysoides*	SE	3-17-88						
Willow flycatcher *Empidonax traillii*	SE[84]	1-02-91						
Southwestern willow flycatcher *Empidonax traillii extimus*	(SE)		FE	3-29-95	Final Proposed Final[85]	11-18-05 10-12-04 7-22-97	Final	2002
Bank swallow *Riparia riparia*	ST	6-11-89					Final (state)	1993
Coastal California gnatcatcher *Polioptila californica californica*			FT	3-30-93	Final Proposed[86] Final	1-18-08 4-24-03 10-24-00	Exempt	

[76] Federal status applies only to the Pacific coastal population.

[77] The Dec 7, 1999 designation was remanded & partially vacated by the US District Court for the District of Oregon on July 2, 2003.

[78] The Jun 29, 2010 proposed rule reinstates that portion of the Dec 5, 2002 proposed rule concerning the listing of the plover as threatened. It doesn't reinstate the portion of the rule regarding a special rule under section 4(d) of the ESA.

[79] Current taxonomy is *Sternula antillarum browni*

[80] Federal: *Brachyramphus marmoratus marmoratus* with a proposal (7-31-08) to change the name to *Brachyramphus marmoratus*.

[81] Proposed rule to revise the previously designated Critical Habitat.

[82] The Fish and Game Commission determined that Xantus's murrelet should be listed as a Threatened species February 24, 2004. As part of the normal listing process, this decision was reviewed by the Office of Administrative Law. The listing became effective on Dec 22, 2004.

[83] Current taxonomy: Gilded flicker (*Colaptes chrysoides*).

[84] State listing includes all subspecies.

[85] On May 11, 2001 the 10th Circuit Court of Appeals vacated the previously designated Critical Habitat

[86] Due to court order the previously designated critical habitat was vacated and the USFWS was directed to re-propose critical habitat.

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN		
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
San Clemente loggerhead shrike *Lanius ludovicianus mearnsi*			FE	8-11-77			Final	1984
Arizona Bell's vireo *Vireo bellii arizonae*	SE	3-17-88						
Least Bell's vireo *Vireo bellii pusillus*	SE	10-02-80	FE	5-02-86	Final	2-02-94	Draft	1998
Inyo California towhee[87] [88] *Pipilo crissalis eremophilus*	SE	10-02-80	FT	8-03-87	Final	8-03-87	Final	1998
San Clemente sage sparrow *Amphispiza belli clementeae*			FT	8-11-77			Final	1984
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	SE	1-10-74						
Santa Barbara song sparrow **(Extinct)**			**delisted**	10-12-83				
Melospiza melodia graminea			FE	6-04-73				
MAMMALS								
Buena Vista Lake shrew *Sorex ornatus relictus*			FE[89]	4-05-02	Final Proposed	2-23-05 8-19-04	Final	1998
Lesser long-nosed bat *Leptonycteris yerbabuenae*			FE	10-31-88			Final	1997
Riparian brush rabbit *Sylvilagus bachmani riparius*	SE	5-29-94	FE	3-24-00			Final	1998
Point Arena mountain beaver *Aplodontia rufa nigra*			FE	12-12-91			Final	1998
San Joaquin antelope squirrel[90] *Ammospermophilus nelsoni*	ST	10-02-80						
Mohave ground squirrel[91] *Spermophilus mohavensis*	ST	6-27-71						
Pacific pocket mouse *Perognathus longimembris pacificus*			FE	9-26-94			Final	1998
Morro Bay kangaroo rat *Dipodomys heermanni morroensis*	SE	6-27-71	FE	10-13-70	Final	8-11-77	Draft revision Final	2000 1982
Giant kangaroo rat *Dipodomys ingens*	SE	10-02-80	FE	1-05-87			Final	1998
Stephens' kangaroo rat *Dipodomys stephensi*[92]	ST	6-27-71	FE	9-30-88				
San Bernardino kangaroo rat *Dipodomys merriami parvus*			FE[93]	9-24-98	Final[94] Final	11-17-08 5-23-02		
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	SE	6-11-89	FE	7-08-88			Final	1998
Fresno kangaroo rat	**SE**	10-02-80	FE	3-01-85	Final	1-30-85	Final	1998
Dipodomys nitratoides exilis	SR	6-27-71						

[87] Federal: Inyo California (=brown) towhee.
[88] Current taxonomy is *Melozone crissalis eremophilus*
[89] Federal: Buena Vista Lake ornate shrew
[90] Current taxonomy: Nelson's antelope squirrel
[91] Current taxonomy: Xerospermophilus mohavensis
[92] Federal: includes *Dipodomys cascus.*
[93] Federal: San Bernardino Merriam's kangaroo rat
[94] This final revised designation constitutes a reduction of approximately 25,516 acres from the 2002 designation of Critical Habitat.

	LISTING STATUS			CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Salt-marsh harvest mouse *Reithrodontomys raviventris*	SE	6-27-71	FE	10-13-70			Final	1984
Amargosa vole *Microtus californicus scirpensis*	SE	10-02-80	FE	11-15-84	Final	11-15-84	Final	1997
Riparian woodrat *Neotoma fuscipes riparia*			FE[95]	3-24-00			Final	1998
Sierra Nevada red fox *Vulpes vulpes necator*	ST	10-02-80						
San Joaquin kit fox *Vulpes macrotis mutica*	ST	6-27-71	FE	3-11-67			Final	1998
Island fox *Urocyon littoralis*	ST[96]	6-27-71						
San Miguel Island Fox *Urocyon littoralis littoralis*	(ST)		FE	4-05-04	Final[97] (none) Proposed[98]	12-09-05 10-07-04		
Santa Rosa Island Fox *Urocyon littoralis santarosa*	(ST)		FE	4-05-04	Final 97 (none) Proposed 98	12-09-05 10-07-04		
Santa Cruz Island Fox *Urocyon littoralis santacruzae*	(ST)		FE	4-05-04	Final 97 (none) Proposed 98	12-09-05 10-07-04		
Santa Catalina Island Fox *Urocyon littoralis catalinae*	(ST)		FE	4-05-04	Final 97 (none) Proposed 98	12-09-05 10-07-04		
Guadalupe fur seal *Arctocephalus townsendi*	ST	6-27-71	**FT** FE	1-15-86 3-11-67			Draft (revised)	2007
Stellar (=northern) sea lion *Eumetopias jubatus*			FT	4-05-90	Final	3-23-99	Revised Final	2008 1992
Wolverine *Gulo gulo*	ST	6-27-71						
Southern sea otter *Enhydra lutris nereis*			FT	1-14-77			Revised Final	2003 1981
Pacific fisher *Martes pennanti(pacifica)* DPS	SCT or SCE[99]	Listing Not warranted						
Gray whale **(Recovered)** *Eschrichtius robustus*			delisted FE	6-15-94 6-02-70				
Sei whale *Balaenoptera borealis*			FE	6-02-70				

[95] Federal: Riparian (=San Joaquin Valley) woodrat

[96] State listing includes all 6 subspecies on all 6 islands. Federal listing is for only 4 subspecies on 4 islands

[97] The USFWS did not find any habitat on the 4 islands occupied by the foxes that meets the definition of Critical Habitat under the Act. Therefore, the final rule does not designate any Critical Habitat

[98] The USFWS did not find any habitat on the 4 islands occupied by the foxes that meets the definition of Critical Habitat under the Act. Therefore, the proposal is that zero Critical Habitat be designated.

[99] The Fish and Game Commission notice of finding states that the Pacific fisher is a candidate for listing as either an endangered or a threatened species. At the June 23, 2010 meeting the Commission determined that the listing was not warranted.

	LISTING STATUS				CRITICAL HABITAT		RECOVERY PLAN	
	State	List Date	Federal	Effective List Date	Designation	Effective Date	Version	Date
Blue whale *Balaenoptera musculus*			FE	6-02-70			Final	1998
Fin whale *Balaenoptera physalus*			FE	6-02-70			Draft	2006
Humpback whale[100] *Megaptera novaeangliae*			FE	6-02-70			Final	1991
Right whale[101] *Eubalaena japonica*[102]			FE	6-02-70			Final	1991
Sperm whale *Physeter macrocephalus*			FE	6-02-70			Draft	2006
Killer whale (Southern resident DPS) *Orcinus orca*			FE[103] FE	4-04-07 2-16-06 12-22-04			Final	2008
California (=Sierra Nevada) bighorn sheep *Ovis canadensis californiana*[104]	**SE** ST	8-27-99 6-27-71	FE	1-03-00	Final Proposed	9-04-08 7-25-07	Final Draft	2008 2003
Peninsular bighorn sheep DPS[105] *Ovis canadensis cremnobates*	ST	6-27-71	FE	3-18-98	Final Proposed (Revised) Final	5-14-09 10-10-07 3-05-01	Final	2000

[100] Also known as Hump-backed whale.

[101] Also known as Black right whale.

[102] The scientific name was clarified in the Federal Register Vol. 68, No. 69 April 10, 2003.

[103] The killer whale was listed as endangered by the NMFS on Feb 16, 2006 and by the USFWS on Apr 4, 2007.

[104] Current & Federal taxonomy: Sierra Nevada bighorn sheep (*Ovis canadensis sierrae)*

[105] Current taxonomy: the subspecies *O.c. cremnobates* has been synonymized with *O.c. nelsoni.* Peninsular bighorn sheep are now considered to be a Distinct Vertebrate Population Segment (DPS).

State of California
The Resources Agency
DEPARTMENT OF FISH AND GAME
Resource Management and Planning Division
Biogeographic Data Branch
California Natural Diversity Database

STATE AND FEDERALLY LISTED ENDANGERED, THREATENED, AND RARE PLANTS OF CALIFORNIA

October 2011

Designations and Subtotals for each Designation:

	Designations:	Subtotals:
SE	State-listed endangered	134
ST	State-listed threatened	22
SR	State-listed rare	64
SC	State candidate for listing	0
FE	Federally listed endangered	139
FT	Federally listed threatened	47
FPE	Federally proposed endangered	0
FPT	Federally proposed threatened	0
	Both State and Federally listed	125

State listing is pursuant to §1904 (Native Plant Protection Act of 1977) and §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals. Federal listing is pursuant with the Federal Endangered Species Act of 1973, as amended. For information regarding plant conservation, contact the Habitat Conservation Planning Branch, 1416 Ninth Street, Sacramento, CA 95814, phone (916) 653-9767, or the nearest Department of Fish and Game office. For information on this list, contact CNDDB's Information Services at (916) 324-3812. Scientific and common names for State-listed plants are listed in Title 14, §670.2. Scientific or common names in parentheses are the most scientifically accepted nomenclature but have yet to be officially adopted into the California Code of Regulations, Title 14, Division 1, §670.2.

State Designated Plants	**Classification**			
	State	**List Date**	**Federal**	**List Date**
Acanthomintha duttonii San Mateo thorn-mint	SE	Jul 1979	FE	Sep 18,1985
Acanthomintha ilicifolia San Diego thorn-mint	SE	Jan 1982	FT	Oct 13,1998
Agrostis blasdalei var. *marinensis* *(=Agrostis blasdalei)* Marin bent grass		Delisted April 2008.		
Allium munzii Munz's onion	ST	Jan 1990	FE	Oct 13,1998
Allium yosemitense Yosemite onion	SR	Jul 1982		

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Alopecurus aequalis var. *sonomensis* Sonoma alopecurus			FE	Oct 22,1997
Ambrosia pumila San Diego ambrosia			FE	July 2, 2002
Amsinckia grandiflora large-flowered fiddleneck	SE	Apr 1982	FE	May 08,1985
Arabis hoffmannii Hoffmann's rock cress			FE	Jul 31,1997
Arabis macdonaldiana McDonald's rock cress	SE	Jul 1979	FE	Sep 28,1978
Arctostaphylos bakeri (=*A. b.* ssp. *bakeri* and *A. b.* ssp. *sublaevis*) Baker's manzanita	SR	Sep 1979		
Arctostaphylos confertiflora Santa Rosa Island manzanita			FE	Jul 31,1997
Arctostaphylos densiflora Vine Hill manzanita	SE	Aug 1981		
Arctostaphylos edmundsii var. *parvifolia* Hanging Gardens manzanita		Delisted April 2008		
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita			FE	Oct 07,1996
Arctostaphylos hookeri ssp. *hearstiorum* Hearst's manzanita	SE	Sep 1979		
Arctostaphylos hookeri ssp. *ravenii* Presidio manzanita	SE	Nov 1978	FE	Oct 26,1979
Arctostaphylos imbricata San Bruno Mountain manzanita	SE	Sep 1979		
Arctostaphylos morroensis Morro manzanita			FT	Dec 15,1994
Arctostaphylos myrtifolia Ione manzanita			FT	May 26,1999
Arctostaphylos pacifica Pacific manzanita	SE	Sep 1979		
Arctostaphylos pallida pallid manzanita	SE	Nov 1979	FT	Apr 22,1998
Arenaria paludicola marsh sandwort	SE	Feb 1990	FE	Aug 03,1993
Arenaria ursina Big Bear Valley sandwort			FT	Sep 14,1998
Astragalus agnicidus Humboldt milk-vetch	SE	Apr 1982		
Astragalus albens Cushenbury milk-vetch			FE	Aug 24,1994

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Astragalus brauntonii Braunton's milk-vetch			FE	Jan 29,1997
Astragalus claranus (= *A. clarianus*) Clara Hunt's milk-vetch	ST	Jan 1990	FE	Oct 22,1997
Astragalus jaegerianus Lane Mountain milk-vetch			FE	Oct 06,1998
Astragalus johannis-howellii Long Valley milk-vetch	SR	Jul 1982		
Astragalus lentiginosus var. *coachellae* Coachella Valley milk-vetch			FE	Oct 06,1998
Astragalus lentiginosus var. *piscinensis* Fish Slough milk-vetch			FT	Oct 06,1998
Astragalus lentiginosus var. *sesquimetralis* Sodaville milk-vetch	SE	Sep 1979		
Astragalus magdalenae var. *peirsonii* Peirson's milk-vetch	SE	Nov 1979	FT	Oct 06,1998
Astragalus monoensis (= *A. monoensis* var. *monoensis*) Mono milk-vetch	SR	Jul 1982		
Astragalus pycnostachyus var. *lanosissimus* Ventura Marsh milk-vetch	SE	Apr 2000	FE	May 21,2001
Astragalus tener var. *titi* coastal dunes milk-vetch	SE	Feb 1982	FE	Aug 12,1998
Astragalus traskiae Trask's milk-vetch	SR	Nov 1979		
Astragalus tricarinatus triple-ribbed milk-vetch			FE	Oct 06,1998
Atriplex coronata var. *notatior* San Jacinto Valley crownscale			FE	Oct 13,1998
Atriplex tularensis Bakersfield smallscale	SE	Jan 1987		
Baccharis vanessae Encinitas baccharis	SE	Jan 1987	FT	Oct 07,1996
Bensoniella oregona bensoniella	SR	Jul 1982		
Berberis nevinii Nevin's barberry	SE	Jan 1987	FE	Oct 13,1998
Berberis pinnata ssp. *insularis* island barberry	SE	Nov 1979	FE	Jul 31,1997
Blennosperma bakeri Sonoma sunshine	SE	Feb 1992	FE	Dec 02,1991
Blennosperma nanum var. *robustum* Point Reyes blennosperma	SR	Nov 1978		
Bloomeria humilis dwarf goldenstar	SR	Nov 1978		
Brodiaea coronaria ssp. *rosea* Indian Valley brodiaea	SE	Sep 1979		

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Brodiaea filifolia thread-leaved brodiaea	SE	Jan 1982	FT	Oct 13,1998
Brodiaea insignis Kaweah brodiaea	SE	Nov 1979		
Brodiaea pallida Chinese Camp brodiaea	SE	Nov 1978	FT	Sep 14,1998
Calamagrostis foliosa leafy reed grass	SR	Nov 1979		
Calochortus dunnii Dunn's mariposa lily	SR	Nov 1979		
Calochortus persistens Siskiyou mariposa lily	SR	Jul 1982		
Calochortus tiburonensis Tiburon mariposa lily	ST	May 1987	FT	Feb 03,1995
Calyptridium pulchellum Mariposa pussypaws			FT	Sep 14,1998
Calystegia stebbinsii Stebbins's morning-glory	SE	Aug 1981	FE	Oct 18,1996
Camissonia benitensis San Benito evening-primrose			FT	Feb 12,1985
Carex albida white sedge	SE	Nov 1979	FE	Oct 22,1997
Carex tompkinsii Tompkins's sedge	SR	Nov 1979		
Carpenteria californica tree-anemone	ST	Jan 1990		
Castilleja affinis ssp. *neglecta* Tiburon Indian paintbrush	ST	Jan 1990	FE	Feb 03, 1995
Castilleja campestris ssp. *succulenta* succulent owl's-clover	SE	Sep 1979	FT	Mar 26,1997
Castilleja cinerea ash-gray Indian paintbrush			FT	Sep 14,1998
Castilleja gleasonii Mt. Gleason Indian paintbrush	SR	Jul 1982		
Castilleja grisea San Clemente Island Indian paintbrush	SE	Apr 1982	FE	Aug 11,1977

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Castilleja mollis soft-leaved Indian paintbrush			FE	Jul 31,1997
Castilleja uliginosa Pitkin Marsh Indian paintbrush	SE	Nov 1978		
Caulanthus californicus California jewel-flower	SE	Jan 1987	FE	Jul 19,1990
Caulanthus stenocarpus slender-pod jewel-flower		Delisted April 2008		
Ceanothus ferrisae coyote ceanothus			FE	Feb 03,1995
Ceanothus hearstiorum Hearst's ceanothus	SR	Aug 1981		
Ceanothus maritimus maritime ceanothus	SR	Nov 1978		
Ceanothus masonii Mason's ceanothus	SR	Nov 1978		
Ceanothus ophiochilus Vail Lake ceanothus	SE	Jan 1994	FT	Oct 13,1998
Ceanothus roderickii Pine Hill ceanothus	SR	Jul 1982	FE	Oct 18,1996
Cercocarpus traskiae Catalina Island mountain-mahogany	SE	Apr 1982	FE	Aug 08,1997
Chamaesyce hooveri Hoover's spurge			FT	Mar 26,1997
Chlorogalum purpureum var. *purpureum*[1] purple amole			FT	Mar 20,2000
Chlorogalum purpureum var. *reductum*[2] Camatta Canyon amole	SR	Nov 1978	FT	Mar 20,2000
Chorizanthe howellii Howell's spineflower	ST	Jan 1987	FE	Jun 22,1992
Chorizanthe orcuttiana Orcutt's spineflower	SE	Nov 1979	FE	Oct 07,1996

[1] The U.S. Fish & Wildlife Service listed the entire species, *Chlorogalum purpureum*.

[2] The U.S. Fish & Wildlife Service listed the entire species, *Chlorogalum purpureum*.

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	SE	Aug 2001		
Chorizanthe pungens var. *hartwegiana* Ben Lomond spineflower			FE	Feb 04,1994
Chorizanthe pungens var. *pungens* Monterey spineflower			FT	Feb 04,1994
Chorizanthe robusta (includes vars. *hartwegii* and *robusta*) robust spineflower			FE	Feb 04,1994
Chorizanthe valida Sonoma spineflower	SE	Jan 1990	FE	Jun 22,1992
Cirsium ciliolatum Ashland thistle	SE	Sep 1982		
Cirsium fontinale var. *fontinale* fountain thistle	SE	Jul 1979	FE	Feb 03,1995
Cirsium fontinale var. *obispoense* Chorro Creek bog thistle	SE	Jun 1993	FE	Dec 15,1994
Cirsium hydrophilum var. *hydrophilum* Suisun thistle			FE	Nov 20,1997
Cirsium loncholepis La Graciosa thistle	ST	Feb 1990	FE	Mar 20,2000
Cirsium rhothophilum surf thistle	ST	Feb 1990		
Clarkia franciscana Presidio clarkia	SE	Nov 1978	FE	Feb 03,1995
Clarkia imbricata Vine Hill clarkia	SE	Nov 1978	FE	Oct 22,1997
Clarkia lingulata Merced clarkia	SE	Jan 1989		
Clarkia speciosa ssp. *immaculata* Pismo clarkia	SR	Nov 1978	FE	Dec 15,1994
Clarkia springvillensis Springville clarkia	SE	Sep 1979	FT	Sep 14,1998
Cordylanthus maritimus ssp. *maritimus* salt marsh bird's-beak	SE	Jul 1979	FE	Sep 28,1978
Cordylanthus mollis ssp. *mollis* soft bird's-beak	SR	Jul 1979	FE	Nov 20,1997
Cordylanthus nidularius Mt. Diablo bird's-beak	SR	Nov 1978		
Cordylanthus palmatus palmate-bracted bird's-beak	SE	May 1984	FE	Jul 01, 1986
Cordylanthus rigidus ssp. *littoralis* seaside bird's-beak	SE	Jan 1982		

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Cordylanthus tenuis ssp. *capillaris* Pennell's bird's-beak	SR	Nov 1978	FE	Feb 03,1995
Croton wigginsii Wiggins' croton	SR	Jan 1982		
Cryptantha roosiorum bristlecone cryptantha	SR	Jul 1982		
Cupressus abramsiana (= Callitropsis abramsiana) Santa Cruz cypress	SE	Nov 1979	FE	Jan 08,1987
Cupressus goveniana ssp. *goveniana* *(=Callitropsis goveniana)* Gowen cypress			FT	Aug 12,1998
Dedeckera eurekensis July gold	SR	Nov 1978		
Deinandra arida (*=Hemizonia arida*) Red Rock tarplant	SR	Jul 1982		
Deinandra conjugens (*=Hemizonia conjugens*) Otay tarplant	SE	Nov 1979	FT	Oct 13,1998
Deinandra increscens ssp. *villosa*(*=Hemizonia increscens* ssp. *villosa*) Gaviota tarplant	SE	Jan 1990	FE	Mar 20,2000
Deinandra minthornii (*= Hemizonia minthornii*) Santa Susana tarplant	SR	Nov 1978		
Deinandra mohavensis (*= Hemizonia mohavensis*) Mojave tarplant	SE	Aug 1981		
Delphinium bakeri Baker's larkspur	SE	April 2007	FE	Jan 26,2000
Delphinium hesperium ssp. *cuyamacae* Cuyamaca larkspur	SR	Jul 1982		
Delphinium luteum yellow larkspur	SR	Sep 1979	FE	Jan 26,2000
Delphinium variegatum ssp. *kinkiense* San Clemente Island larkspur	SE	Sep 1979	FE	Aug 11,1977
Dichanthelium lanuginosum var. *thermale* Geysers dichanthelium	SE	Sep 1978		
Dieteria asteroides var. *lagunensis* Mount Laguna aster (= *Machaeranthera asteroides* var. *lagunensis*)	SR	Sep 1979		
Dithyrea maritima beach spectaclepod	ST	Feb 1990		
Dodecahema leptoceras slender-horned spineflower	SE	Jan 1982	FE	Sep 28,1987
Downingia concolor var. *brevior* Cuyamaca Lake downingia	SE	Feb 1982		

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Dudleya abramsii ssp. *parva* (=*D. parva*) Conejo dudleya			FT	Jan 29,1997
Dudleya brevifolia (=*D. blochmaniae* ssp. *brevifolia*) short-leaved dudleya	SE	Jan 1982		
Dudleya cymosa ssp. *agourensis* [3] Santa Monica Mtns. dudleya			FT	Jan 29, 1997
Dudleya cymosa ssp. *marcescens* marcescent dudleya	SR	Nov 1978	FT	Jan 29,1997
Dudleya cymosa ssp. *ovatifolia* Santa Monica Mountains dudleya			FT	Jan 29,1997
Dudleya nesiotica Santa Cruz Island dudleya	SR	Nov 1979	FT	Jul 31,1997
Dudleya setchellii Santa Clara Valley dudleya			FE	Feb 03,1995
Dudleya stolonifera Laguna Beach dudleya	ST	Jan 1987	FT	Oct 13,1998
Dudleya traskiae Santa Barbara Island dudleya	SE	Nov 1979	FE	Apr 26,1978
Dudleya verityi Verity's dudleya			FT	Jan 29,1997
Enceliopsis nudicaulis var. *corrugata* Ash Meadows daisy			FT	May 20,1985
Eremalche kernensis Kern mallow			FE	Jul 19,1990
Eriastrum densifolium ssp. *sanctorum* Santa Ana River woollystar	SE	Jan 1987	FE	Sep 28,1987
Eriastrum hooveri Hoover's woolly-star			Delisted	Oct 7,2003
Eriastrum tracyi Tracy's eriastrum	SR	Jul 1982		
Erigeron parishii Parish's daisy			FT	Aug 24,1994
Eriodictyon altissimum Indian Knob mountainbalm	SE	Jul 1979	FE	Dec 15,1994
Eriodictyon capitatum Lompoc yerba santa	SR	Sep 1979	FE	Mar 20,2000

[3] The U.S. Fish & Wildlife Service has listed the more encompassing *Dudleya cymosa* ssp. *ovatifolia* from which ssp. *agourensis* was split.

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Eriogonum alpinum Trinity buckwheat	SE	Jul 1979		
Eriogonum apricum var. *apricum*[4] Ione buckwheat	SE	Aug 1981	FE	May 26,1999
Eriogonum apricum var. *prostratum*[5] Irish Hill buckwheat	SE	Jan 1987	FE	May 26,1999
Eriogonum butterworthianum Butterworth's buckwheat	SR	Nov 1979		
Eriogonum crocatum Conejo buckwheat	SR	Sep 1979		
Eriogonum giganteum var. *compactum* Santa Barbara Island buckwheat	SR	Nov 1979		
Eriogonum grande ssp. *timorum* (= Eriogonum grande var. timorum) San Nicolas Island buckwheat	SE	Nov 1979		
Eriogonum kelloggii Kellogg's buckwheat	SE	Apr 1982		
Eriogonum kennedyi var. *austromontanum* southern mountain buckwheat			FT	Sep 14,1978
Eriogonum ovalifolium var. *vineum* Cushenbury buckwheat			FE	Aug 24,1994
Eriogonum thornei (= *E. ericifolium* var. *thornei*) Thorne's buckwheat	SE	Nov 1979		
Eriogonum twisselmannii Twisselmann's buckwheat	SR	Jul 1982		
Eriophyllum congdonii Congdon's woolly sunflower	SR	Jul 1982		
Eriophyllum latilobum San Mateo woolly sunflower	SE	Jun 1992	FE	Feb 03,1995
Eryngium aristulatum var. *parishii* San Diego button-celery	SE	Jul 1979	FE	Aug 03,1993
Eryngium constancei Loch Lomond button-celery	SE	Jan 1987	FE	Dec 23,1986
Eryngium racemosum Delta button-celery	SE	Aug 1981		
Erysimum capitatum var. *angustatum* Contra Costa wallflower	SE	Nov 1978	FE	Apr 26,1978

[4] The U.S. Fish & Wildlife Service has listed *Eriogonum apricum* as the species, which includes both rare varieties.

[5] The U.S. Fish & Wildlife Service has listed *Eriogonum apricum* as the species, which includes both rare varieties.

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Erysimum menziesii[6] Menzies' wallflower	SE	Sep 1984	FE	Jun 22,1992
Erysimum teretifolium Santa Cruz wallflower	SE	Aug 1981	FE	Feb 04,1994
Fremontodendron decumbens Pine Hill flannelbush	SR	Jul 1979	FE	Oct 18,1996
Fremontodendron mexicanum Mexican flannelbush	SR	Jul 1982	FE	Oct 13,1998
Fritillaria gentneri Gentner's fritillary			FE	Dec 10,1999
Fritillaria roderickii Roderick's fritillary	SE	Nov 1979		
Fritillaria striata striped adobe-lily	ST	Jan 1987		
Galium angustifolium ssp. *borregoense* Borrego bedstraw	SR	Sep 1979		
Galium buxifolium box bedstraw	SR	Nov 1979	FE	Jul 31,1997
Galium californicum ssp. *sierrae* El Dorado bedstraw	SR	Nov 1979	FE	Oct 18,1996
Galium catalinense ssp. *acrispum* San Clemente Island bedstraw	SE	Apr 1982		
Gilia tenuiflora ssp. arenaria sand gilia	ST	Jan 1987	FE	Jun 22,1992
Gilia tenuiflora ssp. hoffmannii Hoffmann's slender-flowered gilia			FE	Jul 31,1997
Gratiola heterosepala Boggs Lake hedge-hyssop	SE	Nov 1978		
Grindelia fraxino-pratensis Ash Meadows gumplant			FT	May 20,1985
Hazardia orcuttii Orcutt's hazardia	ST	Aug 2002		
Helianthemum greenei island rush-rose			FT	Jul 31,1997
Helianthus niveus ssp. *tephrodes* Algodones Dunes sunflower	SE	Nov 1979		
Hesperolinon congestum Marin western flax	ST	Jun 1992	FT	Feb 03,1995

[6] The U.S. Fish & Wildlife Service separately listed all as endangered, *E. menziesii* ssp. *eurekense*, *E. menziesii* ssp. *menziesii*, and *E. menziesii* ssp. *yadonii*.

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Hesperolinon didymocarpum Lake County western flax	SE	Aug 1981		
Holmgrenanthe petrophila (= *Maurandya petrophila*) rock lady	SR	Jul 1982		
Holocarpha macradenia Santa Cruz tarplant	SE	Sep 1979	FT	Mar 20,2000
Howellia aquatilis water howellia			FT	Jul 14,1994
Ivesia callida Tahquitz ivesia	SR	Jul 1982		
Lasthenia burkei Burke's goldfields	SE	Sep 1979	FE	Dec 02,1991
Lasthenia conjugens Contra Costa goldfields			FE	Jun 18,1997
Layia carnosa beach layia	SE	Jan 1990	FE	Jun 22,1992
Lembertia congdonii (=*Monolopia congdonii*) San Joaquin woollythreads			FE	Jul 19,1990
Lesquerella kingii ssp. *bernardina* San Bernardino Mountains bladderpod			FE	Aug 24,1994
Lessingia germanorum San Francisco lessingia	SE	Jan 1990	FE	Jun 19,1997
Lewisia congdonii Congdon's lewisia	SR	Jul 1982		
Lilaeopsis masonii Mason's lilaeopsis	SR	Nov 1979		
Lilium occidentale western lily	SE	Jan 1982	FE	Aug 17,1994
Lilium pardalinum ssp. *pitkinense* Pitkin Marsh lily	SE	Nov 1978	FE	Oct 22,1997
Limnanthes bakeri Baker's meadowfoam	SR	Nov 1978		
Limnanthes douglasii var. *sulphurea* (=*Limnanthes douglasii ssp. sulphurea*) Point Reyes meadowfoam	SE	Apr 1982		
Limnanthes floccosa ssp. *californica* Butte County meadowfoam	SE	Feb 1982	FE	Jun 08,1992
Limnanthes gracilis var. *parishii* (=*Limnanthes gracilis ssp. parishii*) Parish's meadowfoam	SE	Jul 1979		
Limnanthes vinculans Sebastopol meadowfoam	SE	Nov 1979	FE	Dec 02,1991

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Lithophragma maximum San Clemente Island woodland star	SE	Feb 1982	FE	Aug 08,1997
Lotus argophyllus var. *adsurgens* San Clemente Island bird's-foot trefoil	SE	Nov 1979		
Lotus argophyllus var. *niveus* Santa Cruz Island bird's-foot trefoil	SE	Aug 1981		
Lotus dendroideus var. *traskiae* San Clemente Island lotus	SE	Apr 1982	FE	Aug 11,1977
Lupinus citrinus var. *deflexus* Mariposa lupine	ST	Jan 1990		
Lupinus milo-bakeri Milo Baker's lupine	ST	Jan 1987		
Lupinus nipomensis Nipomo Mesa lupine	SE	Jan 1987	FE	Mar 20,2000
Lupinus padre-crowleyi Father Crowley's lupine	SR	Aug 1981		
Lupinus tidestromii var. *tidestromii* (*=L. tidestromii*) Tidestrom's lupine	SE	Jan 1987	FE	Jun 22,1992
Machaeranthera lagunensis (see *Dieteria asteroides* var. *lagunensis*)				
Mahonia sonnei (*= Berberis sonnei*) Truckee barberry		Delisted April 2008	Delisted	Oct 1,2003
Malacothamnus clementinus San Clemente Island bush mallow	SE	Feb 1982	FE	Aug 11,1977
Malacothamnus fasciculatus var. *nesioticus* Santa Cruz Island bush mallow	SE	Nov 1979	FE	Jul 31,1997
Malacothrix indecora Santa Cruz Island malacothrix			FE	Jul 31,1997
Malacothrix squalida island malacothrix			FE	Jul 31,1997
Monardella linoides ssp. *viminea* (*=M. viminea*) willowy monardella	SE	Nov 1979	FE	Oct 13,1998
Nasturtium gambellii (*= Rorippa gambellii*) Gambel's water cress	ST	Feb 1990	FE	Aug 03,1993
Navarretia fossalis spreading navarretia			FT	Oct 13,1998
Navarretia leucocephala ssp. *pauciflora* few-flowered navarretia	ST	Jan 1990	FE	Jun 18,1997

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Navarretia leucocephala ssp. *plieantha* many-flowered navarretia	SE	Nov 1979	FE	Jun 18,1997
Nemacladus twisselmannii Twisselmann's nemacladus	SR	Jul 1982		
Neostapfia colusana Colusa grass	SE	Nov 1979	FT	Mar 26,1997
Nitrophila mohavensis Amargosa nitrophila	SE	Nov 1979	FE	May 20,1985
Nolina interrata Dehesa nolina	SE	Nov 1979		
Oenothera californica ssp. *eurekensis* Eureka Dunes evening-primrose	SR	Nov 1978	FE	Apr 26,1978
Oenothera deltoides ssp. *howellii* Antioch Dunes evening-primrose	SE	Nov 1978	FE	Apr 26,1978
Opuntia basilaris var. *treleasei* Bakersfield cactus	SE	Jan 1990	FE	Jul 19,1990
Orcuttia californica California Orcutt grass	SE	Sep 1979	FE	Aug 03,1993
Orcuttia inaequalis San Joaquin Valley Orcutt grass	SE	Sep 1979	FT	Mar 26,1997
Orcuttia pilosa hairy Orcutt grass	SE	Sep 1979	FE	Mar 26,1997
Orcuttia tenuis slender Orcutt grass	SE	Sep 1979	FT	Mar 26,1997
Orcuttia viscida Sacramento Orcutt grass	SE	Jul 1979	FE	Mar 26,1997
Ornithostaphylos oppositifolia Baja California birdbush	SE	Apr 2001		
Oxytheca parishii var. *goodmaniana* *(=Acanthoscyphus parishii var. goodmaniana* Cushenbury oxytheca			FE	Aug 24,1994
Packera ganderi (= *Senecio ganderi*) Gander's ragwort	SR	Jul 1982		
Packera layneae (= *Senecio layneae*) Layne's ragwort	SR	Nov 1979	FT	Oct 18,1996
Parvisedum leiocarpum (=*Sedella leiocarpa*) Lake County stonecrop	SE	Jan 1990	FE	Jun 18,1997
Pedicularis dudleyi Dudley's lousewort	SR	Sep 1979		
Pentachaeta bellidiflora white-rayed pentachaeta	SE	Jun 1992	FE	Feb 03,1995
Pentachaeta lyonii Lyon's pentachaeta	SE	Jan 1990	FE	Jan 29,1997
Phacelia insularis ssp. *insularis* northern Channel Islands phacelia			FE	Jul 31,1997

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Phlox hirsuta Yreka phlox	SE	Jan 1987	FE	Feb 3,2000
Piperia yadonii Yadon's rein orchid			FE	Aug 12,1998
Plagiobothrys diffusus San Francisco popcorn-flower	SE	Sep 1979		
Plagiobothrys strictus Calistoga popcorn-flower	ST	Jan 1990	FE	Oct 22,1997
Pleuropogon hooverianus North Coast semaphore grass	ST	Dec 2002		
Poa atropurpurea San Bernardino blue grass			FE	Sep 14,1998
Poa napensis Napa blue grass	SE	Jul 1979	FE	Oct 22,1997
Pogogyne abramsii San Diego mesa mint	SE	Jul 1979	FE	Sep 28,1978
Pogogyne clareana Santa Lucia mint	SE	Nov 1979		
Pogogyne nudiuscula Otay Mesa mint	SE	Jan 1987	FE	Aug 03,1993
Polygonum hickmanii Scott's Valley polygonum	SE	May 2005	FE	Apr 8,2003
Potentilla hickmanii Hickman's cinquefoil	SE	Sep 1979	FE	Aug 12,1998
Pseudobahia bahiifolia Hartweg's golden sunburst	SE	Aug 1981	FE	Feb 06,1997
Pseudobahia peirsonii San Joaquin adobe sunburst	SE	Jan 1987	FT	Feb 06,1997
Rorippa subumbellata Tahoe yellow cress	SE	Apr 1982		
Rosa minutifolia small-leaved rose	SE	Oct 1989		
Sanicula maritima adobe sanicle	SR	Aug 1981		
Sanicula saxatilis rock sanicle	SR	Jul 1982		
Sedella leiocarpa (= *Parvisedum leiocarpum*) Lake County stonecrop	SE	Jan 1990	FE	Jun 18,1997
Senecio ganderi (see *Packera ganderi*)				
Senecio layneae (=*Packera layneae*)				
Sibara filifolia Santa Cruz Island rock cress			FE	Aug 08,1997
Sidalcea covillei Owens Valley checkerbloom	SE	Jul 1979		

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Sidalcea hickmanii ssp. *anomala* Cuesta Pass checkerbloom	SR	Nov 1979		
Sidalcea hickmanii ssp. *parishii* Parish's checkerbloom	SR	Nov 1979	Removed as FC, 2006 Fed. Register	
Sidalcea keckii Keck's checker-mallow			FE	Feb 16,2000
Sidalcea oregana ssp. *valida* Kenwood Marsh checkerbloom	SE	Jan 1982	FE	Oct 22,1997
Sidalcea pedata bird-foot checkerbloom	SE	Jan 1982	FE	Aug 31,1984
Sidalcea stipularis Scadden Flat checkerbloom	SE	Jan 1982		
Silene campanulata ssp. *campanulata* Red Mountain catchfly	SE	Apr 1982		
Streptanthus albidus ssp. *albidus* Metcalf Canyon jewel-flower			FE	Feb 03,1995
Streptanthus niger Tiburon jewel-flower	SE	Feb 1990	FE	Feb 03,1995
Suaeda californica California seablite			FE	Dec 15,1994
Swallenia alexandrae Eureka Valley dune grass	SR	Aug 1981	FE	Apr 26,1978
Taraxacum californicum California dandelion			FE	Sep 14,1998
Thelypodium stenopetalum slender-petaled thelypodium	SE	Feb 1982	FE	Aug 31,1984
Thermopsis macrophylla var. *angina* (=*T. macrophylla*) Santa Ynez false lupine	SR	Aug 1981		
Thlaspi californicum Kneeland Prairie penny-cress			FE	Feb 9,2000
Thysanocarpus conchuliferus Santa Cruz Island fringepod			FE	Jul 31,1997
Trichostema austromontanum ssp. *compactum* Hidden Lake bluecurls			FT	Sep 14,1998
Trifolium amoenum showy Indian clover			FE	Oct 22,1997
Trifolium polyodon Pacific Grove clover	SR	Sep 1979		
Trifolium trichocalyx Monterey clover	SE	Nov 1979	FE	Aug 12,1998
Tuctoria greenei Greene's tuctoria	SR	Sep 1979	FE	Mar 26,1997
Tuctoria mucronata Crampton's tuctoria	SE	Jul 1979	FE	Sep 28,1978
Verbena californica California vervain	ST	Aug 1994	FT	Sep 14,1998

State Designated Plants	Classification			
	State	List Date	Federal	List Date
Verbesina dissita Big-leaved crownbeard	ST	Jan 1990	FT	Oct 07,1996

APPENDIX B
CORRESPONDENCE

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Ms. Laurie Berman, Director
California Department of Transportation District 11
San Diego and Imperial Counties
4050 Taylor Street
San Diego, CA 92110

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Ms. Berman:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

The existing checkpoints do not allow for primary inspections to occur outside of the traffic lanes, provide an unimpeded roadway for traffic during checkpoint closures, and requires the use of jersey barriers adjacent to the highway lanes as a safety measure for the agents. The improvements on both checkpoints will require some ground disturbance in previously disturbed and undisturbed areas. The ground disturbance would occur adjacent to the existing paved/gravel areas at the checkpoints. Other improvements such as new inspections lanes located outside the traffic lanes, new modular buildings for administrative, office, and detention purposes, shade canopies, holding tanks, and improved lighting would be included as part of the Proposed Action (Figures 2 and 3).

CBP respectfully requests that your agency provide us with any concerns or issues that feel should be addressed in the EA. We intend to provide your agency with notification of availability of the Draft EA once the document is completed. Please inform us if additional copies are needed and/or if someone else within your agency other than you should receive notification of the availability of the Draft EA.

Your prompt attention to this request would be greatly appreciated. For additional information, please contact:

Ms. Hope Pollmann
ATTN: CESWF-PER-EE
U.S. Army Corps of Engineers, Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102

Ms. Pollmann can be reached at (817) 886-1681 or by email, hope.l.pollmann@usace.army.mil. Thank you for your cooperation.

Sincerely,

for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

AUG 2 9 2011

Mr. Howard Windsor
California Department of Forestry and Fire Protection
Southern Region, San Diego Unit
2249 Jamacha Road
El Cajon, CA 92019

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Windsor:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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P.O. Box 17300
Fort Worth, Texas 76102

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Sincerely,

wgmoore

for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

AUG 2 9 2011

Mr. Jeri Hayes, Acting District Ranger
United States Forest Service Cleveland National Forest
Descano Ranger District
3348 Alpine Boulevard
Alpine, CA 91901

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Hayes:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Fort Worth, Texas 76102

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Sincerely,

Wymoore

Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

AUG 2 9 2011

Mr. John Robertus, Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court,Suite 100
San Diego, CA 92123-4340

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Robertus:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Mr. Ricardo Martinez
Assistant Secretary of Border Affairs
California Environmental Protection Agency
1001 I Street
Sacramento, CA 95814

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Martinez:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Fort Worth, Texas 76102

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Sincerely,

Wymoore

for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Mr. Scott Morgan, Acting Director
California State Clearing House
PO Box 3044
Sacramento, CA 95812-3044

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Morgan:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Dr. Therese Muranaka,
California State Parks
4477 Pacific Highway
San Diego, CA 92110

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Dr. Muranaka:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Sincerely,

Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Mr. Milford Wayne Donaldson, FAIA
California State Historic Preservation Officer
Attn: Susan Stratton, Senior State Archaeologist
Office of Historic Preservation
1416 9th Street, Room 1442-7
Sacramento, CA 95814

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Ms. Stratton:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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We are currently in the process of gathering the most current information available, in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800. CBP respectfully requests that you provide information on any cultural resources that you believe may be affected by the proposed CBP activities in San Diego County, California. A cultural survey is being conducted for the proposed project areas, and we will provide you with a copy of the cultural resources report for your comment once it is prepared.

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U.S. Army Corps of Engineers, Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102

Ms. Pollmann can be reached at (817) 886-1681 or by email, hope.l.pollmann@usace.army.mil. Thank you for your cooperation.

Sincerely,

LFmoore

for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Carlsbad Ecological Services Field Office
ATTN: Jim Bartel, Field Supervisor
6010 Hidden Valley Road
Carlsbad, CA 92011

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Bartel:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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We are currently in the process of gathering the most current information available regarding Federal and state listed species potentially occurring within the project area. CBP respectfully requests that your agency provide a list of the protected species that occur within this county, along with a description of the sensitive resources (e.g., rare or unique plant communities, threatened, endangered, and candidate species, etc.), and a species location map for those species that you believe may be affected by the proposed CBP activities in San Diego County, Texas.

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Fort Worth, Texas 76102

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Sincerely,

for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Mr. Ed Pert, Regional Manager
California Department of Fish and Game
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Mr. Pert:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Sincerely,

Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

AUG 2 9 2011

Honorable Edwin Romero, Chairman
Barona Band of Mission Indians
1095 Barona Road
Lakeside, CA 92040

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Chairman Romero:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Honorable Dan Tucker, Chairman
Sycuan Band of the Kumeyaay Nation
5459 Dehesa Road
El Cajon, CA 92019

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Chairman Tucker:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

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Ms. Pollmann can be reached at (817) 886-1681 or by email, hope.l.pollmann@usace.army.mil. Thank you for your cooperation.

Sincerely,

Wymoore

for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

1300 Pennsylvania Avenue NW
Washington, DC 20229

AUG 2 9 2011

U.S. Customs and Border Protection

Honorable Robert Pinto, Sr,, Chairman
Cuyapaipe Band of Mission Indians
4054 Willows Road
Alpine, CA 91903-2250

Subject: Proposed Improvements to Old Highway 80 and Interstate 8 Checkpoints

Dear Chairman Pinto:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) that addresses the potential effects, beneficial and adverse, resulting from the proposed improvements on the existing Old Highway 80 and Interstate 8 Checkpoints in San Diego County, California (Figure 1). The proposed improvements would be completed to increase the checkpoints efficiency, provide a safer environment for the agents and public during checkpoint operations, and allow for unimpeded traffic flow during times when the checkpoints are closed. Additionally, these improvements would be in full support of the National Border Patrol Strategy to gain and maintain effective control of the U.S. borders.

The existing checkpoints do not allow for primary inspections to occur outside of the traffic lanes, provide an unimpeded roadway for traffic during checkpoint closures, and requires the use of jersey barriers adjacent to the highway lanes as a safety measure for the agents. The improvements on both checkpoints will require some ground disturbance in previously disturbed and undisturbed areas. The ground disturbance would occur adjacent to the existing paved/gravel areas at the checkpoints. Other improvements such as new inspections lanes located outside the traffic lanes, new modular buildings for administrative, office, and detention purposes, shade canopies, holding tanks, and improved lighting would be included as part of the Proposed Action (Figures 2 and 3).

We are currently in the process of gathering the most current information available, in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800. CBP respectfully requests that you provide information on any cultural resources that you believe may be affected by the proposed CBP activities in San Diego County, California. A cultural survey is being conducted for the proposed project areas, and we will provide you with a copy of the cultural resources report for your comment once it is prepared.

We intend to notify your agency of the availability of the Draft EA once the document is completed. Please inform us if additional copies are needed and/or if someone else within your agency other than you should receive notification of the availability of the Draft EA.

Your prompt attention to this request would be greatly appreciated. For additional information, please contact:

Ms. Hope Pollmann
ATTN: CESWF-PER-EE
U.S. Army Corps of Engineers, Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102

Ms. Pollmann can be reached at (817) 886-1681 or by email, hope.l.pollmann@usace.army.mil. Thank you for your cooperation.

Sincerely,

Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosure

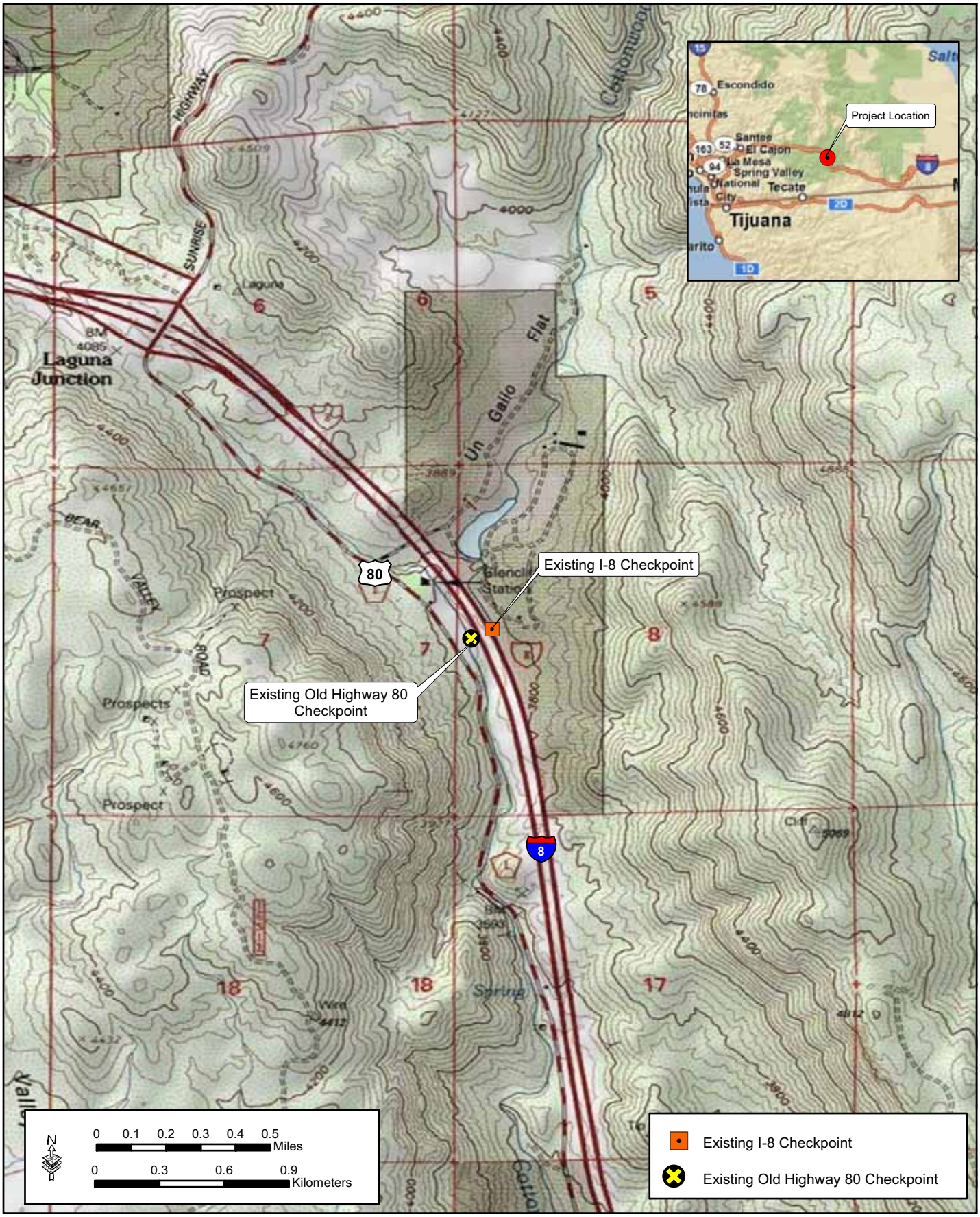

Figure 1: Project Location Map

GSRC

July 2011

Figure 2: Project Footprint for I-8 Checkpoint

GSRC

July 2011

Figure 3: Project Footprint for Old Highway 80 Checkpoint

GSRC

July 2011

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY
DEPARTMENT OF TRANSPORTATION
DISTRICT 11
PLANNING DIVISION
4050 TAYLOR STREET, MS 240
SAN DIEGO, CA 92110
PHONE (619) 688-6960
FAX (619) 688-4299
TTY 711
www.dot.ca.gov

Flex your power!
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November 8, 2011

11-SD-8
Checkpoint Improvements

Mr. Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office
1300 Pennsylvania Ave, NW
Washington, DC 20229

Dear Mr. Flossman:

The California Department of Transportation (Caltrans) has reviewed the proposed improvements to Old Highway 80 and Interstate 8 (I-8) checkpoints referenced in your letter dated August 29, 2011 for the preparation of the Environmental Assessment (EA). Caltrans has the following comments:

- Improvements on state facilities will require encroachment permits and must meet all applicable standards from the Department, including sight distance, truck turning, and ADA compliance.

- Any work performed within Caltrans right-of-way (R/W) will require review and approval by the Department.

Furthermore, the applicant's EA must include all California Environmental Quality Act (CEQA) clearances for any work within Caltrans R/W and indicate that an encroachment permit will be needed. As part of the encroachment permit process, the developer must provide appropriate environmental approval for potential environmental impacts to State Highway R/W. The EA should include studies or letters from qualified specialists or personnel which address the potential, or lack of potential, for impacts to the following resources in State R/W:

Archaeological and historic resources
Biological resources
Visual quality
Hazardous waste
Water quality and stormwater
Air quality
Noise levels

We strongly encourage the U.S. Department of Homeland Security to coordinate early with Caltrans on any aspects of the proposed improvements to Old Highway 80 and I-8 checkpoints project that may impact state transportation facilities.

If you have any questions on the comments Caltrans has provided, please contact Anthony Aguirre of the Development Review Branch at (619) 688-3161.

Sincerely,

JACOB M. ARMSTRONG, Chief
Development Review Branch

c: Ms. Hope Pollmann, Planner, U.S. Army Corps of Engineers, Fort Worth District

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

November 29, 2011

Mr. John Petrilla, Environmental Protection Specialist
United States Department of Homeland Security
Customs and Border Protection (CBP)
2400 Avila Road, Suite 5020
Laguna Niguel, CA 92677

Sent by FAX to: 949-360-3205
No. of Pages: 4

Re: Sacred Lands File Search and Native American Contacts list for the **"Proposed CBP Interstate 8 and Old Highway 80 Checkpoint Project;"** located on Old Highway 80 near the Interstate 8 connection, near the entrance to the Sunrise Highway, in the Mountain Empire region of eastern San Diego County, California

Dear Mr. Petrilla:

The Native American Heritage Commission (NAHC) is the California State 'Trustee Agency' pursuant to Public Resources Code §21070 for the protection of California's Native American Cultural Resources. The NAHC is also a 'reviewing agency' for environmental documents prepared under the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq*), 36 CFR Part 800.3, .5 and are subject to the Tribal and interested Native American consultation as required by the National Historic Preservation Act, as amended (Section 106) (16 U.S.C. 470; Section 106 [f] 110 [f] [k], 304). The provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001-3013) and its implementation (43 CFR Part 10.2), and California Government Code §27491 may apply to this project if Native American human remains are inadvertently discovered.

The NAHC is of the opinion that the federal standards, pursuant to the above-referenced Acts and the Council on Environmental Quality (CSQ; 42 U.S.C. 4371 *et seq*) are similar to and in many cases more stringent with regard to the 'significance' of historic, including Native American items, and archaeological, including Native American items at least equal to the California Environmental Quality Act (CEQA.). In most cases, federal environmental policy require that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Statement (EIS).

The NAHC conducted a Sacred Lands File (SLF) search of its Inventory and Native American Cultural Resources **were not identified** in the project areas you specified; early and quality consultation with the Native American on the attached list may provide detailed information of sites with which they are aware. Also, the absence of archaeological resources does not preclude their existence. In addition, this area is known to the California NAHC to contain substantial archaeological/Native American cultural resources.

The NAHC Sacred Lands File Inventory of the Native American Heritage Commission is established by the California Legislature pursuant to California Public Resources Code §§5097.94(a) and 5097.96. The NAHC Sacred Lands Inventory is populated by submission to the data by Native American tribes and Native American elders; In this way it differs from the California and National Register of Historic Places under the jurisdiction of the U.S. Secretary of the Interior.

The NAHC, pursuant to Appendix B of the Guidelines to the California Environmental Quality Act (CEQA) is designated as the agency with expertise in the areas of issues of cultural significance to California Native American communities. Also, in the 1985 California Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites

Culturally affiliated tribes are to be consulted to determine possible project impacts pursuant to the National Historic Preservation Act, as amended. Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. The NAHC recommends as part of 'due diligence', that you also contact the nearest Information Center of the California Historical Resources Information System (CHRIS) of the State Historic Preservation Office (SHPO) for other possible recorded sites in or near the APE (contact the Office of Historic Preservation at 916-445-7000).

Attached is a list of Native American contacts is attached to assist you; they may have knowledge of cultural resources in the project area. It is advisable to contact the persons listed and seek to establish a 'trust' relationship with them; if they cannot supply you with specific information about the impact on cultural resources, they may be able to refer you to another tribe or person knowledgeable of the cultural resources in or near the affected project area.

Lead agencies should consider avoidance, in the case of cultural resources that are discovered. A tribe or Native American individual may be the only source of information about a cultural resource; this is consistent with the NHPA (16 U.S.C. 470 *et seq* Sections. 106, 110, and 304) Section 106 Guidelines amended in 2009. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful

NEPA regulations provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Even though a discovery may be in federal property, California Government Code §27460 should be followed in the event of an accidental discovery of human remains during any groundbreaking activity; in such cases California Government Code §27491 and California Health & Safety Code §7050.5 will apply and construction cease in the affected area.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Cc: Native American Contacts list

California Native American Contacts
San Diego County
November 29, 2011

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road Diegueno
Lakeside , CA 92040
sue@barona-nsn.gov
(619) 443-6612
619-443-0681

Viejas Band of Kumeyaay Indians
Anthony R. Pico, Chairperson
PO Box 908 Diegueno/Kumeyaay
Alpine , CA 91903
jrothauff@viejas-nsn.gov
(619) 445-3810
(619) 445-5337 Fax

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson
PO Box 1120 Diegueno/Kumeyaay
Boulevard , CA 91905
gparada@lapostacasino.
(619) 478-2113
619-478-2125

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

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

Campo Band of Mission Indians
Monique LaChappa, Chairwoman
36190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo , CA 91906
miachappa@campo-nsn.gov
(619) 478-9046
(619) 478-5818 Fax

Sycuan Band of the Kumeyaay Nation
Danny Tucker, Chairperson
5459 Sycuan Road Diegueno/Kumeyaay
El Cajon , CA 92021
ssilva@sycuan-nsn.gov
619 445-2613
619 445-1927 Fax

Jamul Indian Village
Kenneth Meza, Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul , CA 91935
jamulrez@sctdv.net
(619) 669-4785
(619) 669-48178 - Fax

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

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7060.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed U.S. Customs and Border Protection (CBP) - Interstate 8 and Old Highway 80 C"heckpoint Project; leacted in the Mountain Empire area of eastern San Diego County, California for which a Sacred Lands File search and Native American Contacts list were requested.

California Native American Contacts
San Diego County
November 29, 2011

Mesa Grande Band of Mission Indians
Mark Romero, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA 92070
mesagrandeband@msn.com
(760) 782-3818
(760) 782-9092 Fax

Ewiiaapaayp Tribal Office
Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
michaelg@leaningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas
P.O. Box 775 Diegueno -
Pine Valley , CA 91962
(619) 709-4207

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

Inaja Band of Mission Indians
Rebecca Osuna, Spokesperson
2005 S. Escondido Blvd. Diegueno
Escondido , CA 92025
(760) 737-7628
(760) 747-8568 Fax

Manzanita Band of the Kumeyaay Nation
Leroy J. Elliott, Chairperson
P.O. Box 1302 Diegueno/Kumeyaay
Boulevard , CA 91905
(619) 766-4930
(619) 766-4957 - FAX

Kumeyaay Cultural Repatriation Committee
Steve Banegas, Spokesperson
1095 Barona Road Diegueno/Kumeyaay
Lakeside , CA 92040
(619) 742-5587 - cell
(619) 742-5587
(619) 443-0681 FAX

Kumeyaay Diegueno Land Conservancy
M. Louis Guassac
P.O. Box 1992 Diegueno/Kumeyaay
Alpine , CA 91903
guassacl@onebox.com
(619) 952-8430

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

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

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed U.S. Customs and Border Protection (CBP) - Interstate 8 and Old Highway 80 C"heckpoint Project; leacted in the Mountain Empire area of eastern San Diego County, California for which a Sacred Lands File search and Native American Contacts list were requested.

California Native American Contacts
San Diego County
November 29, 2011

Inter-Tribal Cultural Resource Protection Council
Frank Brown, Coordinator
240 Brown Road Diegueno/Kumeyaay
Alpine , CA 91901
FIREFIGHTER69TFF@AOL.COM
((619) 884-8437

Kumeyaay Cultural Repatriation Committee
Bernice Paipa, Vice Spokesperson
P.O. Box 1120 Diegueno/Kumeyaay
Boulevard , CA 91905
(619) 478-2113

Campo Band of Mission Indians
Andrea Najera, Cultural Resources Manager
36190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo , CA
(619) 478-9046
(619) 478-5818 - FAX

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

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

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed U.S. Customs and Border Protection (CBP) - Interstate 8 and Old Highway 80 C"heckpoint Project; leacted in the Mountain Empire area of eastern San Diego County, California for which a Sacred Lands File search and Native American Contacts list were requested.

1300 Pennsylvania Avenue NW
Washington, DC 20229

DEC 02 2011

U.S. Customs and Border Protection

Mr. Jim Bartel, Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Ecological Services Field Office
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011

Subject: Concurrence of Determination Regarding Proposed Improvements to Interstate 8 and Old Highway 80 Checkpoints, San Diego County, California

Dear Mr. Bartel:

U.S. Customs and Border Protection (CBP) proposes improvements and maintenance to the existing U.S. Border Patrol (USBP) checkpoints located on Interstate 8 (I-8) and Old Highway 80 (Highway 80), located approximately 5 miles east of Alpine, San Diego County, California (see Attachment A: Figure 1). The purpose of the proposed improvements is to facilitate the safe and effective operation of the checkpoints. To meet this goal, the proposed improvements must provide an increased width of the approach lanes to allow sufficient space to safely conduct primary inspections and to allow for the free flow of public traffic during times when the checkpoints are closed; adequate lighting to enhance security and detection capabilities; and a means to operate the checkpoint during extremely hot or other inclement conditions. A general description of these improvements was provided to your office in our original letter to you dated 29 August 2011. A more detailed description is provided in the following paragraphs.

The Proposed Action would include expansion of the current footprint at the I-8 and Highway 80 checkpoints and would include installation of lights, shade canopies, and other minor improvements. The expansion at I-8 would consist of construction of two new exit lanes from I-8 to the inspection area and construction of retaining walls and guard rails at the edge of the expansion area. This expansion would occur near the southern end of the existing checkpoint, within existing cut slopes that were created during construction of I-8, as depicted on Attachment B: Figure 2. Other items to be installed/implemented at the I-8 checkpoint include:

1. A shade canopy over the expanded lane areas and near the secondary inspection area.
2. Permanent lights consisting of 10 light standards equipped with four luminaries each.
3. Hydraulic spike strip
4. Steel building over the existing hydraulic vehicle lift
5. Hydraulic crash bollards
6. Water filled K rails and appropriate signage

Metal halide lamps would be installed on the permanent lights to provide the most accurate color rendering index. Illumination would be directed down and toward the traffic lanes for inspection

and safety purposes. Illumination intensity at ground level would be expected to achieve 24 foot-candles. Backshields would be placed on the lights to reduce or eliminate light trespass into vegetated areas adjacent to the checkpoint. Installation of the permanent lights would allow USBP to discontinue the use of all or most of the portable light generators that are currently used. This would result in a reduction in noise and air pollution. Power for the lights would be provided by underground lines from existing, adjacent electrical power poles.

The improvements at the Highway 80 checkpoint would involve ground disturbance and vegetation clearing to the current easement boundary, which is approximately 10 to 12 feet wide by 1,000 feet long. The paved area would be expanded to accommodate one access lane to the inspection stations off of the Highway 80 road surface. Other improvements proposed at the Highway 80 checkpoint include the following and are illustrated in Attachment C: Figure 3:

1. Shade canopy of the inspection area
2. Upgrade of the pad around the existing USBP water well
3. Permanent lights consisting of nine light standards with five luminaries each
4. Underground wastewater holding tank (which will be operated/maintained by licensed contractor)
5. New modular administrative building
6. Additional parking spaces
7. K rails and appropriate signage

Three coast live oak trees (*Quercus agrifolia*) are within footprint of the expanded access lane and parking area. Every attempt to avoid removing these trees shall be carefully considered. The southernmost tree might require removal due to safety concerns, as it is near the beginning of the expanded lanes. Limbs would be cut on all three trees to provide proper vehicle clearance and line of sight for the agents working the checkpoint. Lights would be installed to provide security and enhance inspection. The lighting design would be similar to that described for the I-8 checkpoint.

Additionally, the continued maintenance, as well as potential renovations of or minor additions to the checkpoints, would be expected. Such activities could include, but are not limited to, minor renovations and additions to buildings such as realigning interior spaces of an existing building, adding a small storage shed to an existing building, installing a small antenna on an already existing antenna tower that does not cause the total height to exceed 200 feet, kennels, and security systems. Other maintenance activities could include routine upgrade, repair, and maintenance of the checkpoint buildings, roofs, parking area, grounds, or other facilities which would not result in a change of functional use (e.g., replacing door locks or windows, painting interior or exterior walls, resurfacing a road or parking lot, culvert maintenance, grounds maintenance, or replacing essential station components such as an air condition unit).

In recent conversations with Mr. Patrick Gower of your staff, a concern was expressed about the potential of the areas surrounding the checkpoints to support the endangered Quino checkerspot butterfly (*Euphydryas editha quino*) (QCB). A review of the USFWS Information, Planning, and Conservation (IPaC) System website and the California Natural Diversity Database (CNDDB) indicated that six Federally protected species have the potential to occur in the region of the two

checkpoints (USFWS 2011 and CNDDB 2011), including the QCB. Of these, only the least Bell's vireo (*Vireo bellii pusillus*) has been recorded within a 1.5-mile radius of the checkpoints, as reported by CNDDB (CNDDB 2011). State-listed species reported within 1.5 miles of the checkpoint include the Dulzura pocket mouse (*Perognathus californicus femoralis*), sticky geraea (*Geraea viscida*), and San Diego hulsea (*Hulsea californica*).

A habitat assessment of both sites was conducted in September 2011 by Mr. Michael W. Klein, Sr. along with biologists from Gulf South Research Corporation (GSRC). Mr. Klein described the vegetation adjacent to the I-8 checkpoint as consisting of Great Basin sage communities with Great Basin sagebrush (*Artemisia tridentata*), Muller's scrub oak (*Quercus cornelius-mulleri*), and California buckwheat (*Eriogonum fasciculatum*) as the dominant plants. Other species observed by Mr. Klein and GSRC included lilac (*Ceanothus leucodermis*), deer weed (*Lotus scoparius*), broom snakeweed (*Gutierrezia* sp.), rock rose (*Cistus creticus*), sunflower (*Vigueria* sp.), and goldenbush (*Hazardia squarrosa*). Dark-tip bird's beak (*Cordylanthus rigidus*) is also a common associate species found on this site, and is one of the QCB's larval host plants.

The Highway 80 checkpoint is situated within an oak woodland and chaparral community with coast live oak, non-native grasses (e.g., *Bromus, Avena,* and *Hordeum*), and California buckwheat as dominant plants. This site also contains several dark-tip bird's beak plants.

The proposed improvements would result in the permanent loss of 650 square feet (0.015 acre) of potentially suitable habitat for the QCB at the I-8 checkpoint. Although dark-tipped bird's beak and California buckwheat are present at the Highway 80 checkpoint, this area was marginally suitable habitat for the QCB since the buckwheat was found sporadically and under the coast live oak trees, which shaded the buckwheat plants. QCB larvae tend to avoid shaded areas during diapause. Because of the degraded nature of the habitat at both checkpoints, the small size of the impact area, and the proximity to busy highways, CBP has determined that the proposed improvements may affect, but are not likely to adversely affect, the QCB. CBP also believes that due to the small size of the construction footprint, the fact that the footprint is situated within an existing and active highway right-of-way, and that any disturbance would occur within previously disturbed areas, any potential impacts on QCB would be discountable.

Cottonwood Creek flows from the north side of I-8, through culverts under the interstate, and then southeasterly, approximately 150 feet from the Highway 80 checkpoint. Cottonwood Creek continues to flow southeasterly between I-8 and Old Highway 80. The creek is ephemeral in this reach. Vegetation along Cottonwood Creek is comprised predominantly of coast live oak, great basin sage, arroyo willow (*Salix lasiolepis*), and mulefat (*Baccharis salicifolia*).

Although Cottonwood Creek drainage does contain potentially suitable habitat for arroyo toad, least Bell's vireo, and southwestern willow flycatcher, CBP has determined that no effect would occur on these species because of the following reasons:

1. The position of the creek between I-8 and Highway 80, which generate constant noise.
2. The distance from the proposed improvements to the creek (approximately 150 feet) and the density of the vegetation along the creek, which would attenuate any construction noise from the Highway 80 checkpoint.

3. The short duration of construction activities at the Highway 80 checkpoint.
4. The lack of reported observations of Federally protected species near the checkpoints.
5. The avoidance of coast live oaks by the construction improvement.
6. No disturbance would occur, directly or indirectly, on the habitat within Cottonwood Creek.

CBP will continue to consult with your office for any projects in your service area and will forward a copy of the Draft Environmental Assessment of the proposed actions at these checkpoints for your review, once it is released to the public. We respectfully ask that you concur with our findings that the Proposed Action would not be likely to adversely affect the QCB and would have no effect on arroyo toad, southwestern willow flycatcher, and least Bell's vireo.

Your prompt attention to this request would be greatly appreciated. For additional information, please contact:

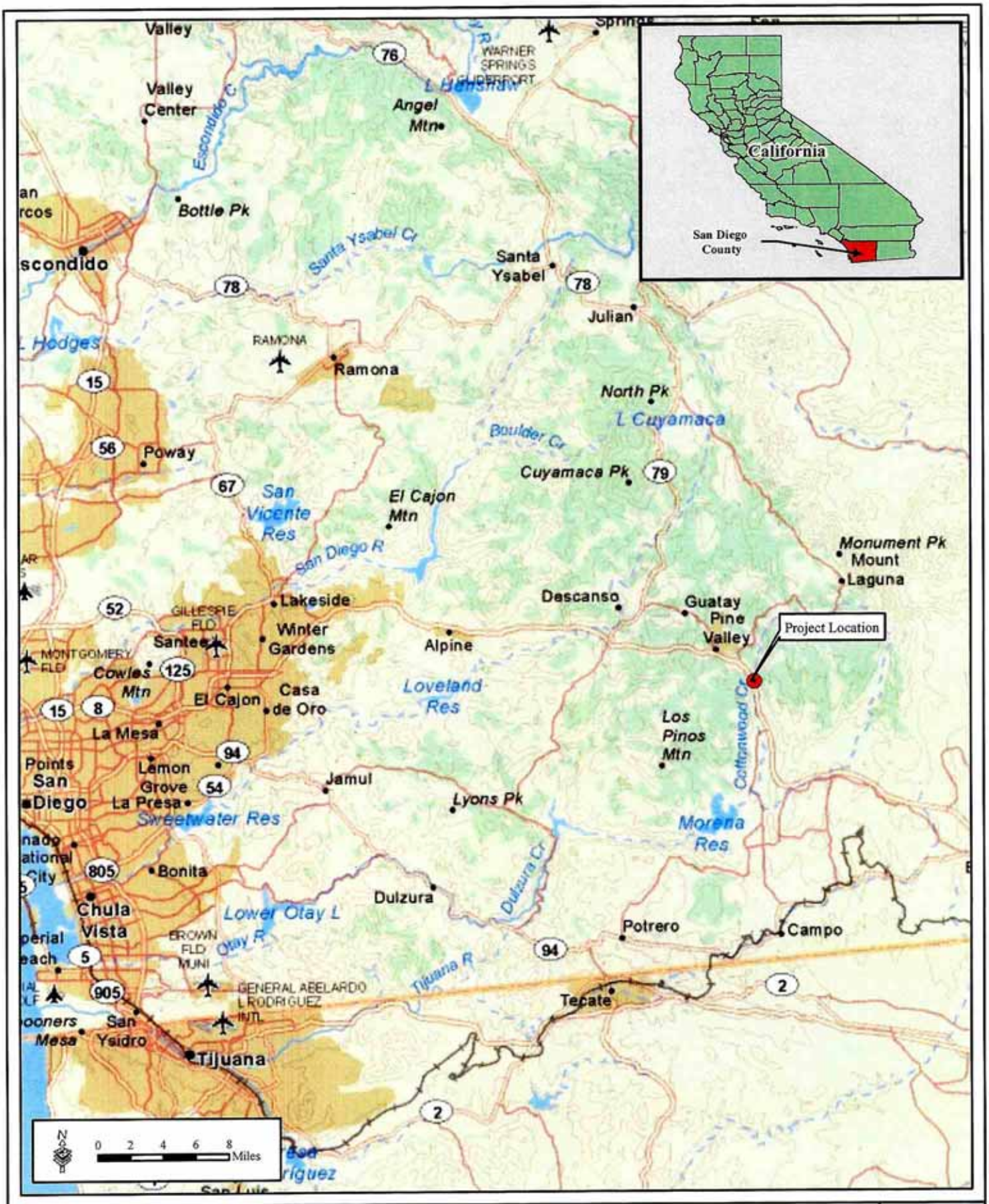
U.S Customs and Border Protection
Mr. John Petrilla, Laguna Facilities Center
24000 Avila Rd.
5th Floor, Room 5020
Laguna Niguel, CA 92677

If you require additional information or have any questions, please contact Mr. Petrilla at (949) 360-2382 or by e-mail at john.petrilla@dhs.gov. Thank you.

Sincerely,

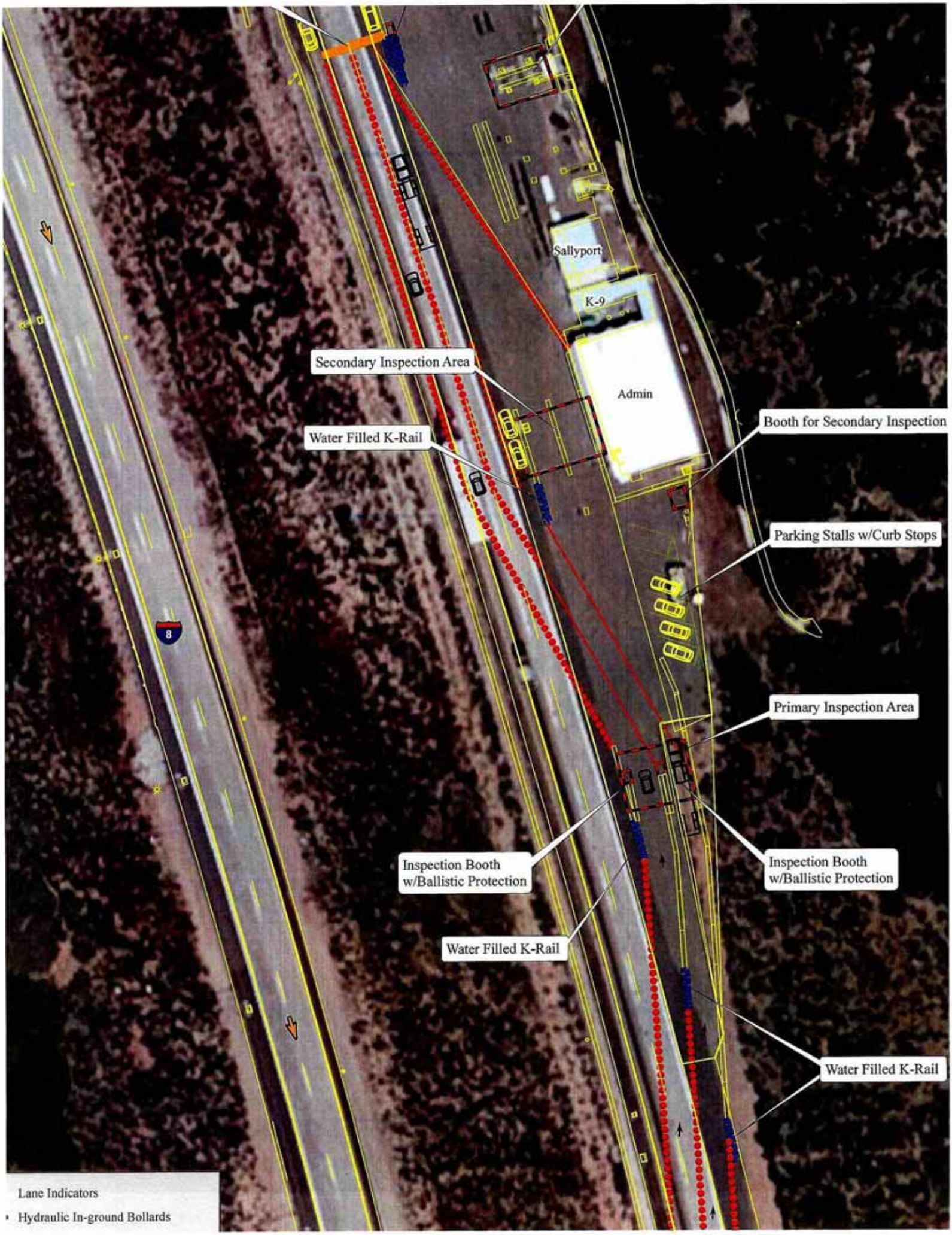
for Loren Flossman
Director
Border Patrol Facilities and Tactical Infrastructure
Program Management Office

Enclosures



Attachment A
Figure 1. Project Location Map

GSRC
November 2011


Sallyport
K-9
Admin
Secondary Inspection Area
Water Filled K-Rail
Booth for Secondary Inspection
Parking Stalls w/Curb Stops
Primary Inspection Area
Inspection Booth w/Ballistic Protection
Inspection Booth w/Ballistic Protection
Water Filled K-Rail
Water Filled K-Rail
8
Lane Indicators
Hydraulic In-ground Bollards

Attachment C
Figure 3. Alternative 2: Proposed Action for Old Highway 80 Checkpoint

GSRC
November 2011

STATE OF CALIFORNIA – THE RESOURCES AGENCY
EDMUND G. BROWN, JR., *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

May 10, 2012

Reply in Reference To: CBP120206A

Christopher Colacicco, Director
Real Estate and Environmental Services Division
US Customs and Border Protection
1300 Pennsylvania Avenue NW
Washington, DC 20229

Re: I-8 and the Highway 80 US Border Patrol Checkpoints San Diego County, California

Dear Mr. Colacicco:

Thank you for seeking my consultation regarding the above noted undertaking. Pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA), US Customs and Border Protection (CBP) is seeking my comments on the effects the proposed undertaking will have on historic properties.

The project consists of widening the cleared right-of-way at both the I-8 and Highway 80 checkpoints and installing lights, wastewater holding tanks, and shade canopies. The clearing will include an area roughly 12 feet by 1000 feet for the Highway 80 checkpoint. All improvements to the I-8 checkpoint will be within the previously cleared and graded checkpoint. Holes for the canopies and lights would be up to 12 feet deep with diameters varying from eight to 16 inches in diameter. The Area of Potential Effects includes the clearing area of the Highway 80 checkpoint and is contained completely within the footprint of the existing I-8 checkpoint, which is previously graveled and or paved. Included in your letter received February 2, 2012, you have provided details and several maps as evidence of your efforts to identify historic properties in the APE.

CBP has performed a records search and identified that 11 cultural resources have been identified within a half mile of the APE, however none are located within the APE. Additionally, the CBP performed a pedestrian survey of the APE by way of 12 foot transects. No historic properties were identified within the APE by the pedestrian survey. Native American consultation has been undertaken with letters sent to the tribes as of February 3, 2012. No responses have been received to date.

Based on your identification efforts, the CBP has determined that there will be No Adverse Effect to historic properties by this undertaking. Pursuant to 36 CFR 800.5(c), I concur with the CBP determination of No Adverse Effects.

Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, the CBP may have additional future responsibilities for this undertaking under 36 CFR Part 800. Thank you for seeking my comments and

considering historic properties as part of your project planning. If you have any questions or concerns, please contact Trevor Pratt of my staff at (916) 445-7017 or at email at tpratt@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY
DEPARTMENT OF TRANSPORTATION
DISTRICT 11
PLANNING DIVISION
4050 TAYLOR STREET, MS 240
SAN DIEGO, CA 92110
PHONE (619) 688-6960
FAX (619) 688-4299
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Flex your power!
Be energy efficient!

June 18, 2012

11-SD-8
Checkpoint Improvements
SCH No. 2012061011

John Petrilla
U.S. Customs and Border Protection
24000 Avila Road, Suite 5020
Laguna Niguel, DC 92677

Dear Mr. Petrilla:

The California Department of Transportation (Caltrans) has reviewed the Environmental Assessment (EA) for the proposed improvements of Interstate 8 (I-8) and Old Highway 80 (Hwy 80). The Project would include expansion of the current footprint at the I-8 and Hwy 80 checkpoints and would include installation of lights, shade canopies, and other minor improvements. The expansion at I-8 would consist of construction of two new exit lanes from I-8 to the inspection area construction of retaining walls and guard rails at the edge of the expansion area, and other improvements. Improvements at the Hwy 80 checkpoint would involve ground disturbance and vegetation clearing to the current easement boundary, which is approximately 10 to 12 feet wide by 1,000 feet long. The paved area would be expanded to accommodate one access lane to the inspection stations off of the Hwy 80 road surface and other improvements. → 1

Work within State right-of-way (R/W) will require an Encroachment Permit and must meet all applicable standards, including sight distance, truck turning, and Americans with Disabilities Act (ADA) compliance.

Furthermore, the applicant's EA must include all California Environmental Quality Act (CEQA) clearances for any work within Caltrans R/W and indicate that an encroachment permit will be needed. As part of the encroachment permit process, the developer must provide appropriate environmental approval for potential environmental impacts to State Highway R/W. → 2 The EA should include studies or letters from qualified specialists or personnel which address the potential, or lack of potential, for impacts to the following resources in State R/W: → 3

Archaeological and historic resources
Biological resources
Visual quality
Hazardous waste
Water quality and stormwater
Air quality
Noise levels

We strongly encourage the U.S. Department of Homeland Security to coordinate early with Caltrans on any aspects of the proposed improvements to Hwy 80 and I-8 checkpoints project that may impact State transportation facilities. 4

Caltrans has the following specific comments:

- Water filled barriers are not allowed within the Clear Recovery Zone (CRZ = 30 ft from edge of travelled way). Water filled barriers are not an approved safety device for California freeways. Alternatively, selection of an approved barrier would be allowed, but would require an approved end treatment on the upstream blunt end or the end could be tapered to 30 ft at a 10:1 flare (minimum). 5

- Caltrans Structures Division will also need review the proposed shade canopy and the secondary inspection area canopy. If provided design plans Caltrans can provide preliminary review and comments prior to an official Caltrans Encroachment Permit. 6

- All utilities will be required to tie-in to a non-Caltrans meter. 7

- No in ground or permanent flush mounted spike system is allowed within the State's R/W. 8

If you have any questions on the comments Caltrans has provided, please contact Anthony Aguirre of the Development Review Branch at (619) 688-3161.

Sincerely,

JACOB M. ARMSTRONG, Chief
Development Review Branch

c: Ms. Hope Pollmann, Planner, U.S. Army Corps of Engineers, Fort Worth District

RESPONSES TO COMMENTS
CALIFORNIA DEPARTMENT OF TRANSPORTATION (Caltrans)

Caltrans #1.	The EA and FONSI have been revised to indicate that an encroachment permit will be required prior to the implementation of the improvements.
Caltrans #2.	The EA and FONSI address the environmental concerns that would typically be addressed in a CEQA document, including growth inducing impacts and mitigation. This project does not have any unique issues that would be identified by CEQA that are not addressed by the NEPA process. CEQA allows for use of NEPA documents in place of CEQA documents. This is common practice for other Federal projects that do not have unique issues not addressed by the NEPA process. The California Code of Regulations (CCR), Title 14, Sections 15220 to 15229 allows the use of an EIS/ROD or EA/FONSI to meet the requirements for an EIR or Negative Declaration under CEQA. Submission through the California Governor's Office of Planning and Research, State Clearinghouse is required to use those provisions, which CBP has done.
Caltrans #3.	CBP and USBP have coordinated with Caltrans throughout the planning stages of the proposed activities.
Caltrans #4.	CBP will continue to coordinate with Caltrans to identify approved barrier designs that will comply with Caltrans safety requirements and CBP/USBP operational needs.
Caltrans #5.	CBP has submitted the designs for the shade canopy and other proposed improvements at the checkpoint sites.
Caltrans #6.	CBP agrees that the utilities will be tied in under separate meter.
Caltrans #7.	CBP will continue to coordinate with Caltrans to identify and receive approval of a spike system that will comply with Caltrans safety requirements and meet CBP/USBP operational needs.

State of California -The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
http://www.dfg.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

June 18, 2012

John Petrilla
U.S. Department of Homeland Security
Customs and Border Protection
24000 Avilia Road, Suite 5020
Laguna Niguel, CA 92677

Subject: Comments on the Draft Environmental Assessment for the Proposed Improvements of Interstate 8 and Highway 80 Checkpoints, San Diego County, California (SCH 2012061011)

Dear Mr. Petrilla:

The California Department of Fish and Game (Department) has reviewed the above-referenced draft Environmental Assessment (EA) dated May 2012. The Department offers the comments and recommendations below to assist the U.S. Customs and Border Protection (CBP) in avoiding or minimizing potential impacts to biological resources. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (Sections 15386 and 15381, respectively) and is responsible for ensuring appropriate plant and animal species, pursuant to the California Endangered Species Act (CESA) and other sections of the Fish and Game Code.

The checkpoints for which improvements are proposed are located on Interstate 8 (I-8) and Old Highway 80 (Hwy 80) southeast of the unincorporated community of Pine Valley, and west of Buckman Springs Road, San Diego County, California. Coordinates of the I-8 checkpoint are 32.796176, -116.495684, and coordinates of the Hwy 80 checkpoint are 32.798495, -116.49878. The proposed projects would include expansion of the current footprint at the I-8 and Hwy 80 checkpoints and would include installation of lights, shade canopies, and other minor improvements. The expansion at I-8 would consist of construction of two new exit lanes from I-8 to the inspection area and construction of retaining walls and guard rails at the edge of the expansion area, resulting in 0.015 acre of permanent impacts. This expansion would occur near the southern end of the existing checkpoint, within existing cut slopes that were created during construction of I-8. Other items to be installed or implemented at the I-8 checkpoint include: 1) shade canopy over the expanded lane areas and near the secondary inspection area, 2) permanent lights consisting of ten light standards equipped with four luminaries each, 3) hydraulic spike strip, 4) steel building over the existing hydraulic vehicle lift, 5) hydraulic crash bollards, and 6) water filled K rails and appropriate signage.

The improvements at the Hwy 80 checkpoint would involve ground disturbance and vegetation clearing to the current easement boundary, resulting in 0.12 acre of permanent impacts. The paved area would be expanded to accommodate one access lane to the inspection stations off of the Hwy 80 road surface. Other improvements proposed at the Hwy 80 checkpoint include the following: 1) shade canopy over the inspection area, 2) upgrade of the pad around the existing water well, 3) permanent lights consisting of nine light standards with five luminaries

each, 4) underground waste water holding tank, 5) new administrative building, 6) additional parking spaces, and 7) K rails and appropriate signage.

The draft EA included three project design alternatives: (1) No Action Alternative; (2) Proposed Action Alternative; and (3) No Lane Expansion Alternative, in which improvements occur but no expansion is undertaken.

Land type and habitat documented within I-8's project area consists of Great Basin sage communities, whose primary species include: Great Basin sage brush (*Artemesia tridentata*), Muller's scrub oak (*Quercus cornelius-mulleri*), and California buckwheat (*Erigonum fasciculatum*). Dark-tip bird's beak, (*Cordylanthus rigidus*) is also a common associate species found on this site, according to the EA, and is one of the Quino Checkerspot butterfly's (*Euphydryas editha quino*) larval host plants. Habitat within Hwy 80's project area was documented as oak woodland and chaparral with coast live oak (*Quercus agrifolia*), non-native grasses (e.g., *Bromus*, *Avena*, and *Hordeum*), and California buckwheat. Dark-tip brid's beak was also observed at this site. The proximate area surrounding the project sites is rural open space with sparse development. No project-specific survey data, including the time of year at which the survey was conducted, was provided in the EA.

To enable the Department staff to adequately review and comment on the proposed action we recommend the following information, where applicable, be included in any subsequent environmental documents. → 1

1. Based on the information provided in the EA it is unclear from the findings that the project would result in less than significant impacts to all sensitive biological resources. The extent of the analysis provided on potential impacts to sensitive biological resources was limited to an acknowledgement in the EA of a federal and state biological database search, and observation made on-site. However, the supporting technical documents (e.g., biological technical report prepared by the biologist of record) were not included in the EA to substantiate this conclusion. The supporting documentation (biological technical report) should include site-specific surveys conducted at the appropriate times of year to actually detect species, and should and not be done opportunistically. Seasonal variations in use by fauna in the project area should be addressed. Recent, focused, species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable should be included in the impact analysis. → 2

2. The Department would emphasize that the EA needs to provide a thorough discussion on direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts as identified by cooperating agencies. This should consider all relevant and reasonable mitigation measures that cover the range of impacts of the project, including commensurate mitigation to sensitive vegetation types, and impacts to narrow endemic plant species, should those be identified. We are particularly concerned with the lack of commensurate mitigation. The conclusion that, 'removal of 0.14 acre of locally and regionally common plant communities would not have major cumulative impacts on vegetation communities because of the vast amounts of similar vegetation communities surround the project sites' (page 4-3) is not supported by the evidence and/or existing, established regional criteria. In addition, it is unclear to the Department how CBP concluded that the project would have, 'negligible cumulative impacts' (page 4-3) considering there is no supporting discussion acknowledging whether the County's development databases were reviewed to determine the potential effects of past projects, the effects of other current projects, and the effects of probable future projects in → 3

comparison to the action. Absent commensurate mitigation to address direct impacts to sensitive vegetation communities, we believe the project's contribution to cumulative habitat loss could be significant. We suggest, as in previous comment letters evaluating United States Border Patrol projects in San Diego County, that CBP consider the County of San Diego's Guidelines for Determining Significance for Biological Resources, which includes mitigation ratios that are applied to development proposals for addressing direct impacts to the vegetation communities.

3, continued

3. The proposed actions should also be analyzed relative to their effect on the off-site habitats and associated wildlife. Specifically, this should include any identified nearby public lands, open space, and adjacent natural habitats. Impact to and maintenance of wildlife corridor or movement areas, including access to undisturbed habitat in adjacent areas, is an area of concern to the Department. The analysis should also include a discussion of the potential for impacts resulting for increased vehicle traffic (frequency and duration), artificial lighting, noise, and vibration. Adopted significance thresholds should guide the analysis.

4

4. Potential impacts to migratory wildlife affected by these actions were partially discussed on page FONSI-4 of the EA and included an avoidance measure by limiting vegetation clearing to outside the defined avian breeding season for southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*). However, the EA's cumulative impacts analysis states that due to the degraded condition of the project site, it is unlikely that there will be a need to restrict construction activities during the bird breeding season. We believe that it is appropriate to include an avoidance measure to address the avian breeding season in the Summary of Environmental Commitments and Draft Finding of No Significant Impact. Furthermore, sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of birds and their active nests, including raptors and other migratory non-game birds as listed under the migratory Bird Treaty Act. The proposed action (including disturbances to vegetation) should take place outside of the general avian breeding season (January 15 to August 15) as defined by the Department and the U.S. Fish and Wildlife Service (collectively referred to as the Wildlife Agencies) to avoid take (including disturbance which would cause abandonment of active nests containing eggs and/or young). To avoid any direct and indirect impacts to raptors and/or any migratory birds, grubbing and clearing of vegetation that may support active nests and construction activities adjacent to nesting habitat, should occur outside of the breeding season. If removal of habitat and/or any migratory birds, grubbing and clearing of vegetation that may support active nests and construction activities adjacent to nesting habitat, should occur outside of the breeding season. If removal of habitat and/or construction activities are necessary adjacent to nesting habitat during the breeding season, the CPB shall retain an approved biologist to conduct a pre-construction survey to determine the presence or absence of non-listed nesting migratory birds on or within 100 feet of the construction area, Endangered Species Act (ESA) - or CESA-listed birds on or within 300 feet of the construction area and nesting raptors within 500 feet of the construction area. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, the results of which must be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities. If nesting birds are detected by the approved biologist, the following buffers should be established: 1) no work within 100 feet of a non-listed nesting migratory bird nest, 2) no work within 300 feet of an ESA or CESA-listed bird nest, and 3) no work within 500 feet of a raptor nest. However, the Wildlife Agencies may reduce these buffer widths depending on site-specific conditions (e.g. the width and type of screening vegetation between the nest and proposed activity) or the existing ambient level of activity (e.g., existing level of human activity within the buffer distance). If construction must take place

5

within the recommended buffer widths above, the project applicant should contact the Wildlife Agencies to determine the appropriate buffer.

A biological monitor shall be present on-site during all initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained and to minimize the likelihood that nests containing eggs or chicks area are abandoned or fail due to construction activity. A biological monitor shall also perform periodic inspection of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. These inspections should take place once or twice a week, as defined by the Wildlife Agencies, depending on the sensitivity of the resources. The biological monitor shall send weekly monitoring reports to the Wildlife Agencies immediately if clearing is done outside of the permitted project footprint. → 6

5. The EA states that coast live oaks (*Quercus agrifolia*) exist within the project footprint and that removal may be necessary (page FONSI-2). However, the EA is lacking supplemental discussion on commensurate habitat-based mitigation that will be provided to offset this removal. The Department recommends mitigation be provided for individual oak trees that are damaged or removed along the right-of-way. We would also recommend replacement at the following ratios: → 7

   a. trees less than five inches diameter at breast height (DBH) shall be replaced at 3:1

   b. trees between five and 12 inches DBH shall be replaced at 5:1

   c. trees between 12 and 36 inches DBH shall be replaced at 10:1

   d. trees greater than 36 inches DBH shall be replaced at 20:1

   Oak woodland restoration should use locally collected acorns or saplings grown from collected acorns. Appropriate understory species should also be included to enhance structural diversity of the mitigation site. The site should be monitored and managed for a minimum of 10 years to ensure success of the restoration effort.

We appreciate the opportunity to comment on the draft EA for this action and to assist the CPB in further minimizing and mitigating the proposed actions and their impacts to biological resources. If you have questions or comments regarding this letter, please contact Jennifer Edwards of the Department at (858)467-2717 or via email at jedwards@dfg.ca.gov.

Sincerely,

Stephen M. Juarez
Environmental Program Manager
South Coast Region

cc: State Clearinghouse, Sacramento

RESPONSES TO COMMENTS
CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG)

CDFG #1. CBP thanks California Department of Fish and Game/Caltrans for its review and comment

CDFG #2. A biological report has been added to the appendices of the EA. Surveys were conducted in July and August 2011. While protocol surveys, including multi-seasonal surveys, were not conducted, the surveys that were conducted were sufficient to perform habitat assessments to determine suitability to support rare, threatened or endangered species.

CDFG #3. The determination that the loss of 0.14 acre of habitat was not a major cumulative impact was based on several factors including the small size, the disturbed condition of the site, the location (i.e., existing highway ROW), and the spatial and temporal juxtaposition of other projects. The cumulative effects were adequately described in Section 4 of the EA, including quantification of CBP/USBP projects throughout San Diego County. Based on county and state agency websites, no proposed or planned projects were identified along U.S. Highway 80 or I-8; thus, there are no other projects anticipated that would add to the cumulative effects within the project region. After further review of the County of San Diego Guidelines for Determining Significance for Biological Resources, CBP has confirmed the conclusion that no major cumulative impacts would result from the proposed action and, therefore, no mitigation is warranted.

CDFG #4. These effects were considered and determined to be negligible or minor, primarily for the reasons stated in the response to CDFG #2. The EA has been revised to clearly state that there will be no increase in traffic (frequency or duration). The use of permanent lighting will reduce noise, air quality and vibration effects, as stated in the Draft EA.

CDFG #5. CBP has committed to restrict the initial site preparation to the period between September 1 and March 1, which is outside the typical migratory bird breeding/nesting season (see FONSI page 4 and EA sections 3.6.2.2 and 5.3)

CDFG #6. CBP has committed to having an on-site biological monitor during the initial site preparation (i.e., clearing, grubbing and grading) as stated in the FONSI (page 4) and sections 3.6.2.2 and 5.3 of the EA.

CDFG #7. CBP will continue to coordinate with CDFG to identify and negotiate potential mitigation for coast live oaks, in the event that the three trees must be removed. However, as stated in the EA (page 2-5), every attempt will be made to avoid removal of these trees. It should also be noted that three other coast live oak trees are within the footprint; the design of the checkpoint was developed to avoid disturbances to these trees.

APPENDIX C
AIR QUALITY CALCULATIONS

CALCULATION SHEET-COMBUSTION EMISSIONS-CONSTRUCTION

Assumptions for Combustible Emissions					
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	1	300	8	160	384000
Diesel Road Compactors	1	100	8	30	24000
Diesel Dump Truck	1	300	8	30	72000
Diesel Excavator	1	300	8	15	36000
Diesel Hole Trenchers	1	175	8	15	21000
Diesel Bore/Drill Rigs	0	300	8	160	0
Diesel Cement & Mortar Mixers	1	300	8	30	72000
Diesel Cranes	0	175	8	160	0
Diesel Graders	1	300	8	15	36000
Diesel Tractors/Loaders/Backhoes	1	100	8	160	128000
Diesel Bulldozers	1	300	8	30	72000
Diesel Front-End Loaders	2	300	8	30	144000
Diesel Forklifts	1	100	8	160	128000
Diesel Generator Set	1	40	8	160	51200

Emission Factors							
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bulldozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front-End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Forklifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTION EMISSIONS-CONSTRUCTION

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.186	0.876	2.323	0.173	0.169	0.313	226.818
Diesel Road Paver	0.010	0.039	0.130	0.009	0.009	0.020	14.181
Diesel Dump Truck	0.035	0.164	0.436	0.033	0.032	0.059	42.528
Diesel Excavator	0.013	0.052	0.182	0.013	0.012	0.029	21.276
Diesel Hole Cleaners\Trenchers	0.012	0.056	0.134	0.011	0.010	0.017	12.399
Diesel Bore/Drill Rigs	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Cement & Mortar Mixers	0.048	0.184	0.578	0.038	0.037	0.058	42.029
Diesel Cranes	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Diesel Graders	0.014	0.054	0.188	0.013	0.013	0.029	21.276
Diesel Tractors/Loaders/Backhoes	0.261	1.158	1.018	0.193	0.188	0.134	97.484
Diesel Bulldozers	0.029	0.109	0.378	0.026	0.025	0.059	42.552
Diesel Front-End Loaders	0.060	0.246	0.793	0.056	0.054	0.117	85.089
Diesel Aerial Lifts	0.279	1.095	1.207	0.196	0.190	0.134	97.441
Diesel Generator Set	0.068	0.212	0.337	0.041	0.040	0.046	33.137
Total Emissions	**1.016**	**4.246**	**7.704**	**0.802**	**0.780**	**1.015**	**736.211**

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSION EMISSIONS-CONSTRUCTION

Construction Worker Personal Vehicle Commuting to Construction Site-Passenger and Light Duty Trucks									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emissions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	60	160	15	15	0.22	0.26	0.47
CO	12.4	15.7	60	160	15	15	1.97	2.49	4.46
NOx	0.95	1.22	60	160	15	15	0.15	0.19	0.34
PM-10	0.0052	0.0065	60	160	15	15	0.00	0.00	0.00
PM 2.5	0.0049	0.006	60	160	15	15	0.00	0.00	0.00
CO2	369	511	60	160	15	15	58.56	81.09	139.65

Heavy Duty Trucks Delivery Supply Trucks to Construction Site									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emissions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	120	2	2	0.00	0.01	0.01
CO	1.32	3.21	60	120	2	2	0.02	0.05	0.07
NOx	4.97	12.6	60	120	2	2	0.08	0.20	0.28
PM-10	0.12	0.33	60	120	2	2	0.00	0.01	0.01
PM 2.5	0.13	0.36	60	120	2	2	0.00	0.01	0.01
CO2	536	536	60	120	2	2	8.51	8.51	17.01
Daily Commute New Staff Associated with Proposed Action									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Cars	Number of trucks	Total Emissions cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	40	365	15	15	0.33	0.39	0.72
CO	12.4	15.7	40	365	15	15	2.99	3.79	6.78
NOx	0.95	1.22	40	365	15	15	0.23	0.29	0.52
PM-10	0.0052	0.0065	40	365	15	15	0.00	0.00	0.00
PM 2.5	0.0049	0.006	40	365	15	15	0.00	0.00	0.00
CO2	369	511	40	365	15	15	89.05	123.32	212.38

Truck Emission Factor Source: MOBILE6.2 USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway.

CALCULATION SHEET-TRANSPORTATION COMBUSION EMISSIONS-CONSTRUCTION

Conversion factor:	gms to tons
	0.000001102

Carbon Equivalents	Conversion Factor
N2O or NOx	311
Methane or VOCs	25

Source: EPA 2010 Reference, Tables and Conversions, Inventory of U.S. Greenhouse Gas Emissions and Sinks; http://www.epa.gov/climatechange/emissions/usinventoryreport.html

CARBON EQUIVALENTS

Construction Commuters	Conversion	Emissions CO2 tons/yr	Total CO2
VOCs	25	11.78	
NOx	311	0.34	
Total		12.13	151.77

Delivery Trucks	Conversion	Emissions CO2 tons/yr	Total CO2
VOCs	25	0.33	
NOx	311	86.71	
Total		87.04	104.06

Kirtland AFB staff and Students	Conversion	Emissions CO2 tons/yr	Total CO2
VOCs	25	17.92	
NOx	311	162.87	
Total		180.79	393.17

CALCULATION SHEET-FUGITIVE DUST-CONSTRUCTION

Construction Fugitive Dust Emissions

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19	ton PM10/acre-month	MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42	ton PM10/acre-month	MRI 1996; EPA 2001; EPA 2006

PM2.5 Emissions

PM2.5 Multiplier	0.10	(10% of PM10 emissions assumed to be PM2.5)	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM10 and PM2.5 emissions)	EPA 2001; EPA 2006

Project Assumptions

Construction Area (0.19 ton PM10/acre-month)

			Conversion Factors	
Duration of Construction Project	6	months	0.000022957	acres per sq feet
Length		miles	5280	feet per mile
Length (converted)	1000	feet		
Width	12	feet		
Area	5.00	acres		

Staging Areas

Duration of Construction Project	6	months
Length		miles
Length (converted)		feet
Width		feet
Area	0.00	acres

	Project Emissions (tons/year)			
	PM10 uncontrolled	PM10 controlled	PM2.5 uncontrolled	PM2.5 controlled
Construction Area (0.19 ton PM10/ac	5.70	2.85	0.57	0.29
Staging Areas	0.00	0.00	0.00	0.00
Total	**5.70**	**2.85**	**0.57**	**0.29**

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999.* EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants.*Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1).* Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Construction Fugitive Dust Emission Factors

General Construction Activities Emission Factor

0.19 ton PM10/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM10/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM10/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions from Construction Operations, calculated the 0.19 ton PM10/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM10/acre-month) and 75% of the average emission factor (0.11 ton PM10/acre-month).

The 0.19 ton PM10/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM10/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particle (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District and the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM10/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM10/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM10/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM2.5 Multiplier **0.10**

PM2.5 emissions are estimated by applying a particle size multiplier of 0.10 to PM10 emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM10 and PM2.5 **0.50**

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas. Wetting controls will be applied during project construction (EPA 2006).

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999.* EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants.* Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1).* Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

CALCULATION SHEET-SUMMARY OF EMISSIONS

Alternative 1 Construction Emissions for Criteria Pollutants (tons per year)									
Emission Source	VOC	CO	NOx	PM-10	PM-2.5	SO2	CO2	CO2 Equivalents	Total CO2
Combustion Emissions	1.02	4.25	7.70	0.80	0.78	1.02	736.21	2421.47	3157.68
Construction Site-Fugitive PM-10	NA	NA	NA	2.85	0.29	NA	NA	NA	NA
Construction Workers Commuter & Trucking	0.48	4.53	0.62	0.01	0.01	NA	139.65	205.92	345.57
Total emissions-CONSTRUCTION	**1.50**	**8.78**	**8.33**	**3.66**	**1.07**	**1.02**	**876**	**2,627**	**3,503**
De minimis Threshold (1)	100	100	100	100	100	100	NA	NA	27,557

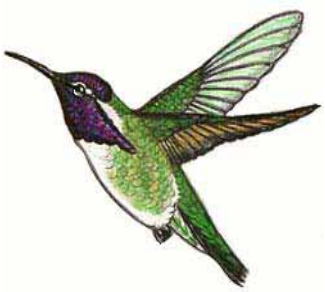
1. New Hanover County is in attainment for all NAAQS

Carbon Equivalents	Conversion Factor
N2O or NOx	311
Methane or VOCs	25

Source: EPA 2010 Reference, Tables and Conversions, Inventory of U.S. Greenhouse Gas Emissions and Sinks;
http://www.epa.gov/climatechange/emissions/usinventoryreport.html

APPENDIX D
QCB ASSESSMENT

Klein-Edwards Professional Services



August 24, 2011

Chris Ingram
Gulf South Research Corporation
8081 GSRI Avenue
Baton Rouge, LA 70820

Subject: Results of Quino Checkerspot Butterfly Habitat assessment for the I-8 Checkpoint and the Old Highway 80 Checkpoint Project Located in San Diego County, California

Mr. Ingram,

FLITE Tours, Inc., DBA: Klein-Edwards Professional Services (KEPS) was retained by Gulf South Research Corporation to conduct a Habitat Assessment for the federally endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*) (QCB) I-8 Checkpoint and Old Highway 80 Checkpoint Project located in the County of San Diego, California. KEPS's Assessment was conducted based on the U.S. Fish and Wildlife Service's 2002 QCB Protocol.

Site Location and Description

The I-8 Checkpoint and the Old Highway 80 Checkpoint Project is located along Interstate 8 and Old Highway 80 just east of Sunrise Highway in Pine Valley in San Diego County. The I-8 Checkpoint consists of Great Basin Sage vegetation with great basin sagebrush (*Artemisia tridentate*), Muller's scrub oak (*Quercus cornelius-mulleri*) and California buckwheat (*Eriogonum fasciculatum*) as the dominant plants. The Old Highway 80 Checkpoint consists of Oak woodland and chaparral with Coast Live Oak (*Quercus agrifolia*), non-native grasses, and California buckwheat as dominant plants.

Both sites were visited on August 24, 2011 between 0830 – 1000 to assess each Checkpoint for QCB suitability.

Results

I-8 Checkpoint has some open areas within the proposed impact area as well as open areas within the scrub upslope. There is also lots of California buckwheat in these open areas as well as dark-tip bird's beak (*Cordylanthus rigidus*). Dark-tip bird's beak is one of the Quino Checkerspot Butterfly's larval host plants and the California buckwheat is one the butterfly's preferred diapause sites.

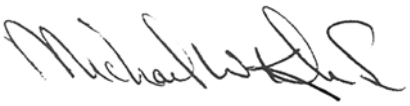
Old Highway 80 Checkpoint has open areas within the proposed impact area as well as open area adjacent to the impact area. There is California buckwheat as Dark-tip bird's beak within the impact area and in the area adjacent to it.

Both locations contain suitable conditions for the butterfly and its larvae. Attach are examples of the habitat as the buckwheat and bird's beak.

If you have any further questions or comments regarding this report, please contact me directly at 619.282.8687 or on my cell at 619.347.3244.

Respectfully Submitted,

KLEIN-EDWARDS PROFESSIONAL SERVICES



Michael W. Klein
Principal / Biologist

I-8 Checkpoint example of the Great Basin Sage Brush vegetation with Dark-tip Bird's Beak in the foreground

I-8 Checkpoint showing example of Dark-tip Bird's Beak

Old Highway 80 Checkpoint showing open areas and Dark-tip Bird's Beak and California buckwheat