

FOR CONTRACT NO.: 08-0C1214  
PROJECT ID: 0800000037

## INFORMATION HANDOUT

DEPARTMENT OF FISH AND GAME PERMIT 1602  
DEPARTMENT OF FISH AND GAME PERMIT 2081  
LAHONTAN RWQCB PERMIT 401  
USA CORPS OF ENGINEERS PERMIT 404  
US FISH AND WILDLIFE SERVICE PERMIT BO

ROUTE: 08-SBd-395-19.0/35.6  
PROJECT ID: 0800000037



**California Regional Water Quality Control Board**  
**Lahontan Region**



Linda S. Adams  
Acting Secretary for  
Environmental Protection

Victorville Office  
14440 Civic Drive, Suite 200, Victorville, California 92392  
(760) 241-6583 • Fax (760) 241-7308  
<http://www.waterboards.ca.gov/lahontan>

Edmund G. Brown Jr.  
Governor

**MEMORANDUM**

**TO:** Craig Wentworth, Senior Environmental Planner  
California Department of Transportation, District 8  
464 W. Fourth Street  
6<sup>th</sup> Floor, M.S. 822  
San Bernardino, CA 92401

**FROM:**  Harold J. Singer, Executive Officer  
LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

**DATE:** JUN 17 2011

**SUBJECT:** ORDER FOR CLEAN WATER ACT SECTION 401 WATER QUALITY  
CERTIFICATION, U.S. 395 WIDENING PROJECT, SAN BERNARDINO  
COUNTY, WDID NO. 6B361101021

The California Regional Water Quality Control Board, Lahontan Region (Water Board) has received project information from California Department of Transportation (Applicant) and an application filing fee to complete an application for Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) for the U.S. 395 Widening Project (Project). This Order for WQC is based upon the information provided in the application and subsequent correspondence received in support of the application.

Any person aggrieved by this action of the Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code (CWC), section 13320, and California Code of Regulations (CCR), title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality), or will be provided upon request.

**PROJECT DESCRIPTION**

Specific Project details, as presented in the application, are summarized in the following table.

*California Environmental Protection Agency*

**Table of Project Information:**

WDID Number	6B361101021
Applicant	California Department of Transportation, District 8 464 W Fourth Street 6th Floor, M.S. 822 San Bernardino, CA 92401 Contact: Craig Wentworth, Senior Environmental Planner
Project Name	U.S. 395 Widening Project
Project Purpose and Description	The purpose of this Project is to improve circulation and public safety along a portion of U.S. Highway 395 between State Highway 18 and State Route 58 from post mile 19.05 to post mile 35.6. The Project will widen the roadway right-of-way from 100-feet to 150-feet. The right-of-way will include: a 50-foot wide paved section (median, traffic lanes, and 8-foot wide paved shoulders); an approximately 20-foot wide unpaved, disturbed area beyond the paved section on either side of the roadway; and an additional approximately 30-foot wide undisturbed area at the outer boundary of the right-of-way, also on either side of the roadway. Project implementation will permanently impact a number of ephemeral drainages that cross Highway 395. The drainages currently sheet-flow across Highway 395 and reconnect with the natural drainage channel downstream of the roadway (at-grade crossings). No culvert crossings currently exist or are proposed for this Project. The Project will maintain the existing roadway grade and the at-grade crossings will retain their function post-construction.
Project Location	Adelanto (nearest City), San Bernadino County 34.742093° latitude and -117.467608° longitude (center)
Hydrologic Unit(s)	Mojave Hydrologic Unit 628.00, Upper Mojave Hydrologic Area 628.20 and Middle Mojave Hydrologic Unit 628.30
Project Area	Approximately 182 acres
Receiving Water(s) Name	Buckthron Wash, Freemont Wash, and unnamed tributaries to the Mojave River
Water Body Type(s)	Ephemeral stream
Wetland within the Project area	None
Area of Waters of U.S. (WOUS) within the Project Area	0.579 acre
Area, Linear Feet, and Volume of Permanent Impact of Water of the United States (WOUS)	0.461 acre; 5,792 linear feet; 52 cubic yards (fill)
Area, Linear Feet, and Volume of Temporary Impact of WOUS	None
Federal Permit(s)	The Applicant has applied for coverage under a U.S. Army Corps of Engineers (ACOE) Nationwide Permit Number 14, Linear Transportation Projects, pursuant to section 404 of the CWA.

**Table of Project Information:**

Non-Compensatory Mitigation	During and after construction, the Applicant will follow Best Management Practices (BMPs) to minimize the short-term degradation of water quality.
Compensatory Mitigation	To compensate for the 0.461 acre of permanent impact to WOUS, the Applicant has proposed to purchase a parcel (or parcels) of land that includes, at minimum, 1.383 acre of ephemeral desert wash. The mitigation land shall 1) be within the same watershed as the Project site, and 2) be characterized by similar soil permeability and hydrological and biological functions as the Project site. The Applicant has agreed to acquire the mitigation land prior to Project completion, but no later than March 30, 2012. Once acquired, the Applicant shall obtain a conservation easement to preserve the mitigation land in perpetuity. A copy of the easement title will be sent to the Water Board upon recording. By March 30, 2012, the Applicant shall provide a Habitat Mitigation Monitoring Plan (HMMP) that describes the restoration and enhancement activities proposed for the mitigation site, as well as a monitoring and reporting schedule to monitor the success of the mitigation for a minimum of 5 years. The Applicant shall implement the HMMP prior to Project completion.
Applicable Fees	\$37,709.00 (\$640 base fee + [\$6.40 x 5,792 linear feet of permanent and temporary impact])
Fees Received	\$37,709.00

**CEQA COMPLIANCE**

The California Department of Transportation (CalTrans) prepared a combined Initial Study with a Mitigated Negative Declaration (IS/MND) and an Environmental Assessment with a Finding of No Significant Impact for the Project. The IS/MND was prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code 21000, et seq., and circulated under State Clearinghouse Number 2008011063. The MND was certified on May 1, 2008, following public review.

The Water Board, acting as a CEQA Responsible Agency in compliance with the California Code of Regulations (CCR), title 14, section 15096, has considered the IS/MND prepared by CalTrans with respect to water quality. Based on that review, I find that potential water quality impacts resulting from Project construction would be less than significant.

**SECTION 401 WATER QUALITY CERTIFICATION****Authority**

CWA, section 401 (33 U.S.C., paragraph 1341), requires that any applicant for a CWA, section 404 permit, who plans to conduct any activity that may result in discharge of dredged or fill materials to waters of the United States, shall provide to the permitting agency a certification that the discharge will be in compliance with applicable water quality standards of the state in which the discharge will originate. No section 404 permit may be

granted (or valid) until such certification is obtained. The Applicant submitted a complete application and a fee deposit required for WQC under section 401 of the CWA for the U.S. 395 Widening Project. The ACOE will regulate the Project under Nationwide Permit Number 14, Linear Transportation Projects, pursuant to section 404 of the CWA.

CCR, title 23, section 3831(e) grants the Water Board Executive Officer the authority to grant or deny water quality certification for projects in accordance with section 401 of the CWA. The proposed Project qualifies for such water quality certification.

### **Standard Conditions**

Pursuant to CCR, title 23, section 3860, the following standard conditions are requirements of this certification:

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code (CWC), section 13330 and CCR, title 23, section 3867.
2. This certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license unless the pertinent certification application was filed pursuant to CCR, title 23, section 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial certification action must be conditioned upon total payment of the full fee required under CCR, title 23, section 3833, unless otherwise stated in writing by the certifying agency.
4. Neither Project construction activities nor operation of the Project may cause a violation of the Water Quality Control Plan for the Lahontan Region (Basin Plan), may cause a condition or threatened condition of pollution or nuisance, or cause any other violation of the CWC.
5. The Project must be constructed and operated in accordance with the Project described in the application for water quality certification that was submitted to the Water Board. Deviation from the project description constitutes a violation of the conditions upon which the certification was granted. Any significant changes to this Project that would have a significant or material effect on the findings, conclusions, or conditions of this certification, including project operation, must be submitted to the Executive Officer for prior review and written approval.
6. This WQC is subject to the acquisition of all local, regional, state, and federal permits and approvals as required by law. Failure to meet any conditions contained herein or any conditions contained in any other permit or approval issued by the State of California or any subdivision thereof may result in the revocation of this WQC and civil or criminal liability.
7. The Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and

implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (CWC) or section 303 of the CWA, or as appropriate to coordinate the operations of this Project with other projects where coordination of operations is reasonably necessary to achieve water quality standards or to protect the beneficial uses of water. Notwithstanding any more specific conditions in this certification, the Project must be constructed and operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (CWC) or section 303 of the CWA.

8. This certification does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under the California Endangered Species Act (Fish and Game Code, section 2050 et seq.) or the federal Endangered Species Act (16 USC, section 1531 et seq.). If a "take" will result from any act authorized under this certification, the applicant must obtain authorization for the take prior to construction or operation of the Project. The Applicant is responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this certification.

#### **Additional Conditions**

Pursuant to CCR, title 23, section 3859, subdivision (a), the following additional conditions are required with this certification:

1. The Applicant must maintain a copy of this Order at the Project site so as to be available at all times to site operating personnel and agencies.
2. The Applicant is responsible for informing any contractors of the specific conditions contained in this WQC Order.
3. To compensate for the 0.461 acre of permanent impact to WOUS, the Applicant has proposed to purchase a parcel (or parcels) of land that includes, at minimum, 1.383 acre of ephemeral desert wash. The mitigation land shall 1) be within the same watershed as the Project site, and 2) be characterized by similar soil permeability and hydrological and biological functions as the Project site. The Applicant has agreed to acquire the mitigation land prior to Project completion, but no later than March 30, 2012. Once acquired, the Applicant shall obtain a conservation easement to preserve the mitigation land in perpetuity. A copy of the easement title will be sent to the Water Board upon recording. By March 30, 2012, the Applicant shall submit to the Water Board a Habitat Mitigation Monitoring Plan (HMMP) that describes restoration and enhancement activities proposed for the mitigation site. The HMMP shall include a monitoring and reporting schedule to monitor and report the success of the mitigation for a minimum of 5 years. The HMMP shall also contain criteria by which to evaluate the final success of the restoration and enhancement activities. The Applicant will implement the HMMP prior to Project completion.

4. Prior to initiating any construction, a National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit will be obtained from the State Water Board, which requires the development and implementation of a Stormwater Pollution Prevention (SWPPP). The SWPPP will contain provisions for specific Best Management Practices (BMPs) and erosion control measures designed to minimize the degradation of water quality, during both construction and post-construction conditions. The SWPPP will also contain the necessary BMPs to meet the requirements of the Caltrans State Wide Storm Water Management Plan.
5. No debris, cement, concrete (or wash water there from), oil, or petroleum products must be allowed to enter into or be placed where it may be washed from the Project site by rainfall or runoff into a natural drainage channel. When operations are completed, any excess material and/or soil must be removed from the Project work area and any areas adjacent to the work area where such material may be transported into a channel.
6. All open flow temporary diversion channels will be lined with filter fabric or plastic to prevent channel erosion and sediment transport.
7. An emergency spill kit must be at the Project site at all times during Project construction.
8. The Applicant must permit Water Board staff or their authorized representative(s) upon presentation of credentials:
  - a. Entry onto Project premises, including all areas on which fill, excavation or mitigation is located or in which records are kept;
  - b. Access to copy any record required to be kept under the terms and conditions of this WQC;
  - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this WQC; and
  - d. Sampling of any discharge or surface water covered by this WQC.
9. Construction vehicles and equipment must be monitored for leaks and proper BMPs must be implemented should leaks be detected or the vehicles/equipment must be removed from service, if necessary, to protect water quality.

#### **Section 401 Water Quality Certification Requirements Granted**

I hereby issue an order certifying that any discharge from the referenced Project will comply with the applicable provisions of CWA, sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards), and with other applicable requirements of State law. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this WQC. A copy of State Water Board Order No. 2003-0017-DWQ is enclosed for your reference.

Except insofar as may be modified by any preceding conditions, all WQC actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicant's project description and the terms specified in this WQC order, and (b) compliance with all applicable requirements of the Basin Plan.

We look forward to working with you in your efforts to protect water quality. If you have questions, please contact Jan Zimmerman, Engineering Geologist, at (760) 241-7376 ([jjzimmerman@waterboards.ca.gov](mailto:jjzimmerman@waterboards.ca.gov)), or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 ([pcopeland@waterboards.ca.gov](mailto:pcopeland@waterboards.ca.gov)). Please use the WDID referenced in the subject line of this WQC for future correspondence regarding this project.

Enclosure: SWRCB Order No. 2003-0017-DWQ

cc w/o encl: Zakary West, California Department of Transportation  
Eric Weiss, California Department of Fish & Game  
Paul Amato, Wetlands Regulatory Office, USEPA, Region 9  
Jason A. Brush, Wetlands Regulatory Office (WTR-8), USEPA, Region 9  
(via email, [Brush.Jason@epamail.epa.gov](mailto:Brush.Jason@epamail.epa.gov))  
Bill Orme, SWRCB, Division of Water Quality  
(via email, [stateboard401@waterboards.ca.gov](mailto:stateboard401@waterboards.ca.gov))

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 8

ENVIRONMENTAL PLANNING (MS 822)

464 WEST 4<sup>TH</sup> STREET, 6<sup>TH</sup> FLOOR

SAN BERNARDINO, CA 92401-1400

PHONE (909) 383-6936

FAX (909) 383-6494

TTY (909) 383-6300

*Flex your power!  
Be energy efficient!*

June 6, 2011

Mr. Bruce Kinney  
Deputy Regional Manager  
California Department of Fish and Game  
Inland Deserts Region  
407 West Line Street  
Bishop, CA 93415

06/13/11  
Mr. Wentworth  
Here is your copy  
of the agreement.  
Thanks.  
Bruce Kinney

**Re: Streambed Alteration Agreement Notification No. 1600-2011-0045-R6**

Dear Mr. Kinney:

Enclosed, you will find two (2) copies of Streambed Alteration Agreement Notification No. 1600-2011-0045-R6, signed June 6, 2011. The California Department of Transportation, District-08 commits to fulfill all Measures to Protect Fish and Wildlife Resources, as outlined within the above-referenced agreement, and appreciates your timely response in its issuance.

Please contact me at (909) 383-6936, should you have any questions or need further information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig Wentworth'.

Craig Wentworth  
Senior Environmental Planner  
Biological Studies and Permits Branch

Cc:

Veronica Chan, ACOE  
Jan Zimmerman, RWQCB

Enclosures:

Streambed Alteration Agreement Notification No. 1600-2011-0045-R6, Buckthorn Wash, Freemont Wash, Signed  
June 6, 2011.

**CALIFORNIA DEPARTMENT OF FISH AND GAME  
AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION  
NO. 1600-2011-0045-R6**

U.S. Route 395 Rumble Strip Installation Safety Widening Project  
San Bernardino County, CA

**CEQA FINDINGS**

*INTRODUCTION:*

The California Environmental Quality Act ("CEQA"; Public Resources Code §21000, *et seq.*), and the State CEQA Guidelines ("Guidelines"; 14 Cal. Code Regs. 15000, *et seq.*) require that prior to reaching a decision on a project, a Responsible Agency must consider the environmental effects of the project as shown in the document prepared by the Lead Agency.

As the lead agency for the proposed project, the California Department of Transportation, District 8 adopted a Mitigated Negative Declaration on May 13, 2008.

The California Department of Fish and Game is issuing an Agreement Regarding Proposed Stream or Lake Alteration to the project proponent, California Department of Transportation, District 8 (Caltrans) as represented by Mr. Craig Wentworth. The proponent has proposed to widen the existing roadbed to construct a 3.9-foot median rumble strip and 7.9-foot shoulders with rumble strips of an approximately 16.5 mile stretch of U.S. Route 395 (U.S. 395) to improve safety.

The California Department of Fish and Game ("CDFG") is a Responsible Agency under CEQA for the purpose of approving the Streambed Alteration Agreement necessitated by the proposed project. As a CEQA Responsible Agency, CDFG is required by CEQA Guidelines §15096 to review the environment document certified by the Lead Agency approving the project and to make certain findings concerning the project's potential to cause significant, adverse environmental effects. However, when considering alternatives and mitigation measures approved by the Lead Agency, a Responsible Agency is more limited than the Lead Agency. CDFG has responsibility for mitigating or avoiding only the direct or indirect environmental effects of the streambed alteration agreement that it approves.

*FINDING:*

CDFG has considered the Notice of Exemption prepared by the Lead Agency. CDFG has independently concluded that the Streambed Alteration Agreement should be issued under the terms and conditions specified therein. CDFG finds that with the mitigation measures incorporated into the Streambed Alteration Agreement, there will be no significant effects from the proposed project.

*The Project is Approved.*

DATE: 06/10, 2011

By: Bruce Kinney, DCM  
Bruce Kinney, Deputy Regional Manager  
DEPARTMENT OF FISH AND GAME  
Inland Deserts Region

**CALIFORNIA DEPARTMENT OF FISH AND GAME**  
INLAND DESERTS REGION  
407 WEST LINE STREET  
BISHOP, CA 93415



**STREAMBED ALTERATION AGREEMENT**  
NOTIFICATION No. 1600-2011-0045-R6  
Buckthorn Wash, Freemont Wash

**CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8**  
**U.S.- ROUTE 395 RUMBLE STRIP INSTALLATION SAFETY WIDENING PROJECT**

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and the California Department of Transportation, District 8 (Permittee) as represented by Mr. Craig Wentworth.

#### **RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on January 25, 2011 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, DFG has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

#### **PROJECT LOCATION**

Generally, the project follows a 16.5 mile stretch of the U.S. Route 395, from 7.85 miles north of State Highway 18 (Post Mile 19.05) and 10.88 miles south of State Route 58 (SR-58, Post Mile 35.60). The project crosses Buckthorn Wash, Freemont Wash and other ephemeral unnamed washes, in the County of San Bernardino, State of California. The southern project boundary lies at approximately 34° 37' 9.22" North, -117° 25' 31.69" West, Township 6N, Range 5W, Section 8 of the U.S. Geological Survey (USGS) 7.5 minute Adelanto quadrangle. The northern extent of the proposed project is approximately located at 35° 50' 52.66" North, -117° 30' 4.60" West, Township 25S, Range 42E, Section 28 of USGS 7.5 minute Burrow Canyon quadrangle.

## PROJECT DESCRIPTION

The project is limited to the California Department of Transportation, District 8 (Caltrans) proposal to widen the existing roadbed to construct a 3.9-foot median rumble strip and 7.9-foot shoulders with rumble strips of an approximately 16.5 mile stretch of U.S. Route 395 (U.S. 395) to improve safety. A rumble strip would be ground into the existing roadway along the centerline and along the outside margins of the north and south bound lanes. Road shoulders, graded to 4:1 slopes of flatter, would extend to 18 feet minimum, outside of paved areas.

## PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: Desert tortoise (*Gopherous agassazii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), burrowing owl (*Athene cunicularia*), Le Conte's Thrasher (*Toxostoma lecontei*), Prarie Falcon (*Falco mexicanus*), other migratory bird species and Joshua Tree (*Yucca brevifolia*).

The adverse effects the project could have on the fish or wildlife resources identified above include: Impacting approximately 182 acres of desert tortoise habitat (approximately 96 acres of Critical Habitat and 86 acres of non-critical desert tortoise habitat) resultant of the placement of desert tortoise exclusionary fencing and direct loss of habitat associated with the construction of the project. Permanent impacts to the species would include the fragmentation of habitat, causing two disjointed populations along U.S. 395 for approximately 16.5 miles. Impacting Mohave ground squirrel (MGS) resultant of equipment parking and operation and paving activities. Roadside parking has the potential to impact Mohave ground squirrel through soil compaction while paving activities would result in direct impacts and ultimate loss of Mohave ground squirrel habitat. Burrowing owls may be directly and indirectly impacted following direct mortality through operations, soil compaction, loss of burrowing and/or nesting sites and loss of forage. Other Avian species may be impacted through direct mortality associated with operations, loss of nesting sites and loss of forage. Joshua tree will be directly impacted during the construction of the proposed project through direct take and translocation efforts.

## MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

### 1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to DFG personnel, or personnel from another state, federal, or local agency upon request.

- 1.2 **Providing Agreement to Persons at Project Site.** Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 **Notification of Conflicting Provisions.** Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4 **Project Site Entry.** Permittee agrees that DFG personnel may enter the project site at any time to verify compliance with the Agreement.

## **2. Avoidance and Minimization Measures**

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1 **Staging Areas.** All staging, storage, lay-down access roads and equipment storage/parking areas will be placed outside of environmentally sensitive areas. A biologist shall be consulted on the placement of all areas, and shall clearly delineate areas with highly visible staking, flagging and fencing.
- 2.2 **Environmentally Sensitive Area Designation.** All areas of environmental concern shall be clearly delineated and maintained on a bi-weekly basis. Buckthorn Wash, Freemont Wash and all other ephemeral washes shall be clearly delineated as areas to which NO additional impacts (temporary or otherwise) are authorized beyond the 0.461 acres that will be filled or impacted by the direct footprint of the widened roadway. No access is granted beyond this scope; all access to the above mentioned washes will be done remotely from *upland* areas.
- 2.3 **Notification of California Natural Diversity Database (CNDDDB).** If any sensitive species are observed on or in proximity to the project site, or during project surveys, the Applicant shall submit California Natural Diversity Data Base (CNDDDB) forms and maps to the CNDDDB within five working days of the sightings, and provide the regional Department office with copies of the CNDDDB forms and survey maps. The CNDDDB form is available online at: [www.dfg.ca.gov/whdab/pdfs/natspec.pdf](http://www.dfg.ca.gov/whdab/pdfs/natspec.pdf). This information shall be mailed within five days to: California Department of Fish and Game, Natural Diversity Data Base, 1807 13th Street, Suite 202, Sacramento, CA 95814, Phone (916) 324-3812. A copy of this information shall also be mailed within five days to the Department of Fish and Game Region 6, 4665 Lampson Avenue, Suite J, Los Alamitos, CA 90720, Attn: Streambed Team. Please reference SAA # 1600-2011-0045-R6

- 2.4 **Migratory Bird Treaty Act Compliance.** The Applicant shall not remove vegetation from the jurisdictional areas within the project site from March 1 to September 31 to avoid impacts to nesting birds. If the Applicant intends to commence project construction during the period commencing March 1 through September 31, the Applicant shall have a qualified biologist survey all potential nesting vegetation within the project site for nesting birds, prior to project activities (including construction and/or site preparation). Surveys shall be conducted for five consecutive days, at the appropriate time of day during the breeding season, and surveys shall end no more than three days prior to clearing. The Department shall be notified in writing prior to the start of the surveys. Documentation of surveys and findings shall be submitted to the Department within ten (10) days of the last survey. If no nesting birds were observed project activities may begin. If an active bird nest is located, the nest site shall be fenced a minimum of 200 feet (500 feet for Least Bell's vireo, willow flycatcher, Southwestern willow flycatcher, and/or raptors) in all directions, and this area shall not be disturbed until after September 15 or until the nest becomes inactive. If threatened or endangered species are observed in the area, no work shall occur during the breeding season (March 15 through September 15) to avoid direct or indirect (noise) take of listed species.

Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests, including raptors and other migratory non-game birds (As listed under the Migratory Bird Treaty Act).

- 2.5 **Biological Monitor.** A qualified biologist shall be on-site to monitor all activities that result in the clearing or grading of sensitive habitat as well as grading, excavation, and/or other ground-disturbing activities in jurisdictional areas. The Applicant shall flag the limits of grading and the jurisdictional areas, perform necessary surveys, and take photographs during the construction process, as required by this permit. The monitor is required to halt construction activities if threatened or endangered species are identified and notify the appropriate agencies immediately.
- 2.6 **Tree Removal and Trimming Pre-Construction Surveys.** A pre-construction breeding bird survey shall be conducted within 7 days prior to construction activities. This action will be dependent on the timing of the habitat removal.
- 2.7 **Construction Lighting Sources.** Lighting, during construction along the widened road and construction areas will consist of directional lighting that focuses the light away from the natural habitat areas located adjacent to the project components.
- 2.8 **California Desert Native Plants Act.** Permittee shall comply with the California Desert Native Plants Act.
- 2.9 **Joshua Tree.** Joshua trees with a circumference of 50 inches measured at 4 feet, or measuring 15 feet high, or occurring in a cluster of 10 or more within close proximity to one another will be transplanted within Caltrans right of way.

**2.10 Burrowing Owl.** Prior to the initiation of any project activities in State stream jurisdictional areas (jurisdictional areas), the Applicant shall conduct a burrowing owl habitat assessment for the jurisdictional areas. The habitat assessment shall determine whether suitable habitat for burrowing owl is present on-site. The habitat shall focus on whether burrows are present on-site (natural or artificial burrows) that burrowing owls previously have used, are using, or could use now or in the future. A report summarizing the results of the habitat assessment shall be submitted to the Department within 30 days following the completion of the habitat assessment. If no suitable habitat is found on-site, Conditions 2.1 A thru D do not apply. If suitable habitat is found on-site, the Applicant shall comply with the burrowing owl mitigation guidelines set forth by the Department. The Applicant shall submit documentation of compliance with the Departmental guidelines within fifteen (15) days of completing the habitat assessment.

A. Prior to commencing project activities within the jurisdictional areas, a qualified biologist shall conduct focused surveys for burrowing owls within the jurisdictional areas to identify burrows occupied by owls (occupied burrows). Surveys should be conducted by walking through suitable habitat within the jurisdictional areas of the project site. The pedestrian survey transects shall be spaced to allow 100% visual coverage of the ground surface. Surveys should be conducted during weather that is conducive to observing owls outside their burrows. The Department recommends following the survey methodology described in the 1993 Burrowing Owl Consortium Protocol Guidelines. If no occupied burrows are found on-site, Conditions 13 B and C do not apply.

B. All owls associated with occupied burrows, found in jurisdictional areas that will be directly impacted (temporarily or permanently) by the project, shall be passively relocated and the following measures shall be implemented to avoid take of owls:

(1) Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31, unless a qualified biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.

(2) Owls must be passively relocated by a qualified biologist from any occupied burrows that will be impacted by project activities within jurisdictional areas. Passive relocation is used to exclude owls from their burrows by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. Suitable habitat must be available adjacent to or near the disturbance site or artificial burrows will need to be provided nearby. Once the

biologist has confirmed that the owls have left the burrow, burrows should be excavated using hand tools and refilled to prevent reoccupation.

All relocation shall be approved by the Department and shall follow the 1993 Burrowing Owl Consortium protocol guidelines. The qualified biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the Department within 30 days following completion of the relocation and monitoring of the owls.

C. A Burrowing Owl Mitigation and Monitoring Plan shall be submitted to the Department for review and approval prior to relocation of owls. The Burrowing Owl Mitigation and Monitoring Plan shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) shall also be included in the plan. The Plan shall also describe proposed off-site areas to preserve to compensate for impacts to burrowing owls/occupied burrows at the project site as required under Condition 2.11. D.

D. As compensation for the direct loss of burrowing owl nesting and foraging habitat, the Applicant shall mitigate by acquiring and permanently protecting 6.5 acres of known burrowing owl nesting and foraging habitat for every pair or unpaired burrowing owl impacted by the project (those owls that required relocation because their burrows were directly impacted). The Applicant shall set-up a non-wasting endowment account for the long-term management of the preservation site for burrowing owls. The site shall be managed for the benefit of burrowing owls. The preservation site, site management, and endowment shall be approved by the Department.

Additionally, if burrowing owl surveys or passive relocation of owls is not conducted over other portions of your project site including areas outside of State jurisdictional areas, the project proponent risks being in violation of the Fish and Game Code and other laws that protect the owl. The burrowing owl is protected under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13) and Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors. Therefore, it is the responsibility of the project proponent to ensure compliance with these laws for the entire project site. The Department recommends

focused surveys be conducted over all potential suitable habitat within the entire project site (even areas outside State jurisdiction pursuant to Section 1600) and to relocate following the 1993 Burrowing Owl Consortium Protocol Guidelines to ensure there are not violations of other laws.

## 2.11 Construction BMPs.

- 2.11.1 The Applicant shall not allow water containing mud, silt or other pollutants from grading, aggregate washing, or other activities to enter a lake or flowing stream or be placed in locations that may be subjected to high storm flows.
- 2.11.2 The Applicant shall comply with all litter and pollution laws. All contractors, subcontractors and employees shall also obey these laws and it shall be the responsibility of the Applicant to ensure compliance.
- 2.11.3 Spoil sites shall not be located within a stream/lake or locations that may be subjected to high storm flows, where spoil shall be washed back into a stream/lake, or where it will impact streambed habitat, aquatic or riparian vegetation.
- 2.11.4 Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and wildlife resources, resulting from project related activities shall be prevented from contaminating the soil and/or entering the waters of the state. These materials, placed within or where they may enter a stream/lake, by Applicant or any party working under contract, or with the permission of the Applicant shall be removed immediately.
- 2.11.5 No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream.
- 2.11.6 Concrete debris or asphalt debris will not be placed as rock slope protection. Should the design of the rock slope protection change from what is currently submitted to the Department, the Department must be re-notified and a new agreement or amendment may be required.
- 2.11.7 All project areas of disturbance (except the road alignment itself) will be

re-vegetated to the greatest extent possible; revegetation will utilize native species and all planting plans would be reviewed and approved by the Department prior to implementation. Re-vegetation will occur in all disturbed sites including: cut and fill slopes, equipment and material staging areas, and temporary access routes.

2.11.8 No equipment maintenance shall be done within or near any stream channel where petroleum products or other pollutants from the equipment may enter these areas under any flow.

2.11.9 The Applicant shall notify the Department, in writing, at least five (5) days prior to initiation of project activities in jurisdictional areas, and at least five (5) days prior to completion of project activities in jurisdictional areas. Notification shall be sent to the Department at 12550 Jacaranda Avenue, Victorville, CA 92392, Attn: Eric Weiss. Please reference **SAA # 1600-2011-0045-R6**.

2.11.10 The Applicant shall notify the department of any change of conditions to the project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of a proposed project change in a manner which increases or decreases the risk that a fish or wildlife resource may be substantially adversely affected by the proposed project. The notifying report shall be provided to the Department no later than seven (7) days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project, the biological and physical characteristics of a project area, or the laws or regulations pertinent to the project as defined below. **A copy of the notifying change of conditions report shall be included in the annual reports.**

(A) Biological conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of a fish or wildlife resource within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of a fish or wildlife resource within or adjacent to the project area, whether native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

(B) Physical conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by flooding; 2) the movement of a river or stream channel to a different

location; 3) a reduction of or other change in riparian vegetation on the bed, channel, or bank of a river, stream, or lake, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.

(C) Legal conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

- 2.12 **Incidental Take Permit.** An Incidental Take Permit for all potential threatened and endangered species shall be sought and obtained from the Department of Fish and Game pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, title 14, section 783.0 et seq. and comply with all federal endangered species requirements.
- 2.13 **Educational Program.** Permittee shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status under CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site. Copies of this ITP shall be maintained at the worksite. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. These forms shall be filed at the worksite offices and be available to DFG upon request.
- 2.14 **Desert Tortoise Exclusionary Fencing.** Permanent desert tortoise exclusion fencing shall be placed along the proposed project length prior to surface disturbance. Fence installation shall conform with current United States Fish and Wildlife specifications. Pre-construction sweeps within the proposed project site shall be performed prior to ground disturbing activities.
- 2.15 **Biological Monitors.** Biological monitors shall be onsite during the construction and installation of the desert tortoise exclusionary fencing. Following the complete installation of the desert tortoise exclusionary fencing, an on-call desert tortoise biologist shall be available.

### 3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

A jurisdictional determination and delineation (JD) for the proposed project prepared by AMEC Earth and Environmental Inc. (Ms. Heather Rothbard and Mr. Jason Erlich) for Caltrans in August of 2010 identified one hundred seventy two distinct ephemeral washes (including natural and man-made features, with a range of widths between 1 foot and 67 feet) within the project area. Of the two prominent washes (Freemont Wash and Buckthorn Wash) only Freemont Wash exhibited enough surface flow to cross U.S. 395 at the time of the field review. The proposed project would impact one hundred seventy two ephemeral channels for a total impact of 0.461 acres to state jurisdictional waters. Impacts would be resultant of the direct footprint of the widened roadbed itself and no further access is granted to the washes either temporary or permanent in nature. All access to the 0.461 acres of impacts addressed under this agreement shall be done so remotely, from adjacent *upland areas* (e.g. the existing roadway and/or paved shoulder). All other wash areas, not specifically addressed under the 0.461 acres of impacts shall be clearly delineated in accordance to Section 2.2 Environmentally Sensitive Area Designation of this agreement.

- 3.1 Permanent Impacts. The Applicant shall mitigate the permanent impacts of 0.461 acres of permanent jurisdictional channel and associated habitat through the creation and restoration of 1.0 acres of jurisdictional channel and transitional zones. The Applicant shall mitigate **impacts through the restoration** of the jurisdictional channel and transitional zones with native plant species and by removing all non native plants in the mitigation area.

The Applicant shall restore a total of 1.0 acre of land immediately adjacent to the proposed project to mitigate for 0.461 acres of permanent impacts resultant of the proposed project.

Use of Native Plants: Revegetation Efforts. The Department recommends the use of native plants to the greatest extent feasible in the landscaped areas adjacent and/or near the mitigation/open space areas and within or adjacent to stream channels. The Applicant shall not plant, seed or otherwise introduce invasive exotic plant species to the landscaped areas adjacent and/or near the mitigation/open space areas and within or adjacent to stream channels (minimum 100 foot setback from open space areas and 150 foot setback from stream channels and riparian mitigation sites). Invasive exotic plant species not to be used include those species listed on the "California Invasive Plant Inventory, February 2006" and the February 2007, Inventory Update, (which updated Lists A & B of the California Exotic Pest Plant Council's list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999"). This list includes: pepper trees, pampas grass, fountain grass, ice plant, myoporum, black locust,

capeweed, tree of heaven, periwinkle, bush lupine, sweet alyssum, English ivy, French broom, Scotch broom, Spanish broom, and *Lepidium latifolium*. A copy of the complete list can be obtained by contacting the California Invasive Plant Council by phone at (510) 843-3902, at their website at [www.cal-ipc.org](http://www.cal-ipc.org), or by email at [info@cal-ipc.org](mailto:info@cal-ipc.org). The Applicant shall submit a copy of the draft landscape/planting plan to the Department's representative for review at least 30 days prior to the acquisition and/or use of any plant materials (seeds or container plants) adjacent to the mitigation/open space site and/or within or adjacent to any stream channel.

- 3.1.1 **The mitigation sites shall meet all of the following below:**
- 3.1.2 **Planting Survival.** All planting shall have a minimum of 80% survival the first year and 100% survival thereafter and shall attain 80% cover after 3 years and 90% cover after 5 years. If the survival and cover requirements have not been met, the Applicant is responsible for replacement planting to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for 5 years after planting.
- 3.1.3 **Exotic Plant Species.** The site shall not contain more than 5 percent exotic plant species for the Department to deem the site successful. All plant species with rates of dispersal and establishment listed as "High" or "Moderate" on the California Invasive Plant Inventory shall have documented absence, or have been removed from the site for at least three years for the Department to deem the site successful. The site shall not contain invasive wildlife species for the Department to deem the site successful. Exotic, non-native, and invasive species removal shall be conducted throughout the 5-year monitoring and maintenance period.
- 3.1.4 **Irrigation of Mitigation Site.** Irrigation of the mitigation site(s) may only be used to help the plants become established during the first two years following planting. Watering/irrigation of the site(s) shall be discontinued at least two years prior to completion of the monitoring period for the site(s) to be deemed successful by the Department.
- 3.1.5 **Genetic Diversity.** Genetic diversity is a growing concern and the native plants used in the mitigation site shall be obtained from seed or plants located in close proximity to the site location to preserve genetic diversity.

#### **4. Reporting Measures**

Permittee shall meet each reporting requirement described below.

- 4.1.1 Habitat Mitigation and Monitoring Reporting.** Prior to the initiation of any project activities in jurisdictional areas and no later than 60 days after signature to this agreement, the Applicant shall submit to the Department for review and approval a Habitat Mitigation and Monitoring Plan designed to meet the overall mitigation goals identified in Condition 4 of this Agreement. The plan shall provide details on both the creation/restoration, improvement and enhancement aspects of the mitigation. The plan shall include monitoring and maintenance procedures/timeline, success standards and contingency measures, description of plans for invasive removal activities including monitoring and maintenance objectives to prevent the re invasion of undesirable weeds and/or invasive wildlife species for a minimum of five years. Any plans for exotic plant and/or invasive wildlife species removal shall include a detailed plan that identifies on a map each location and size of non-native vegetation to be removed, and the methods used to remove and dispose of invasive wildlife species. Monitoring and maintenance of the sites shall be done annually for a minimum of five years, or until the Department determines the restoration sites are successful. If trash abatement or other similar techniques will be utilized, areas proposed for abatement or improvement will be submitted for Departmental approval at least 30 days prior to initiation of construction. If the proposed mitigation does not meet the Department's standards, additional mitigation may be proposed and approved. Once approved, the applicant may begin construction.
- 4.1.2 Habitat Mitigation and Monitoring Plan.** To minimize temporal loss of fish and wildlife resources the Habitat Mitigation and Monitoring Plan shall be implemented within one hundred twenty (120) days of impacts to jurisdictional areas. The Applicant shall notify the Department, in writing, no later than one hundred twenty (120) days after impacts to jurisdictional areas and confirm the implementation of the Habitat Mitigation and Monitoring Plan
- 4.1.3 Mitigation Lands Reporting.** An annual report shall be submitted to the Department each year for a minimum of 5 years after mitigation or until the Department deems the mitigation site(s) successful. This report shall include (a) a description of the restoration activities done the previous year (including revegetation, channel improvements, trash abatement and exotic species removal) and when they were conducted; (b) information regarding exotic vegetation removal including the amount removed, the amount removed and treated, frequency and timing

of removal and treatment, disposal specifics, and a summary of the general success and failures or failure of the exotic removal plan; (c) information regarding the presence or absence of invasive wildlife species including the methods used to remove and dispose of invasive wildlife species; (d) information pertaining to channel improvements, trash abatement including the methods used for abatement, amounts removed and frequency and timing of removal. The report shall also include wildlife observed at the site during monitoring surveys including sensitive species and/or listed species. Photos from designated photo stations shall be included.

## **CONTACT INFORMATION**

Any communication that Permittee or DFG submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or DFG specifies by written notice to the other.

To Permittee:

Mr. Craig Wentworth  
464 W. Fourth Street, 6<sup>th</sup> Floor, M.S. 822  
San Bernardino, CA 92401  
Fax: (909) 383-6494  
Craig.wentworth@dot.ca.gov

To DFG:

Department of Fish and Game  
Inland Deserts Region  
12550 Jacaranda Ave.  
Victorville, CA 92395  
Attn: Lake and Streambed Alteration Program – Eric Weiss  
Notification #1600-2011-0045-R6  
eweiss@dfg.ca.gov

## **LIABILITY**

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute DFG's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

## **SUSPENSION AND REVOCATION**

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before DFG suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before DFG suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused DFG to issue the notice.

## **ENFORCEMENT**

Nothing in the Agreement precludes DFG from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects DFG's enforcement authority or that of its enforcement personnel.

## **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503

(bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

### **AMENDMENT**

DFG may amend the Agreement at any time during its term if DFG determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

### **TRANSFER AND ASSIGNMENT**

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter DFG approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

### **EXTENSIONS**

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

### **EFFECTIVE DATE**

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.dfg.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html).

### **TERM**

This Agreement shall expire on April 1, 2016, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

### **AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

### **AUTHORIZATION**

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

**CONCURRENCE**

The undersigned accepts and agrees to comply with all provisions contained herein.

**FOR CALIFORNIA DEPARTMENT OF  
TRANSPORTATION**

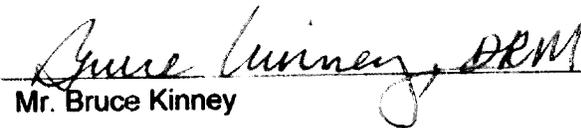


Mr. Craig Wentworth  
Office Chief, Biological Permits and Studies Branch

6/6/2011

Date

**FOR DEPARTMENT OF FISH AND GAME**



Mr. Bruce Kinney  
Deputy Regional Manager

06/10/2011

Date

Prepared by: Eric Weiss  
Environmental Scientist



State of California - The Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
4665 Lampson Avenue, Suite J  
Los Alamitos, CA 90720  
<http://www.dfg.ca.gov>

EDMUND G. BROWN, Jr. Governor  
JOHN McCAMMAN, Director



June 30, 2011

Mr. Zackry West  
Department of Transportation, District 8  
464 West 4<sup>th</sup> Street, 6<sup>th</sup> Floor, M.S. 822  
San Bernardino, CA 92401

**Subject: Incidental Take Permit for US Route 395 Widening to Install Rumble Strips on Median and Outside Shoulders (2081-2011-008-06)**

Dear Mr. West:

Enclosed you will find two originals of the incidental take permit for the above referenced Project, which have been signed by the Department. Please read the permit carefully, sign the acknowledgement on both copies of the permit, and return one original no later than 30 days from Department signature, and prior to initiation of ground-disturbing activities, to:

Department of Fish and Game  
Habitat Conservation Branch, CESA Permitting  
1416 Ninth Street, 12<sup>th</sup> Floor  
Sacramento, CA 95814

You are advised to keep the other original signature permit in a secure location and distribute copies to appropriate project staff responsible for ensuring compliance with the conditions of approval of the permit. Note that you are required to comply with certain conditions of approval prior to initiation of ground-disturbing activities. Additionally, a copy of the permit must be maintained at the project work site and made available for inspection by Department staff when requested.

The permit will not take effect until the signed acknowledgement is received by the Department.

Sincerely,

Kimberly Nicol  
Regional Manager

Enclosures (2)

*Conserving California's Wildlife Since 1870*



California Department of Fish and Game  
Inland Deserts Region  
4665 LAMPSON AVENUE, SUITE J  
LOS ALAMITOS, CA 90720

California Endangered Species Act  
Incidental Take Permit No. 2081-2011-008-06

**US ROUTE 395 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS**

**Authority:** This California Endangered Species Act (CESA) Incidental Take Permit (ITP) is issued by the Department of Fish and Game (DFG) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take<sup>1</sup> of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.<sup>2</sup> DFG, however, may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See also Cal. Code Regs., tit. 14, § 783.4.)

**Permittee:** California Department of Transportation, District 8  
**Principal Officer:** Mr. Craig Wentworth  
**Contact Person:** Mr. Zackry West (909) 383-6332  
**Mailing Address:** 464 W. Fourth Street, 6<sup>th</sup> Floor, M.S. 822  
San Bernardino, CA 92401

**Effective Date and Expiration Date of this ITP:**

This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to DFG's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by DFG, this ITP's authorization to take the Covered Species shall expire on **June 1, 2016**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until DFG accepts as complete the Permittee's Final Mitigation Report required by Condition 7.7 of this ITP.

<sup>1</sup>Pursuant to Fish and Game Code section 86, "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill."

<sup>2</sup>"Candidate species" are species of wildlife that have not yet been placed on the list of endangered species or the list of threatened species, but which are under formal consideration for listing pursuant to Fish and Game Code section 2074.2.

**Project Location:**

The U.S. Route 395 Rumble Strip Installation and Safety Widening Project (Project) is located from 7.85 miles north of State Highway 18 (Post Mile 19.05) north along U.S. Route 395 (US 395) to 10.86 miles south of State Route 58 (Post Mile 35.60) within the County of San Bernardino (see Figure 1).

**Project Description:**

The Project will widen the highway to construct a 3.9-foot median with a median rumble strip, and to construct 7.9-foot standard shoulders with shoulder rumble strips in each direction along U.S.-395 for approximately 16.5 miles. A permanent desert tortoise protection fence will be installed along both directions of travel, north of Shadow Mountain Road as a Project feature. Project activities include grubbing and grading, road construction, vegetation removal, and other activities.

**Covered Species Subject to Take Authorization Provided by this ITP:**

This ITP covers the following species:

<b>Name</b>	<b>CESA Status<sup>3</sup></b>
1. Desert tortoise ( <i>Gopherus agassizii</i> )	Threatened <sup>4</sup>
2. Mohave ground squirrel ( <i>Xerospermophilus mohavensis</i> )	Threatened <sup>5</sup>

These species and only these species are hereinafter referred to as "Covered Species."

**Impacts of the Taking on Covered Species:**

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. Project activities expected to cause incidental take of individuals of the Covered Species include grubbing and grading, road construction, vegetation removal, fence installation, and other activities (Covered Activities). Take as defined by State law incidental to otherwise lawful Project activities is expected with the Project as the result of the installation of temporary and permanent tortoise fencing, relocation of Covered Species outside of the construction area, loss of burrows, predation in or near the Project site due to additional human activities, accidental crushing by construction equipment, and temporary displacement resulting from noise, vibration or other construction-related disturbances. Incidental take of individuals of the Covered Species is expected with the Project in the form of mortality ("kill"), and as "pursue, catch, or capture" in connection with Covered Species' relocation and/or salvage efforts as authorized by this ITP.

<sup>3</sup>Under CESA, a species may be on the list of endangered species, the list of threatened species, or the list of candidate species. All other species are "unlisted."

<sup>4</sup>See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(4)(A).

<sup>5</sup>See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(6)(A).

Incidental Take Permit  
No. 2081-2011-008-06

CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8  
US ROUTE 395 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS

Take as authorized by this ITP could occur at any location along the approximately 16.5 miles of US 395 between mile post 9.05 and 35.60 (collectively, the Project Area). The Project will also cause the permanent loss of 182 acres of habitat for the Covered Species. Impacts of the authorized taking also include adverse impacts to Covered Species related to temporal loss, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These Covered Species' impacts include stress resulting from noise and vibrations from tunneling and from capture and relocation, and long-term effects due to increased pollution, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

#### **Incidental Take Authorization of Covered Species:**

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, DFG authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

#### **Conditions of Approval:**

Unless specified otherwise, the following measures shall pertain to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging, parking and noise and vibration generating activities that may cause take. DFG's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable State, federal, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Final Initial Study and Mitigated Negative Declaration (SCH Number: 2008011063) adopted by the lead agency, California Department of Transportation, District 8, for the Project pursuant to the California Environmental Quality Act (CEQA) on May 13, 2008.
- 3. LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration (LSA) agreement (notification number 1600-2011-0045-R6) for the Project pursuant to Fish and Game Code section 1602 et seq.

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**4. ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the Biological Opinion for the Widening and Installation of Rumble Strips on United States Route 395, San Bernardino County, California (post mile 19.05-35.6) # 1-808-F-11 for the Project pursuant to the Federal Endangered Species Act (ESA), unless those terms and conditions are less protective of the Covered Species or conflict with the conditions of this ITP.

**5. ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.

**6. General Provisions:**

**6.1. Designated Representative.** Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with DFG and overseeing compliance with this ITP. Permittee shall notify DFG in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify DFG in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.

**6.2. Designated Biologist.** Permittee shall submit to DFG in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain DFG approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.

**6.3. Designated Biologist Authority.** To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that is not in compliance with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species, or a species not covered by this ITP.

**6.4. Education Program.** Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The

program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, status of Covered Species pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided for any new workers before their performing work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.

- 6.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review in the Project Area upon request by DFG.
- 6.6. Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in closed (animal-proof) containers and removed regularly (at least once a week) to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 6.7. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.
- 6.8. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as mono-filament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 6.9. Firearms and Dogs. Permittee shall prohibit firearms and domestic dogs from the Project Area and site access routes during Covered Activities, except those in the possession of authorized security personnel or local, State, or federal law enforcement officials.

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- 6.10. Delineation of Property Boundaries. Before starting Covered Activities, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes or flags. Permittee shall restrict all Covered Activities to within the fenced, staked or flagged areas. Permittee shall maintain all fencing, stakes and flags until the completion of Covered Activities.
- 6.11. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 6.12. Project Access. Project-related personnel shall access the Project Area using existing routes, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact DFG for written approval before carrying out such an activity. DFG may require an amendment to this ITP if additional take of Covered Species may result from Project modification.
- 6.13. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition 6.12 of this ITP.
- 6.14. Hazardous Waste. Permittee shall immediately stop and following pertinent State and federal statutes and regulations arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- 6.15. DFG Access. Permittee shall provide DFG staff with reasonable access to the Project and mitigation lands under Permittee control, and shall otherwise fully cooperate with DFG efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 6.16. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

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## **7. Monitoring, Notification and Reporting Provisions:**

- 7.1. Notification Before Commencement. The Designated Representative shall notify DFG 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 7.2. Notification of Non-compliance. The Designated Representative shall immediately notify DFG in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to DFG within 24 hours.
- 7.3. Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP. The Designated Biologist shall conduct compliance inspections a minimum of twice daily during periods of inactivity and after clearing, grubbing, and grading are completed.
- 7.4. Quarterly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition 7.3 into a Quarterly Compliance Report and submit it to DFG along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to DFG's Regional Office at the office listed in the Notices section of this ITP and via e-mail to DFG's Regional Representative. At the time of this ITP's approval, the DFG Regional Representative is Eric Weiss (eweiss@dfg.ca.gov). DFG may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If DFG determines the reporting schedule must be changed, DFG will notify Permittee in writing of the new reporting schedule.

- 7.5. Annual Status Report. Permittee shall provide DFG with an Annual Status Report

(ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until DFG accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition 7.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.

7.6. CNDDDB Observations. The Designated Biologist shall submit all observations of Covered Species to DFG's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.

7.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide DFG with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

7.8. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to DFG by calling the Regional Office at (909) 980-8607. The initial notification to DFG shall include information regarding the location, species, number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send a written report to all four DFG offices listed in the Notices section of this ITP within two calendar days. The report shall include the initial notification information, date and time of the finding or incident, a photograph,

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explanation as to cause of take or injury, disposition of injured Covered Species and any other pertinent information.

**8. Take Minimization Measures:**

The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

8.1. Pre-construction Surveys. No more than 30 days prior to initiating Covered Activities, the Designated Biologist shall conduct pre-construction surveys for Covered Species. These surveys shall cover 100 percent of the Project Area with a 50-foot buffer zone. The Designated Biologist shall follow the survey methodology in the most recent U.S. Fish and Wildlife Service (USFWS) Desert Tortoise Field Manual. The Designated Biologist shall flag all potential burrows within this area. Within 30 days of performing the pre-construction surveys, the Designated Biologist shall submit a report to DFG documenting results (using the USFWS Protocol data sheet) and include a Translocation Plan (following the most current USFWS guidance document). Upon report receipt and Translocation Plan approval by DFG, Covered Species burrows shall be excavated and individuals relocated by the Designated Biologist (Conditions, 8.5, 8.6, 8.7 and 8.8 below).

8.2. Desert Tortoise Fencing. With the Designated Biologist present and prior to starting other Covered Activities, Permittee shall install permanent tortoise-proof fence along the length of Project Area, encompassing both directions of travel along U.S.-395 and the associated right of way (ROW). The Permittee shall fit the base of the ROW with tortoise-proof fencing and desert tortoise control access points (e.g. cattle crossings) which conform to USFWS standards. Fence design shall be consistent with the USFWS 2005 exclusion fence design specifications. After fence installation, the Designated Biologist shall conduct clearance surveys for desert tortoise. The Designated Biologist shall relocate live desert tortoise observed within the fenced Project Area to an area outside the fenced area, preferably their burrow location.

8.3. Temporary Fencing. With the Designated Biologist present and prior to ground-disturbing activities, Permittee shall install temporary desert tortoise exclusionary fence around any active construction area, lay down area, and storage area (whether onsite or offsite), prior to the on-set of vegetation removal or any other project related construction activities, with the exception of where permanent desert tortoise exclusionary fencing currently exists or will be installed in place of temporary desert tortoise exclusionary fencing.

8.4. Removal of Vegetation. Permittee shall minimize vegetation removal associated with

construction activities to the fullest extent possible. The Designated Biologist shall review and approve or deny any grubbing or clearing of vegetation.

- 8.5. Clearance Survey and Burrow Collapse. Immediately prior to the start of ground-disturbing activities, the Designated Biologist shall resurvey the Project Area and access route within the fenced area for Covered Species and their burrows. The Designated Biologist shall inspect all burrows within the Project Area for habitation (the use of specialized fiber optics equipment may be necessary) prior to collapsing them in accordance with the conditions of this ITP.
- 8.6. Ground Squirrel Burrow Excavation. The Designated Biologist shall fully excavate by hand all burrows within the 16.5-mile Project Area that are suspected or known to be occupied by Mohave ground squirrels. The Designated Biologist shall allow Mohave ground squirrels encountered in the excavated burrows during their *active period* to escape out of harm's way. During the Mohave ground squirrel *dormant period*, the Designated Biologist shall collect any Mojave ground squirrels encountered and immediately relocate them to an artificial burrow at a protected off-site location approved in advance by DFG's Regional Representative. The Mohave ground squirrel may only be relocated by the Designated Biologist. The Designated Biologist shall prepare relocation burrows in the following manner: (1) dig a hole at least two feet deep; (2) install a nine-inch diameter non-collapsible plastic container, which shall be connected to a flexible three-inch diameter non-collapsible plastic pipe that runs to the ground surface at a 45-degree angle; (3) cover the surface end of the three-inch pipe remaining open with dirt. The Designated Biologist shall place the Mohave ground squirrel in the artificial burrow and lightly plug the burrow mouth with soil in a manner that is similar to a natural Mohave ground squirrel burrow.
- 8.7. Mohave Ground Squirrel Observations. The Designated Representative shall immediately, or no later than noon on the next business day, notify DFG of any Mohave ground squirrel observations. Notification to DFG shall be via telephone or e-mail, followed by a written report. Notification and the written report shall include the date, location, and circumstances of the observation, the name of the Designated Biologist that relocated the individual, and the location (including GPS coordinates) where the individual was moved.
- 8.8. Relocation of Desert Tortoise. Using the methods described in the Desert Tortoise Handling Guidelines (Attachment 5), the Designated Biologist shall capture, collect measurement and identification data, permanently mark, and relocate any desert tortoise found within the Project Area to suitable, undisturbed off-site habitat. Desert tortoises shall be relocated and/or moved as short a distance possible. The Designated Biologist shall follow all excavation, capture, handling, and relocation procedures described in the Desert Tortoise Handling Guidelines in order to protect

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the health and well-being of desert tortoise. If a desert tortoise is found above ground, the Designated Biologist shall release it above ground in suitable habitat and conditions. If a desert tortoise is found during burrow excavation, the Designated Biologist shall relocate it to an unoccupied burrow of similar size. If no such burrow is available for relocating, the Designated Biologist shall construct an artificial burrow similar in size, depth, and orientation as the original burrow. The Designated Biologist shall follow all protocols for the construction of artificial burrows found in the Desert Tortoise Handling Guidelines. The Designated Biologist shall record the location of all tortoise burrows, tortoises, and relocation sites using GPS technology. The Designated Biologist shall collapse all potential or actual desert tortoise burrows present within the work site after establishing that they are not currently occupied by desert tortoise.

8.9. Care of Injured Covered Species. If a Covered Species is injured or killed as a result of Project-related activities or if a Covered Species is otherwise found dead within the Project boundary, Permittee shall immediately notify the Designated Biologist as described in Condition 7.8. The Designated Biologist shall immediately take injured individuals to a DFG-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility prior to the start of Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species.

8.10. Desert Tortoise Handling Records. The Designated Biologist shall maintain a record of all desert tortoises handled. This information shall include the following for each tortoise: (1) the locations and dates of observation; (2) the general condition and health, including injuries, state of healing, and whether the desert tortoise voided its bladder; (3) the location moved from and location moved to (using GPS technology); (4) diagnostic markings (i.e., identification numbers or marked lateral scutes<sup>6</sup>); (5) ambient temperature when handled and released; and (6) digital photographs of each handled desert tortoise. The Designated Biologist shall mark each desert tortoise moved from within the Project Area using the acrylic paint epoxy covering technique on the fourth left costal scute as described in the Desert Tortoise Handling Guidelines. The Designated Biologist shall take digital photographs of the carapace, plastron, and fourth costal scute of each desert tortoise handled (notching of scutes is NOT permitted). The Designated Representative shall record the information detailed above in the daily observation and inspection records for inclusion in the Construction Compliance Report as directed in Condition 7.3 above.

8.11. Vehicular Traffic Restrictions. Permittee shall restrict Project-related vehicle traffic to established roads and the fenced Project area; cross-country (off-road) vehicle travel is prohibited and signs shall be posted to this affect. If a Covered Species is encountered, drivers shall stop, wait for the Covered Species to move off the road,

<sup>6</sup> A scute is a bony, external plate or scale on the shell of a tortoise.

and immediately notify the Designated Biologist of the Covered Species location.

## 9. Habitat Management Land Acquisition:

DFG has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and DFG's estimate of the acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall provide for the permanent protection and management of 738 acres of Habitat Management (HM) lands by completing the transfer of fee title to a DFG-approved public agency or the recordation of a conservation easement pursuant to California Civil Code section 815 (Condition 9.2), and calculation and deposit of the management funds (Condition 9.3). Permanent protection and perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition 10 below.

9.1. Cost Estimates. DFG has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows:

- 9.1.1. Land acquisition costs for HM lands identified in Condition 9.2.2 below, estimated at \$1000.00/acre for 738 acres: **\$738,000.00**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;
- 9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition 9.2.5 below, estimated at \$290.00/acre for 738 acres: **\$214,020.00**;
- 9.1.3. Interim management period funding as described in Condition 9.2.6 below, estimated at **\$1,070,100.00**;
- 9.1.4. Long-term management funding as described in Condition 9.3 below, estimated at \$1,450.00/acre for 738 acres: \$1,070,100.00 plus the ten percent contingency fee as described in Condition 9.3.2.2.1 (\$107,010.00) for a total of **\$1,177,110.00**. The long-term management endowment fund is estimated initially for the purpose of providing Security to ensure implementation of HM land management.

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9.1.5. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM Lands to DFG as described in Condition 9.4, estimated at **\$3,000.00.**

9.2. Habitat Acquisition and Protection. To provide for the acquisition and protection of the HM lands, the Permittee shall:

9.2.1. Fee Title/Conservation Easement. Transfer fee title to the HM lands to DFG pursuant to terms approved by DFG. Alternatively, a DFG-approved non-profit organization qualified pursuant to California Government Code section 65965, DFG-approved private entity, or a DFG-approved public agency (collectively "approved entity") may hold fee title or act as grantee for a conservation easement over the HM lands. If an approved entity holds fee title, Permittee shall record a conservation easement in favor of DFG or other DFG-approved entity as grantee. If an approved entity holds a conservation easement, DFG shall be named third-party beneficiary. The Permittee shall obtain DFG approval of any conservation easement before its recordation;

9.2.2. HM Lands Approval. Obtain DFG approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 2B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;

9.2.3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 2A). All documents conveying the HM lands and all conditions of title are subject to the approval of DFG, and if applicable, the Wildlife Conservation Board and the Department of General Services;

9.2.4. Land Manager. Designate an interim and long-term land manager approved by DFG. The land manager may be the conservation easement grantee, land owner, or other party. Documents related to land management shall identify the land manager. Permittee shall notify DFG of any subsequent changes in the land manager within 30 days of the change. If DFG will hold fee title to the mitigation land, DFG will also act as long-term land manager unless otherwise specified.

9.2.5. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have

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been approved by DFG. Start-up activities include, at a minimum: (1) preparing a final management plan for DFG approval (see <http://www.dfg.ca.gov/habcon/conplan/mitbank/>); (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;

9.2.6. Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected annual management (described in the final management plan) following start-up activities. Interim management period activities include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either (1) provide a security to DFG for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with instructions to pay the land manager annually in advance, (3) establish a short-term enhancement sub-account with the National Fish and Wildlife Foundation (NFWF) for annual payment to the land manager, or (4) establish a short-term enhancement account with DFG for annual payment to the land manager.

9.3. Endowment Fund. After obtaining DFG approval of the HM lands, Permittee shall provide long-term management funding for the in-perpetuity management of the HM lands by establishing a long-term management fund (Endowment Fund). The Endowment Fund is a sum of money, held in a DFG-authorized trust fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition 9.2.5. Endowment Fund as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon.

9.3.1. Identify an Endowment Fund Manager. The Endowment Fund shall be held by NFWF or DFG;

9.3.2. Calculate the Endowment Funds Deposit. After obtaining DFG approval of the HM lands, long-term management plan, and Endowment Fund Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR") to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit

Amount). The Permittee shall submit to DFG for review and approval the results of the PAR before transferring funds to the Endowment Fund Manager.

9.3.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Fund Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.

9.3.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment Fund:

9.3.2.2.1. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.

9.3.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

9.3.2.2.3. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Fund Manager and DFG.

9.3.3. Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Fund Manager upon DFG approval of the Endowment Deposit Amount identified above. The approved Endowment Fund Manager may pool the Endowment Fund with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment Fund.

9.4. Reimburse DFG. Permittee shall reimburse DFG for all reasonable expenses incurred by DFG such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM Lands to DFG.

## 10. Performance Security

The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition 9 that has not been

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No. 2081-2011-008-06

CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8  
US ROUTE 395 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS

completed before Covered Activities begin. Permittee shall provide Security as follows:

- 10.1. Security Amount. The Security shall be in the amount of **\$3,202,230.00**. This amount is based on the cost estimates identified in Condition 9.1 above;
- 10.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 3) or another form of Security approved in advance in writing by DFG's Office of the General Counsel;
- 10.3. Security Timeline. The Security shall be provided to DFG before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first;
- 10.4. Security Holder. The Security shall be held by DFG or in a manner approved in advance in writing by DFG;
- 10.5. Security Transmittal. If DFG holds the Security, Permittee shall transmit it to DFG with a completed Mitigation Payment Transmittal Form (see Attachment 4) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other;
- 10.6. Security Drawing. The Security shall allow DFG to draw on the principal sum if DFG, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP;
- 10.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after all secured requirements have been met as evidenced by:
  - Timely submission of all required reports;
  - An on-site inspection by DFG; and
  - Written approval from DFG.

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. DFG may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

**Amendment:**

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable regulations and law. This ITP may also be amended without the concurrence of the Permittee as required by law, including if DFG

determines that continued implementation of the Project under existing ITP conditions would jeopardize the continued existence of the Covered Species or that Project changes or changed biological conditions necessitate an ITP amendment to ensure that impacts to the Covered Species are minimized and fully mitigated.

**Stop-Work Order:**

DFG may issue Permittee a written stop-work order to suspend any activity covered by this ITP for an initial period of up to 25 days to prevent or remedy a violation of any ITP condition(s) (including but not limited to failure to comply with reporting, monitoring, or habitat acquisition obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. Permittee shall comply with the stop-work order immediately upon receipt thereof. DFG may extend a stop-work order under this provision for a period not to exceed 25 additional days, upon written notice to the Permittee. DFG may commence the formal suspension process pursuant to California Code of Regulations, Title 14, section 783.7, within five working days of issuing a stop-work order. Neither the Designated Biologist nor DFG shall be liable for any costs incurred in complying with stop-work orders.

**Compliance with Other Laws:**

This ITP contains DFG's requirements for the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable State, federal, and local laws.

**Notices:**

The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

Habitat Conservation Planning Branch  
California Department of Fish and Game  
Attention: CESA Permitting Program  
1416 Ninth Street, Suite 1260  
Sacramento, CA 95814

Written notices, reports and other communications relating to this ITP shall be delivered to DFG by registered first class mail at the following addresses, or at addresses DFG may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2011-008-06) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Kimberly Nicol, Regional Manager  
California Department of Fish and Game  
4665 Lampson Avenue, Suite J

Incidental Take Permit  
No. 2081-2011-008-06

CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8  
US ROUTE 395 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS

Los Alamitos, CA 90720  
Telephone (562) 596-4212  
Fax (562) 799-8427

Copy of cover without attachment(s) to:

Office of the General Counsel  
California Department of Fish and Game  
1416 Ninth Street, 12th Floor  
Sacramento, CA 95814

And:

Habitat Conservation Planning Branch  
California Department of Fish and Game  
1416 Ninth Street, Suite 1260  
Sacramento, CA 95814

Unless Permittee is notified otherwise, DFG's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Eric Weiss  
Environmental Scientist  
California Department of Fish and Game  
12550 Jacaranda Ave.  
Victorville, CA 92395  
Telephone (909) 980-8607  
FAX (760) 245-9142

**Compliance with CEQA:**

DFG's issuance of this ITP is subject to CEQA. DFG is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, California Department of Transportation, District 8. (See generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the US-395 Widening to Install Rumble Strips on Median and Outside Shoulders Final Initial Study with Mitigated Negative Declaration/Environmental Assessment with Finding of No Significant Impact (SCH No. 2008011063) dated January 8, 2008 (Mitigated Negative Declaration), that the California Department of Transportation, District 8, adopted for US-395 Widening to Install Rumble Strips on Median and Outside Shoulders on May 13, 2008. At the time the lead agency adopted the Mitigated Negative Declaration and approved the Project it also adopted all mitigation measures described in the Mitigated Negative Declaration as conditions of Project approval.

In fulfilling its obligations as a responsible agency, DFG's obligations pursuant to CEQA are more limited than those of the lead agency. DFG, in particular, is responsible for considering

Incidental Take Permit  
No. 2081-2011-008-06  
CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8  
US ROUTE 395 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS

only the effects of those Project activities that it is required by law to carry out or approve, and mitigating or avoiding only the direct or indirect environmental effects of those parts of the Project that it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).)<sup>7</sup>. Accordingly, because DFG's exercise of discretion is limited to issuance of this ITP, DFG is responsible for considering only the environmental effects that fall within its permitting authority pursuant to CESA.

This ITP, along with DFG's CEQA findings for this ITP and Project, which are available as a separate document, provide evidence of DFG's consideration of the lead agency's Mitigated Negative Declaration for the Project and the environmental effects related to issuance of this ITP. (CEQA Guidelines, § 15096, subd. (f).) DFG finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, DFG finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, as well as adherence to and implementation of the Conditions of Approval imposed by DFG through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. DFG consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

#### **Findings Pursuant to CESA:**

These findings are intended to document DFG's compliance with the specific findings requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds. (a)-(b), 783.5, subd. (c)(2).)

DFG finds based on substantial evidence in the ITP application, the Project Mitigated Negative Declaration adopted by the lead agency, the results of site visits and consultations, and DFG's administrative record of proceedings for the Project generally, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. DFG evaluated factors including an assessment of the importance of the habitat in the Project Area,

<sup>7</sup> The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

the extent to which the Covered Activities will impact the habitat, and DFG's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, DFG determined that the protection and management in perpetuity of 738 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;

- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, DFG's finding is based, in part, on DFG's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

**Attachments:**

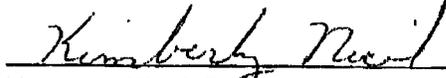
FIGURE 1	Map of Project
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2A,2B	Habitat Management Lands Checklist; Proposed Lands for Acquisition Form
ATTACHMENT 3	Letter of Credit Form

ATTACHMENT 4  
ATTACHMENT 5

Mitigation Payment Transmittal Form  
Desert Tortoise Handling Guidelines

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME

on 6/30/11

  
\_\_\_\_\_  
Kimberly Nicol, Regional Manager  
INLAND DESERTS REGION

APPROVED AS TO FORM:

  
\_\_\_\_\_  
John H. Mattox  
Senior Staff Counsel

**ACKNOWLEDGMENT**

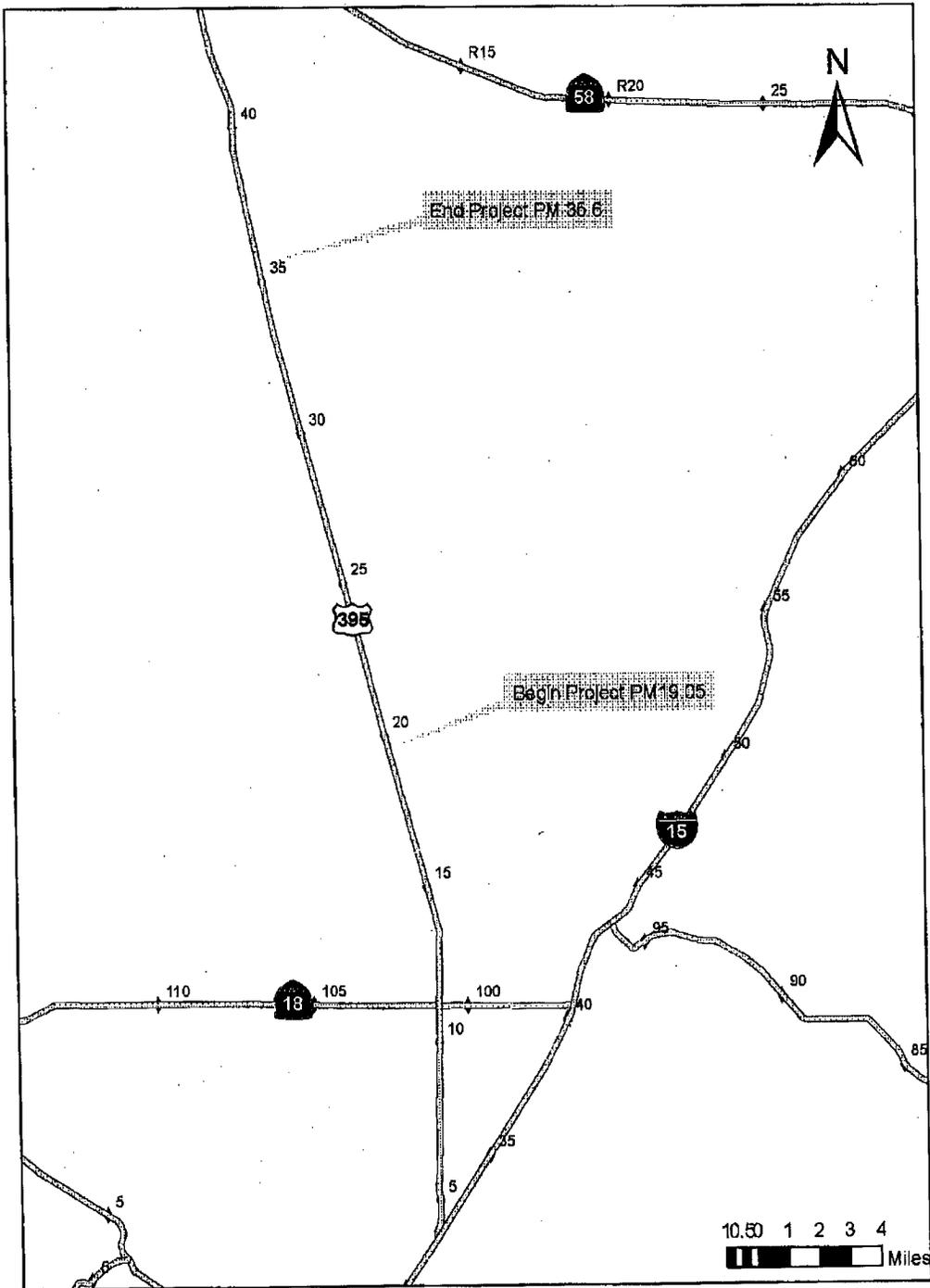
The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

By: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Incidental Take Permit  
No. 2081-2011-008-08  
CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8  
US ROUTE 398 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS

Figure 1



Incidental Take Permit  
No. 2081-2011-008-06  
CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8  
US ROUTE 395 WIDENING TO INSTALL RUMBLE STRIPS ON MEDIAN AND OUTSIDE SHOULDERS



DEPARTMENT OF THE ARMY  
LOS ANGELES DISTRICT CORPS OF ENGINEERS  
P.O. BOX 532711  
LOS ANGELES, CALIFORNIA 90053-2325

June 30, 2011

REPLY TO  
ATTENTION OF:

Office of the Chief  
Regulatory Division

**DEPARTMENT OF THE ARMY NATIONWIDE PERMIT AUTHORIZATION**

Craig Wentworth  
California Department of Transportation, District 8  
Attention: Zackry West  
464 West 4th Street, 6th Floor  
San Bernardino, California 92401-1400

Dear Mr. Wentworth:

This correspondence is in reply to your application (File No. SPL-2011-00446-SCH), dated April 25, 2011, for a Department of the Army Permit to discharge fill into 0.461 acre of non-wetland waters of the U.S., in association with the United State Route 395 (US-395) Rumble Strip Installation Project. The proposed work would take place along US-395, from postmile (PM) 19.05 to PM 35.6, near the City of Adelanto, San Bernardino, California. (34.619228° N, -117.425469° W)

Based on the information you have provided, the Corps of Engineers has determined that your proposed activity complies with the enclosed terms and conditions of Nationwide Permit Number 14 Linear Transportation Projects, as described in enclosure 1.

Specifically, you are authorized to discharge 52 cubic yards of fill into 0.461 acre of non-wetland waters of the U.S., to widen the existing roadbed to construct a 4-foot-wide median and install a median rumble-strip, and construct 8-foot-wide standard shoulders and install shoulder rumble-strips, in each direction along US-395. Temporary impacts to waters of the U.S. are not anticipated and are not authorized.

Furthermore, you must comply with the following non-discretionary Special Conditions:

1. The permittee shall abide by the terms and conditions of your section 401 Water Quality Certification.
2. The Permittee has proposed to mitigate for impacts to waters of the U. S., through implementation of the draft conceptual mitigation plan: "Draft Habitat Mitigation and Monitoring Plan" (HMMP) (dated June 2011, and prepared by Zackry West, California Department of Transportation, District 08). According to the draft HMMP, responsible parties would be as follows: a) Implementation: Craig Wentworth, Senior Environmental Planner California

Department of Transportation, District 08; and b) Performance: Craig Wentworth, Senior Environmental Planner California Department of Transportation, District 08. The responsible party for long-term management will be determined prior to initiation of work in waters of the U.S. The Permittee retains ultimate legal responsibility for meeting the requirements of the final HMMP. Any requirements for financial assurances and/or long-term management provisions are also described in the above draft HMMP, as well as in special condition 3 and 4 below.

Prior to initiating construction in waters of the U.S., the Permittee shall submit to the Corps a final HMMP prepared in accordance with the Corps' Los Angeles District Mitigation Guidelines and Monitoring Requirements, dated April 19, 2004, as amended, and the Mitigation Rule (33 C.F.R. Part 332; 73 FR 19670-19687 (April 10, 2008)). The final HMMP shall address the 0.461 acre of permanent impact to waters of the U.S. through enhancement and/or preservation of waters of the U.S. The draft conceptual HMMP discusses four (4) potential mitigation sites within the Mojave River Watershed. Parcel 1 and Parcel 2 exhibit the potential to satisfy compensatory mitigation requirements in the form of preservation. Parcel 3 and 4 exhibit the potential to satisfy compensatory mitigation requirements in the form of enhancement and preservation. A mitigation site shall be selected prior to initiation of work on waters of the U.S. The mitigation ratio shall be determined once the site is selected. All maps and drawings shall be in compliance with the Final Map and Drawing Standards for the Los Angeles District Regulatory Division dated September 21, 2009 ([http://www.spl.usace.army.mil/regulatory/pn/SPL-RG\\_map-drawing-standard\\_final\\_w-fig.pdf](http://www.spl.usace.army.mil/regulatory/pn/SPL-RG_map-drawing-standard_final_w-fig.pdf)). No work in waters of the U.S. is authorized until the Permittee receives, in writing (by letter or e-mail), Corps approval of the final HMMP. The Permittee shall complete site preparation and planting and initiate monitoring as described in the final, approved HMMP prior to or concurrently with impacts to waters of the U.S.

Your responsibility to complete the required compensatory mitigation as set forth in this Special Condition will not be considered fulfilled until you have demonstrated compensatory mitigation project success and have received written verification of that success from the U.S. Army Corps of Engineers, Los Angeles District, Regulatory Division.

3. Prior to initiation of work in waters of the U.S., the Permittee shall record a Conservation Easement (CE), in a form approved by the Corps Regulatory Division, which shall run with the land, obligating the Permittee, its successors and assigns to protect and maintain the approved mitigation site as natural open space in perpetuity. The CE must include a 3rd party easement holder qualified to hold easements pursuant to California Civil Code section 815.3 and Government Code section 65965. The Permittee must provide monies in the form of an endowment (endowment amount to be determined by Property Analysis Record or similar methodology) for the purposes of fulfilling the 3rd party easement holder's responsibilities under the CE. The CE shall preclude establishment of fuel modification zones, paved public trails, drainage facilities, walls, maintenance access roads and/or future easements, unless approved in writing by the Corps Regulatory Division. Further, to the extent practicable, any such facilities outside the CE shall be sited to minimize indirect impacts on the avoided, created, restored and enhanced wetland and non-wetland waters of the U.S. The Permittee shall receive written approval (by letter or e-mail) from the Corps

Regulatory Division of this CE prior to it being executed and recorded. A recorded copy of the CE shall be furnished to the Corps Regulatory Division prior to initiation of work in waters of the U.S.

4. The Permittee shall clearly mark the limits of the workspace with flagging or similar means to ensure mechanized equipment does not enter avoided waters of the U.S. and riparian wetland/habitat areas. Adverse impacts to waters of the U.S. beyond the Corps-approved construction footprint are not authorized. Such impacts could result in permit suspension and revocation, administrative, civil or criminal penalties, and/or substantial, additional, compensatory mitigation requirements.
5. Within 45 calendar days of completion of authorized work in waters of the U.S., the Permittee shall submit to the Corps Regulatory Division a post-project implementation memo indicating the date authorized impacts to waters of the U.S. ceased.
6. Within 45 calendar days of complete installation of all mitigation, the Permittee shall submit to the Corps Regulatory Division two copies of a memo indicating the following:
  - A) Date(s) all mitigation was installed and monitoring was initiated;
  - B) Schedule for future mitigation monitoring, implementation and reporting pursuant to final, Corps-approved HMMP;
  - C) Summary of compliance status with each special condition of this permit (including any noncompliance that previously occurred or is currently occurring and corrective actions taken to achieve compliance);
  - D) Color photographs taken at the project site before and after construction for those aspects directly associated with impacts to waters of the U.S.; and
  - E) One copy of "as built" drawings for the entire project, including all mitigation sites (all sheets must be signed, dated, to-scale, and no larger than 11 x 17 inches).
7. The permittee shall ensure that all vehicle maintenance, staging, storage, and dispensing of fuel occurs in designated upland areas. The permittee shall ensure that these designated upland areas are located in such a manner to prevent any runoff from entering waters of the U.S.
8. The permittee shall employ all best management practices (BMPs) to ensure that no debris, soil, silt, sand, rubbish, cement or concrete washings thereof, oil or petroleum can be washed by rainfall or runoff into waterways. When project operations are completed, any and all excess construction material, debris, and or other associated excess project materials shall be removed and if not recycled or reused, disposed of at an appropriate off-site location outside of any Corps jurisdictional area.
9. A copy of the permit shall be on the job site at all times during construction. The permittee shall provide a copy of this permit to all contractors, subcontractors, and forepersons. The permittee shall require that all contractors and forepersons read this authorization in its entirety and acknowledge they understand its contents and their responsibility to ensure compliance with all general and special conditions contained herein.

#### Endangered Species Act:

10. This Corps permit does not authorize you to take any threatened or endangered species, in particular the Desert tortoise (*Gopherus agassizii*) or adversely modify its designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g. ESA section 10 permit, or a Biological Opinion (BO) under ESA section 7, with "incidental take" provisions with which you must comply). The enclosed FWS BO (BO1-8-08-F-11, dated April 21, 2008) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, terms and conditions of which are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The FWS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

#### Cultural Resources:

11. Pursuant to 36 C.F.R. section 800.13, in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Regulatory Division staff and Archeology Staff within 24 hours (Steve Dibble at 213-452-3849 or John Killeen at 213-452-3861). The Permittee shall immediately suspend all work within 100 feet of any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. section 800.13.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit.

A nationwide permit does not grant any property rights or exclusive privileges. Also, it does not authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project. Furthermore, it does not obviate the need to obtain other Federal, state, or local authorizations required by law.

Thank you for participating in our regulatory program. If you have any questions, please contact Sophia Huynh of my staff at (213) 452-3357 or via e-mail at [Sophia.C.Huynh@usace.army.mil](mailto:Sophia.C.Huynh@usace.army.mil).

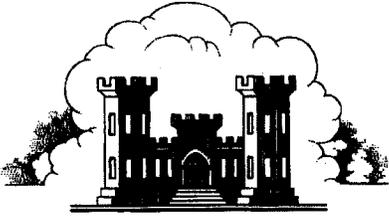
Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at:  
<http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

A handwritten signature in black ink that reads "Mark D. Cohen". The signature is written in a cursive style with a large, sweeping flourish at the end.

Mark D. Cohen  
Deputy Chief, Regulatory Division

Enclosure



LOS ANGELES DISTRICT  
U.S. ARMY CORPS OF ENGINEERS

CERTIFICATION OF COMPLIANCE WITH  
DEPARTMENT OF THE ARMY NATIONWIDE PERMIT

Permit Number: *SPL-2011-00446-SCH*

Name of Permittee: *Department of Transportation, District 8, Zackry West*

Date of Issuance: *June 30, 2011*

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S Army Corps of Engineers, Los Angeles District  
Regulatory Division  
ATTN: CESPL-RG-SPL-2011-00446-SCH  
P.O. Box 532711  
Los Angeles, CA 90017-3401

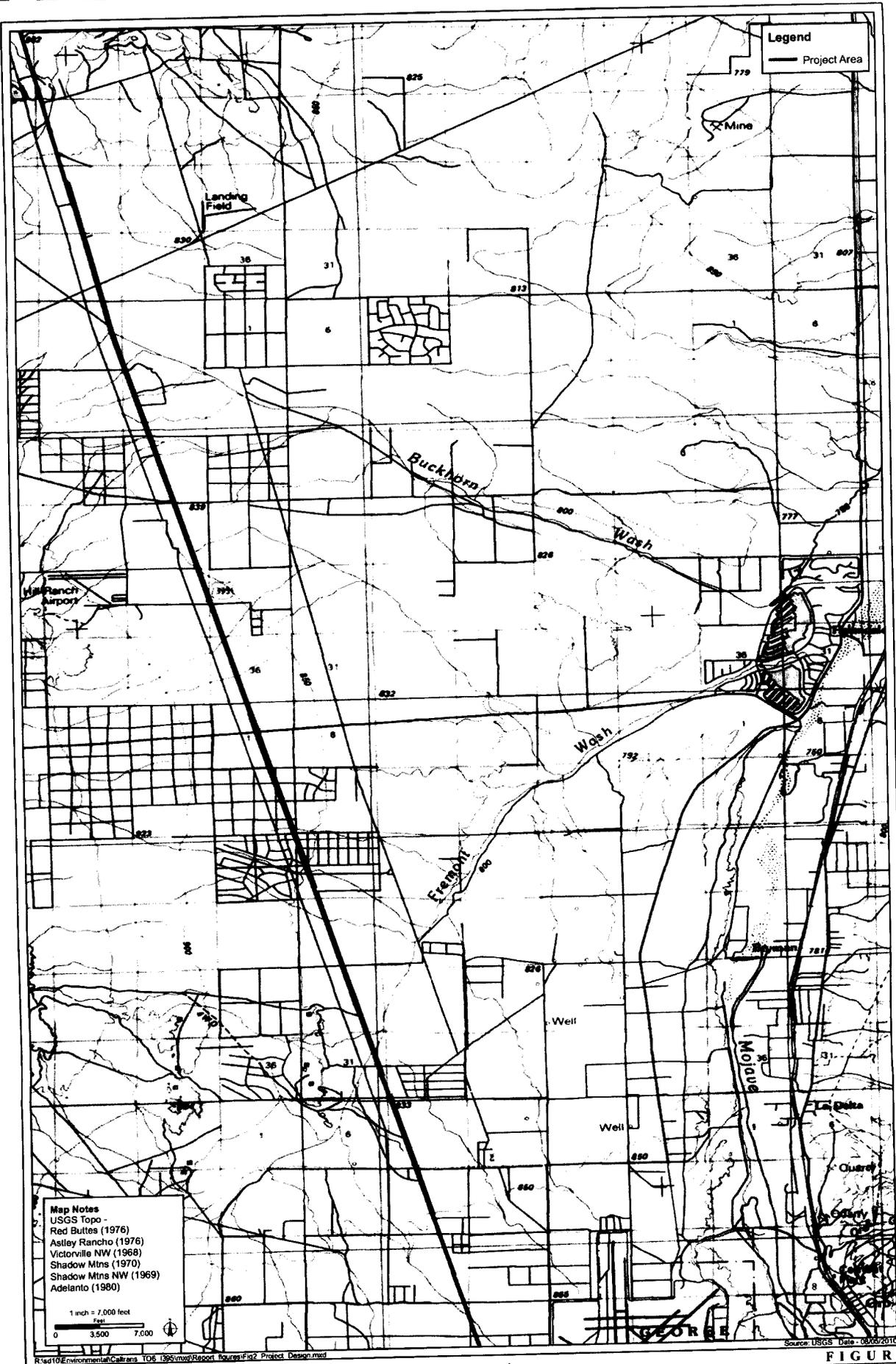
Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this nationwide permit you may be subject to permit suspension, modification, or revocation procedures as contained in 33 CFR section 330.5 or enforcement procedures such as those contained in 33 CFR sections 326.4 and 326.5.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit condition(s).

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date



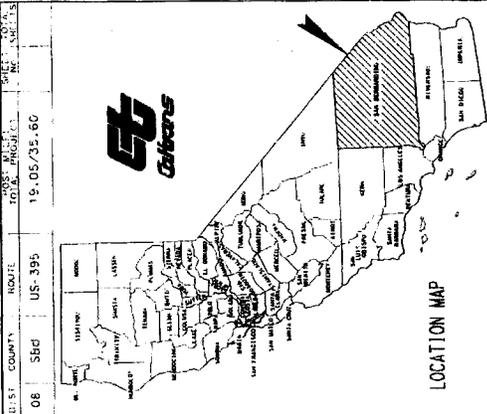


**FIGURE**  
**2**

INDEX OF SHEETS

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 PROJECT PLANS FOR CONSTRUCTION ON  
 STATE HIGHWAY  
 IN SAN BERNARDINO COUNTY  
 FROM 8 MILES NORTH OF STATE ROUTE 18 (SR-18)  
 TO 10.9 MILES SOUTH OF SR-58 (KRAMER JUNCTION).

To be supplemented by Standard Plans dated May, 2006



LOCATION MAP

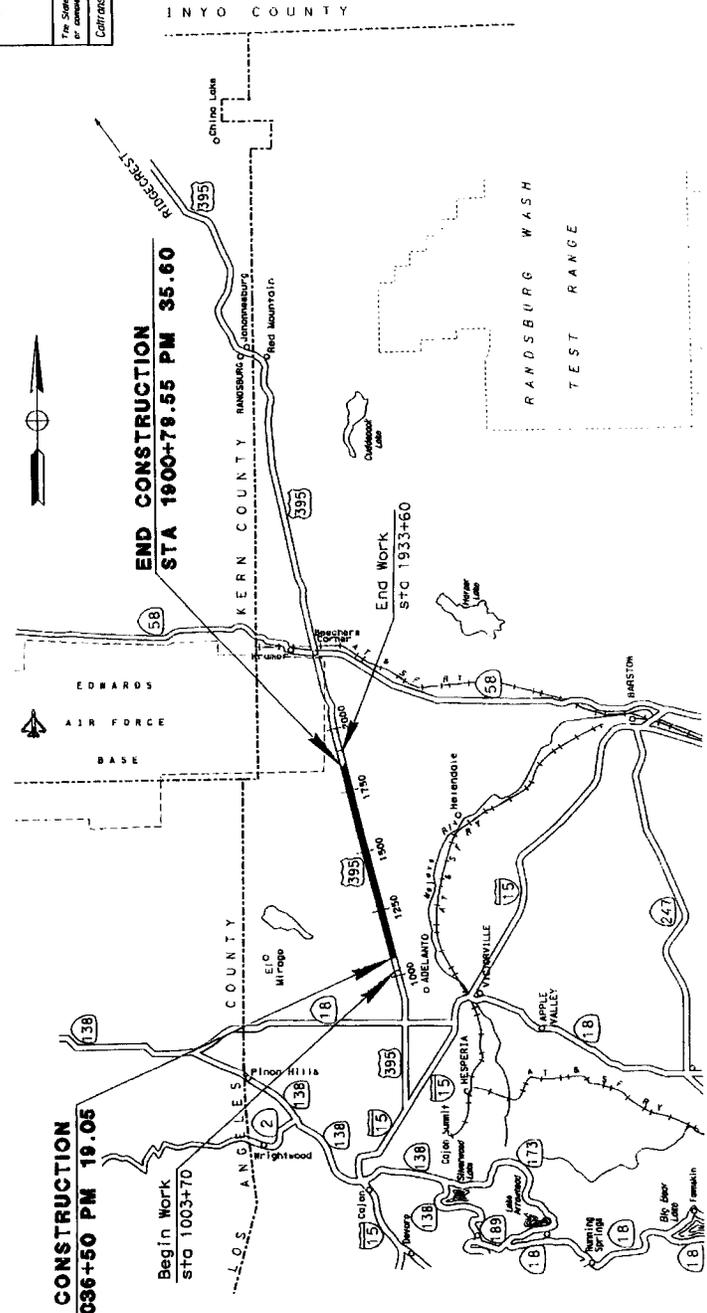
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of these plans.

Contractors may view a web site To get to the web site, go to: <http://www.dot.ca.gov>

**BEGIN CONSTRUCTION**  
 STA 1036+50 PM 19.05

Begin Work  
 STA 1003+70

**END CONSTRUCTION**  
 STA 1900+78.55 PM 35.60



NO SCALE

The Contractor shall possess the Class (or classes) of license as specified in the "Notice to Contractors".

PROJECT NUMBER	DATE	PROJECT NUMBER	DATE
08-395	15-05/35-60		



Project Engineer: [Signature]  
 Registered Professional Engineer  
 License No. 10000  
 State of California

95% PS&E REVIEW

## Enclosure 1: NATIONWIDE PERMIT NUMBER(S) NWP 14 Linear Transportation Projects. TERMS AND CONDITIONS

### 1. Nationwide Permit(s) NWP 14 Linear Transportation Projects. Terms:

Your activity is authorized under Nationwide Permit Number(s) NWP 14 Linear Transportation Projects. subject to the following terms:

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project. This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate. This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars. Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404) Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

### 2. Nationwide Permit General Conditions:

The following general conditions must be followed in order for any authorization by an NWP to be valid:

#### 1. *Navigation.*

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. *Aquatic Life Movements.* No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. *Spawning Areas.* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. *Migratory Bird Breeding Areas.* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. *Shellfish Beds.* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48.
6. *Suitable Material.* No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
7. *Water Supply Intakes.* No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
8. *Adverse Effects From Impoundments.* If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
9. *Management of Water Flows.* To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
10. *Fills Within 100-Year Floodplains.* The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
11. *Equipment.* Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
12. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
13. *Removal of Temporary Fills.* Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
14. *Proper Maintenance.* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.
15. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
16. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
17. *Endangered Species.*
  - (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
  - (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees

must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NHPs. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

#### 18. *Historic Properties.*

(a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect

created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. *Designated Critical Resource Waters.* Critical resource waters include: NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. *Mitigation.* The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require preconstruction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. *Water Quality.* Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
22. *Coastal Zone Management.* In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
23. *Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
24. *Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
25. *Transfer of Nationwide Permit Verifications.* If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

26. *Compliance Certification.* Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:
  - (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
  - (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
  - (c) The signature of the permittee certifying the completion of the work and mitigation.
27. *Pre-Construction Notification.*
  - (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is

complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity:

- (1) Until notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan;
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) *Form of Pre-Construction Notification:* The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) *Agency Coordination:*

- (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed

activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

- (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring preconstruction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.
- (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) *District Engineer's Decision:* In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either:

- (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;
- (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or
- (3) that the project is authorized under the NWP with specific modifications or conditions.

Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. *Single and Complete Project.* The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

### 3. Regional Conditions for the Los Angeles District:

In accordance with General Condition Number 23, "Regional and Case-by-Case Conditions," the following Regional Conditions, as added by the Division Engineer, must be met in order for an authorization by any Nationwide to be valid:

1. For coastal watersheds from the southern reach of the Santa Monica Mountains in Los Angeles County to the San Luis Obispo County/Monterey County boundary, all road crossings must employ a bridge crossing design that ensures passage and/or spawning of steelhead (*Oncorhynchus mykiss*) is not hindered in any way. In these areas, bridge designs that span the stream or river, including designs for pier- or pile-supported spans, or designs based on use of a bottomless arch culvert simulating the natural stream bed (i.e., substrate and streamflow conditions in the culvert are similar to undisturbed stream bed channel conditions) shall be employed unless it can be demonstrated the stream or river does not support resources conducive to the recovery of federally listed anadromous salmonids, including migration of adults and smolts, or rearing and spawning. This proposal also excludes approach embankments into the channel unless they are determined to have no detectable effect on steelhead.
2. For the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), no nationwide permit, except Nationwide Permits 1 (Aids to Navigation), 2 (Structures in Artificial Canals), 3 (Maintenance), 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities), 5 (Scientific Measurement Devices), 6 (Survey Activities), 9 (Structures in Fleeting and Anchorage Areas), 10 (Mooring Buoys), 11 (Temporary Recreational Structures), 20 (Oil Spill Cleanup), 22 (Removal of Vessels), 27 (Stream and Wetland Restoration Activities), 30 (Moist Soil Management for Wildlife), 31 (Maintenance of Existing Flood Control Projects), 32 (Completed Enforcement Actions), 35 (Maintenance Dredging of Existing Basins), 37 (Emergency Watershed Protection and Rehabilitation), 38 (Cleanup of Hazardous and Toxic Waste) and 47 (Pipeline Safety Program Designated Time Sensitive Inspections and Repairs), or other nationwide or regional general permits that specifically authorize maintenance of previously authorized structures or fill, can be used to authorize the discharge of dredged or fill material into a jurisdictional special aquatic site as defined at 40 CFR Part 230.40-45 (sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle-and-pool complexes).
3. For all projects proposed for authorization by nationwide or regional general permits where prior notification to the district engineer is required, applicants must provide color photographs or color photocopies of the project area taken from representative points documented on a site map. Pre-project photographs and the site map would be provided with the permit application. Photographs should represent conditions typical or indicative of the resources before impacts.
4. Notification pursuant to general condition 27 shall be required for projects in all special aquatic sites as defined at 40 CFR Part 230.40-45 (sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle-and-pool complexes), and in all perennial waterbodies in the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), excluding the Colorado River from Davis Dam downstream to the north end of Topock and downstream of Imperial Dam (Federal Register dated March 12, 2007 (72 FR 11092) - regional conditions requiring notification do not apply to Nationwide Permit 47).
5. Notification pursuant to general condition 27 shall be required for projects in all areas designated as Essential Fish Habitat by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092), regional conditions requiring notification do not apply to Nationwide Permit 47).
6. Notification pursuant to general condition 27 shall be required for projects in all watersheds in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and Pacific Ocean on the south (Federal Register dated March 12, 2007 (72 FR 11092) - regional conditions requiring notification do not apply to Nationwide Permit 47).
7. Individual permits shall be required for all discharges of fill material in jurisdictional vernal pools.

8. Individual permits shall be required in Murrieta Creek and Temecula Creek watersheds in Riverside County for new permanent fills in perennial and intermittent watercourses otherwise authorized under NWP's 29, 39, 42 and 43, and in ephemeral watercourses for these NWP's for projects that impact greater than 0.1 acre of waters of the United States. In addition, when NWP 14 is used in conjunction with residential, commercial, or industrial developments the 0.1 acre limit would also apply.
9. Individual permits shall be required in San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County for bank stabilization projects, and in Gaviota Creek, Mission Creek and Carpinteria Creek in Santa Barbara County for bank stabilization projects and grade control structures.
10. Notification pursuant to general condition 27 shall be required for projects in the Santa Clara River watershed in Los Angeles and Ventura counties, including but not limited to Aliso Canyon, Agua Dulce Canyon, Sand Canyon, Bouquet Canyon, Mint Canyon, South Fork of the Santa Clara River, San Francisquito Canyon, Castaic Creek, Piru Creek, Sespe Creek and the mainstem of the Santa Clara River (Federal Register dated March 12, 2007 (72 FR 11092) - regional conditions requiring notification do not apply to Nationwide Permit 47).

**4. Further information:**

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
  - ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
  - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
  - ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. Limits of this authorization.
  - (a) This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
  - (b) This permit does not grant any property rights or exclusive privileges.
  - (c) This permit does not authorize any injury to the property or rights of others.
  - (d) This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
  - (a) Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
  - (b) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
  - (c) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - (d) Design or construction deficiencies associated with the permitted work.
  - (e) Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
  - (a) You fail to comply with the terms and conditions of this permit.
  - (b) The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
  - (c) Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 330.5 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you

for the cost.

6. This letter of verification is valid for a period not to exceed two years unless the nationwide permit is modified, reissued, revoked, or expires before that time.
7. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition H below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
8. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

## Request for Leave or Approved Absence

1. Name (Last, first, middle) <b>HALL, STEPHANIE J.</b>	2. Employee or Social Security Number <b>XXX-XX-9281</b>
--	---

3. Organization  
**USACE-LADO, REGULATORY DIVISION, TRANSPORTATION & SPECIAL PROJECTS BRANCH**

4. Type of Leave/Absence					5. Family and Medical Leave	
Check appropriate box(es) and enter date and time below	Date		Time		Total Hours	If annual leave, sick leave, or leave without pay will be used under the Family and Medical Leave Act of 1993 (FMLA), please provide the following information:  <input type="checkbox"/> I hereby invoke my entitlement to family and medical leave for:  <input type="checkbox"/> Birth/Adoption/Foster Care  <input type="checkbox"/> Serious health condition of spouse, son, daughter, or parent  <input type="checkbox"/> Serious health condition of self  <i>Contact your supervisor and/or your personnel office to obtain additional information about your entitlements and responsibilities under the FMLA. Medical certification of a serious health condition may be required by your agency.</i>
	From	To	From	To		
<input checked="" type="checkbox"/> <b>Accrued annual leave</b>	20110630	20110630	0630	1500	8	
<input type="checkbox"/> <b>Restored annual leave</b>						
<input type="checkbox"/> <b>Advanced annual leave</b>						
<input type="checkbox"/> <b>Accrued sick leave</b>						
<input type="checkbox"/> <b>Advanced sick leave</b>						
<b>Purpose:</b> <input type="checkbox"/> Illness/injury/incapacitation of requesting employee <input type="checkbox"/> Medical/dental/optical examination of requesting employee <input type="checkbox"/> Care of family member, including medical/dental/optical examination of family member or bereavement <input type="checkbox"/> Care of family member with a serious health condition <input type="checkbox"/> Other						
<input type="checkbox"/> <b>Compensatory time off</b>						
<input type="checkbox"/> <b>Other paid absence</b> (specify in remarks)						
<input type="checkbox"/> <b>Leave without pay</b>						

6. Remarks  
**Request 8 hours use/lose annual leave for Thursday, 30 June 2011.**

7. **Certification:** I certify that the leave/absence requested above is for the purpose(s) indicated. I understand that I must comply with my employing agency's procedures for requesting leave/approved absence (and provide additional documentation, including medical certification, if required) and that falsification of information on this form may be grounds for disciplinary action, including removal.

7a. Employee signature <b>HALL, STEPHANIE, J. 1228932660</b>	7b. Date signed <b>20110629</b>
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8a. Official action on request  **Approved**  **Disapproved** (If disapproved, give reason. If annual leave, initiate action to reschedule.)

8b. Reason for disapproval

8c. Signature <b>MACNEIL, SPENCER, D. 1228487852</b>	8d. Date signed <b>20110629</b>
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**Privacy Act Statement**  
Section 6311 of title 5, United States Code, authorizes collection of this information. The primary use of this information is by management and your payroll office to approve and record your use of leave. Additional disclosures of the information may be: To the Department of Labor when processing a claim for compensation regarding a job connected injury or illness; to a State unemployment compensation office regarding a claim; to Federal Life Insurance or Health Benefits carriers regarding a claim; to a Federal, State, or local law enforcement agency when your agency becomes aware of a violation or possible violation of civil or criminal law; to a Federal agency when conducting an investigation for employment or security reasons; to the Office of Personnel Management or the General Accounting Office when the information is required for evaluation of leave administration; or the General Services Administration in connection with its responsibilities for records management.

Public Law 104-134 (April 26, 1996) requires that any person doing business with the Federal Government furnish a social security number or tax identification number. This is an amendment to title 31, Section 7701. Furnishing the social security number, as well as other data, is voluntary, but failure to do so may delay or prevent action on the application. If your agency uses the information furnished on this form for purposes other than those indicated above, it may provide you with an additional statement reflecting those purposes.



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003



IN REPLY REFER TO:  
2008-F-0213

April 21, 2008

Craig Wentworth  
Environmental Planning, District 8 (MS 1222)  
California Department of Transportation  
464 West 4<sup>th</sup> Street, 6<sup>th</sup> Floor  
San Bernardino, California 93726

Subject: Biological Opinion for the Widening of and Installation of Rumble Strips on  
United States Route 395, San Bernardino County, California  
(Postmile 19.05–35.6, EA 0C1210) (1-8-08-F-11)

Dear Mr. Wentworth:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the California Department of Transportation's proposal to widen and install rumble strips on United States Route 395 from 7.85 miles north of State Route 18 and 10.86 miles south of State Route 58. At issue are the effects of the proposed action on the federally threatened desert tortoise (*Gopherus agassizii*) and its critical habitat. This document was prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act). The request for formal consultation from the California Department of Transportation was dated October 26, 2007.

This biological opinion is based on information in the biological assessment for the proposed facility (California Department of Transportation 2007a) and various reports and publications. A complete administrative record of this consultation is on file at the Service's Ventura Fish and Wildlife Office.

This biological opinion does not rely on the regulatory definition of "destruction or adverse modification of critical habitat" at 50 *Code of Federal Regulations* 402.02. Instead, we have relied upon the statutory provisions of the Act to complete the following analysis with respect to critical habitat.

## BIOLOGICAL OPINION

### DESCRIPTION OF THE PROPOSED ACTION

#### **Description of the Proposed Project**

The California Department of Transportation proposes to widen the existing roadbed to accommodate the installation of rumble strips on approximately 8 feet of the outside paved

shoulder and 4 feet of median. In addition, the California Department of Transportation proposes to resurface the roadway and construct approximately 16.5 miles of desert tortoise exclusion fence along both northbound and southbound Route 395 for the entire length of the proposed project (California Department of Transportation (2007a).

The exclusion fence would be a permanent structure at the ultimate right-of-way. The ultimate right-of-way includes the entire area that will be acquired by the California Department of Transportation for future projects on this portion of Route 395.

In its initial request for consultation, the California Department of Transportation also proposed to include four turnouts as part of the proposed action. By letter dated December 26, 2007, the California Department of Transportation (2007b) notified us that the turnouts were no longer part of the proposed action.

### **Measures Proposed to Protect Desert Tortoises**

To reduce the adverse effects of the proposed action on the desert tortoise and its habitat, the California Department of Transportation has proposed to implement numerous measures. These measures were generally described in the biological assessment and revised substantially during conversations between Zackry West of the California Department of Transportation and Ray Bransfield of the Service (West 2008).

As we will define later in this biological opinion, we are modifying the manner in which we approve authorized biologists and desert tortoise monitors. Specifically, we will no longer review the credentials of or approve desert tortoise monitors. We will continue to evaluate the credentials of potential authorized biologists and include, as part of their responsibilities, the training of monitors who are not qualified to undertake the full suite of duties required of an authorized biologist. The authorized biologists will be responsible for assigning duties to the monitors that are appropriate for their skill level and expanding their duties, if their performance indicates such expansion is appropriate. The authorized biologists will also be responsible for evaluating the skills of the trainees in the final post-project report that is required by the terms and conditions of the biological opinion. For the purpose of the following protective measures, a "qualified biologist" is defined as an authorized biologist who has been approved by the Service to conduct activities related to this biological opinion and any monitor who has been approved by the authorized biologist to perform a given task.

1. At least 30 days prior to the initiation of construction activities within the proposed project site, the California Department of Transportation will ensure that the contractor's final plans and specifications include all requirements for preconstruction surveys for desert tortoises in all proposed construction staging areas, parking areas, and project elements, and flagging of these areas. The resident engineer will verify compliance with this and all other protective measures.
2. The California Department of Transportation will ensure that all construction personnel attend a worker education program presented by the qualified biologist. The program will

include information on special status species within the project area, identification of these species and their habitats, techniques being implemented during construction to avoid impacts to species, consequences of killing or injuring an individual of a listed species, and reporting procedures when encountering listed or sensitive species. Construction crews, foremen, and other personnel potentially working on site will attend this desert tortoise education program and place their name on a sign-in sheet. At a minimum, the construction monitoring notebook will include a copy of the Service's biological opinion, the California Department of Fish and Game's section 2081 permit, a summary of the education program, and the mitigation monitoring plan adopted by the California Department of Transportation.

3. Prior to the start of construction, the California Department of Transportation will require the contractor to install fencing to exclude desert tortoises from all work areas and rights-of-way under the direction of a qualified biologist. The California Department of Transportation will use the fencing guidelines described at [http://www.fws.gov/ventura/sppinfo/protocols/DT\\_Exclusion-Fence\\_2005.pdf](http://www.fws.gov/ventura/sppinfo/protocols/DT_Exclusion-Fence_2005.pdf). If desert tortoises are encountered during installation of the fence, the qualified biologist will move the individual to an area outside the fence where it will be safe. The qualified biologist will use his or her judgment regarding the best measures to use to ensure the desert tortoise does not immediately return to the area inside of the fence. These measures may include assigning a biological monitor to the desert tortoise until it ceases attempts to return to the point of capture or temporarily enclosing the animal in a small fenced area. The qualified biologist may contact the Service or California Department of Fish and Game to discuss specific situations if the need arises.
4. The California Department of Transportation will maintain the integrity of the fence to ensure that desert tortoises are excluded from the work area during construction and from the roadway thereafter. The fence will be inspected regularly; initially, it will be inspected on a monthly basis, but the California Department of Transportation may adopt a different schedule, based on experience. The California Department of Transportation will inspect the fence immediately after any rainstorm that occurs during times of the year or at temperatures when desert tortoises are likely to be active.
5. After the fencing is installed and before the onset of ground-disturbing activities, the qualified biologist will survey the area and remove all desert tortoises. The qualified biologist will survey the area as much as is needed to ensure that all desert tortoises have been found; generally, all desert tortoises will be considered to have been removed once a complete survey of the work area is conducted without finding any additional animals. Desert tortoises that are found inside the fenced area will be placed on the other side of the desert tortoise exclusion fence. The qualified biologist will use his or her best judgment to determine the optimal location for placement of desert tortoises. In general, desert tortoises will be moved to the nearest safe area on the same side of the roadway as they were found.
6. All desert tortoises that need to be moved will be handled as described in Desert Tortoise Council (1999 or a more recent version). These procedures will ensure desert tortoises that

are being moved are protected to the greatest degree possible from transmission of disease, exposure to adverse weather conditions, and other adverse situations that may arise during handling.

7. The California Department of Transportation will have a qualified biological monitor on-call throughout the construction period to monitor relocated desert tortoises and to remove any additional individuals encountered during construction. Desert tortoises encountered during construction will be removed and relocated in accordance with the specifications described in measures 5 and 6.
8. The California Department of Transportation will ensure that workers do not bring firearms and pets into the project area. This measure does not apply to law enforcement personnel and working dogs.
9. The California Department of Transportation will implement a program to ensure that trash and litter generated by the proposed action do not attract common ravens (*Corvus corax*) and other potential predators of the desert tortoise.
10. The California Department of Transportation will submit a post-construction report to the Service and California Department of Fish and Game within 30 days of the completion of work. This report will include information on: the number of desert tortoises handled, injured, and killed; the results of monitoring of relocated desert tortoises; and any difficulties in implementing the protective measures.

Pursuant to the requirements of the California Endangered Species Act, the California Department of Transportation will acquire up to 872 acres of desert tortoise habitat to compensate for the loss of habitat within the action area. The acquired lands will be within an area that is important for the recovery of the desert tortoise.

## STATUS OF THE DESERT TORTOISE AND ITS CRITICAL HABITAT

### **Basic Ecology of the Desert Tortoise**

The desert tortoise is a large, herbivorous reptile found in portions of the California, Arizona, Nevada, and Utah deserts. It also occurs in Sonora and Sinaloa, Mexico. In California, the desert tortoise occurs primarily within the creosote, shadscale, and Joshua tree series of Mojave desert scrub, and the lower Colorado River Valley subdivision of Sonoran desert scrub. Optimal habitat has been characterized as creosote bush scrub in which precipitation ranges from 2 to 8 inches, diversity of perennial plants is relatively high, and production of ephemerals is high (Luckenbach 1982, Turner and Brown 1982, Schamberger and Turner 1986). Soils must be friable enough for digging of burrows, but firm enough so that burrows do not collapse. In California, desert tortoises are typically associated with gravelly flats or sandy soils with some clay, but are occasionally found in windblown sand or in rocky terrain (Luckenbach 1982). Desert tortoises occur in the California desert from below sea level to an elevation of 7,300 feet,

but the most favorable habitat occurs at elevations of approximately 1,000 to 3,000 feet Luckenbach 1982, Schamberger and Turner 1986).

Desert tortoises may spend more time in washes than in flat areas outside of washes; Jennings (1997) notes that, between March 1 and April 30, desert tortoises “spent a disproportionately longer time within hill and washlet strata” and, from May 1 through May 31, hills, washlets, and washes “continued to be important.” Jennings’ paper does not differentiate between the time desert tortoises spent in hilly areas versus washes and washlets; however, he notes that, although washes and washlets comprised only 10.3 percent of the study area, more than 25 percent of the plant species on which desert tortoises fed were located in these areas. Luckenbach (1982) states that the “banks and berms of washes are preferred places for burrows;” he also recounts an incident in which 15 desert tortoises along 0.12 mile of wash were killed by a flash flood.

Desert tortoises are most active in California during the spring and early summer when annual plants are most common. Additional activity occurs during warmer fall months and occasionally after summer rain storms. Desert tortoises spend most of their time in the remainder of the year in burrows, escaping the extreme conditions of the desert; however, recent work has demonstrated that they can be active at any time of the year. Further information on the range, biology, and ecology of the desert tortoise can be found in Burge (1978), Burge and Bradley (1976), Hovik and Hardenbrook (1989), Luckenbach (1982), Weinstein et al. (1987), and Service (1994c).

Food resources for desert tortoises are dependent on the availability and nutritional quality of annual and perennial vegetation, which is greatly influenced by climatic factors, such as the timing and amount of rainfall, temperatures, and wind (Beatley 1969, 1974, Congdon 1989, Karasov 1989, Polis 1991 in Avery 1998). In the Mojave Desert, these climatic factors are typically highly variable; this variability can limit the desert tortoise’s food resources.

Desert tortoises will eat many species of plants. However, at any time, most of their diet often consists of a few species (Nagy and Medica 1986, Jennings 1993 in Avery 1998). Additionally, their preferences can change during the course of a season (Avery 1998) and over several seasons (Esque 1994 in Avery 1998). Possible reasons for desert tortoises to alter their preferences may include changes in nutrient concentrations in plant species, the availability of plants, and the nutrient requirements of individual animals (Avery 1998). In Avery’s (1998) study in the Ivanpah Valley, desert tortoises consumed primarily green annual plants in spring; they ate cacti and herbaceous perennials once the winter annuals began to disappear. Medica et al. (1982 in Avery 1998) found that desert tortoises ate increased amounts of green perennial grass when winter annuals were sparse or unavailable; Avery (1998) found that desert tortoises rarely ate perennial grasses.

Desert tortoises can produce from one to three clutches of eggs per year. On rare occasions, clutches can contain up to 15 eggs; most clutches contain 3 to 7 eggs. Multi-decade studies of the Blanding’s turtle (*Emydoidea blandingii*), which, like the desert tortoise, is long lived and matures late, indicate that approximately 70 percent of the young animals must survive each year

until they reach adult size; after this time, annual survivorship exceeds 90 percent (Congdon et al. 1993). Research has indicated that 50 to 60 percent of young desert tortoises typically survive from year to year, even in the first and most vulnerable year of life. We do not have sufficient information on the demography of the desert tortoise to determine whether this rate is sufficient to maintain viable populations; however, it does indicate that maintaining favorable habitat conditions for small desert tortoises is crucial for the continued viability of the species.

Desert tortoises typically hatch from late August through early October. At the time of hatching, the desert tortoise has a substantial yolk sac; the yolk can sustain them through the fall and winter months until forage is available in the late winter or early spring. However, neonates will eat if food is available to them at the time of hatching; when food is available, they can reduce their reliance on the yolk sac to conserve this source of nutrition. Neonate desert tortoises use abandoned rodent burrows for daily and winter shelter; these burrows are often shallowly excavated and run parallel to the surface of the ground.

Neonate desert tortoises emerge from their winter burrows as early as late January to take advantage of freshly germinating annual plants; if appropriate temperatures and rainfall are present, at least some plants will continue to germinate later in the spring. Freshly germinating plants and plant species that remain small throughout their phenological development are important to neonate desert tortoises because their size prohibits access to taller plants. As plants grow taller during the spring, some species become inaccessible to small desert tortoises.

Neonate and juvenile desert tortoises require approximately 12 to 16 percent protein content in their diet for proper growth. Desert tortoises, both juveniles and adults, seem to selectively forage for particular species of plants with favorable ratios of water, nitrogen (protein), and potassium. The potassium excretion potential model (Ofstedal 2001) predicts that, at favorable ratios, the water and nitrogen allow desert tortoises to excrete high concentrations of potentially toxic potassium, which is abundant in many desert plants. Ofstedal (2001) also reports that variation in rainfall and temperatures cause the potassium excretion potential index to change annually and during the course of a plant's growing season. Therefore, the changing nutritive quality of plants, combined with their increase in size, further limits the forage available to small desert tortoises to sustain their survival and growth.

In summary, the ecological requirements and behavior of neonate and juvenile desert tortoises are substantially different than those of subadults and adults. Smaller desert tortoises use abandoned rodent burrows, which are typically more fragile than the larger ones constructed by adults. They are active earlier in the season. Finally, small desert tortoises rely on smaller annual plants with greater protein content to be able to gain access to food and to grow, respectively.

### **Status of the Desert Tortoise**

The Mojave population of the desert tortoise includes those animals living north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, southwestern Utah, and in

the Colorado Desert in California. On August 4, 1989, the Service published an emergency rule listing the Mojave population of the desert tortoise as endangered (54 Federal Register 32326). In its final rule, dated April 2, 1990, the Service determined the Mojave population of the desert tortoise to be threatened (55 Federal Register 12178).

The desert tortoise was listed in response to loss and degradation of habitat caused by numerous human activities including urbanization, agricultural development, military training, recreational use, mining, and livestock grazing. The loss of individual desert tortoises to increased predation by common ravens, collection by humans for pets or consumption, collisions with vehicles on paved and unpaved roads, and mortality resulting from diseases also contributed to the Service's listing of this species.

The following paragraphs provide general information on the results of efforts to determine the status and trends of desert tortoise populations across a large portion of its range; we present information on the status of the desert tortoise within the action area in the Environmental Baseline section of this biological opinion. We have grouped these paragraphs by recovery unit and critical habitat unit; we will describe these units in more detail later in this biological opinion.

Before entering into a discussion of the status and trends of desert tortoise populations across its range, a brief discussion of the methods of estimating the numbers of desert tortoises would be useful. Three primary methods have been widely used: permanent study plots, triangular transects, and line distance sampling.

Generally, permanent study plots are defined areas that are visited at roughly 4-year intervals to determine the numbers of desert tortoises present. Desert tortoises found on these plots during the spring surveys were registered; that is, they were marked so they could be identified individually during subsequent surveys. Between 1971 and 1980, 27 plots were established in California to study the desert tortoise; 15 of these plots were used by the Bureau to monitor desert tortoises on a long-term basis (Berry 1999). Range-wide, 49 plots have been used at one time or another to attempt to monitor desert tortoises (Tracy et al. 2004).

Triangular transects are used to detect sign (i.e., scat, burrows, footprints, etc.) of desert tortoises. The number of sign is then correlated with standard reference sites, such as permanent study plots, to allow the determination of density estimates.

Finally, line distance sampling involves walking transects while trying to detect live desert tortoises. Based on the distance of the desert tortoise from the centerline of the transect, the length of the transect, and a calculation of what percentage of the animals in the area were likely to have been above ground and visible to surveyors during the time the transect was walked, an estimation of the density can be made. Each of these methods has various strengths and weaknesses; the information we present on the density of desert tortoises across the range and in the action area is based on these methods of collecting data.

Note that, when reviewing the information presented in the following sections, determining the number of desert tortoises over large areas is extremely difficult. The report prepared by the Desert Tortoise Recovery Plan Assessment Committee (Tracy et al. 2004) acknowledges as much. Desert tortoises spend much of their lives underground or concealed under shrubs, are not very active in years of low rainfall, and are distributed over a wide area in several different types of habitat. Other factors, such as the inability to sample on private lands and rugged terrain, further complicate sampling efforts. Consequently, the topic of determining the best way to estimate the abundance of desert tortoises has generated many discussions over the years. As a result of this difficulty, we cannot provide concise estimations of the density of desert tortoises in each recovery unit or desert wildlife management area that have been made in a consistent manner.

Given the difficulty in determining the density of desert tortoises over large areas, the reader needs to understand fully that the differences in density estimates in the recovery plan and those derived from subsequent sampling efforts may not accurately reflect on-the-ground conditions.

Despite this statement, the reader should also be aware that the absence of live desert tortoises and the presence of carcasses over large areas of some desert wildlife management areas provide at least some evidence that desert tortoise populations seem to be in a downward trend in some regions.

#### Upper Virgin River Recovery Unit

The Upper Virgin River Recovery Unit is located in the northeastern most portion of the range of the desert tortoise; the Red Cliffs Reserve was established as a conservation area within this critical habitat unit. The recovery plan states that desert tortoises occur in densities of up to 250 adult animals per square mile within small areas of this recovery unit; overall, the area supports a mosaic of areas supporting high and low densities of desert tortoises (Service 1994c).

We have summarized the information in this paragraph from a report by the Utah Division of Wildlife Resources (McLuckie et al. 2003). The Utah Division of Wildlife Resources has intensively monitored desert tortoises, using a distance sampling technique, since 1998.

Monitoring in 2003 indicated that the density of desert tortoises was approximately 44 per square mile throughout the reserve. This density represents a 41 percent decline since monitoring began in 1998. The report notes that the majority of desert tortoises that died within one year (n=64) were found in areas with relatively high densities; the remains showed no evidence of predation. Upper respiratory tract disease has been observed in this population; the region also experienced a drought from 1999 through 2002, with 2002 being the driest year. McLuckie et al. (2003) attribute the primary cause of the die-off to drought, but note that disease, habitat degradation, direct mortality of animals, and predation by domestic dogs and common ravens were also factors in the decline. The average density of desert tortoises in this recovery unit, based on line-distance sampling conducted in 2001, 2003, and 2005 was 59.4 per square mile (Service 2006c).

### Northeastern Mojave Recovery Unit

The Northeastern Mojave Recovery Unit is located to the southwest of the Upper Virgin River Recovery Unit and extends through Nevada and into California in Ivanpah Valley. Several critical habitat units and four desert wildlife management areas are located within this recovery unit. Tracy et al. (2004) note that densities of adult desert tortoises for the overall region do not show a statistical trend over time.

The Beaver Dam Slope Desert Wildlife Management Area covers portions of Nevada, Utah, and Arizona; it is located to the southwest of the Red Cliffs Reserve. Based on various methods, the recovery plan estimates the density of desert tortoises in this desert wildlife management area as being from 5 to 56 animals per square mile (Service 1994c). McLuckie et al. (2001) estimated the density in 2001 to be approximately 7.9 reproductive desert tortoises per square mile, using a distance sampling method. However, they also note several problems with the sampling effort, including too few transects and transects placed in habitat types not normally inhabited by desert tortoises; we also note that, as described in the previous paragraph, the survey occurred during a year of lower-than-average rainfall, which would decrease activity levels of desert tortoises and make them more difficult to detect. The encounter rate during this survey was so low that the precision level of the results is low; other monitoring plots, from earlier years, showed higher density estimates.

The Gold Butte-Pakoon Desert Wildlife Management Area covers portions of Nevada and Arizona, generally south of the Beaver Dam Slope Desert Wildlife Management Area. The recovery plan states that densities of desert tortoises in this recovery unit vary from 5 to 56 animals per square mile (Service 1994c).

The Mormon Mesa Desert Wildlife Management Area is located entirely in Nevada, generally west and northwest of the Beaver Dam Slope and Gold Butte-Pakoon desert wildlife management areas, respectively. The recovery plan states that densities of desert tortoises in this recovery unit vary from 41 to 87 subadult and adult animals per square mile (Service 1994c). The Coyote Springs Desert Wildlife Management Area is located entirely in Nevada, generally west of the Mormon Mesa Desert Wildlife Management Area and east of the Desert National Wildlife Refuge. The recovery plan states that densities of desert tortoises in this recovery unit vary from 0 to 90 adult animals per square mile (Service 1994c). Kernel analysis for the Coyote Springs Desert Wildlife Management Area showed areas where the distributions of carcasses and living desert tortoises do not overlap (Tracy et al. 2004); this scenario is indicative of a higher than average rate of mortality. (The Desert Tortoise Recovery Plan Assessment Committee used a kernel analysis to examine the distribution of live desert tortoises and carcasses over large areas of the range of the species (Tracy et al. 2004). The intent of this analysis is to determine where large areas with numerous carcasses do not overlap large areas with live animals. Regions where the areas of carcasses do not overlap areas of live animals likely represent recent die-offs or declines in desert tortoise populations.) Because permanent study plots for this region were discontinued after 1996, recent declines in numbers would not be reflected in the kernel analysis if they had occurred.

The Ivanpah Desert Wildlife Management Area lies east of the Mojave National Preserve and covers approximately 36,795 acres. It is contiguous with National Park Service lands; note that the National Park Service did not designate desert wildlife management areas within the Mojave National Preserve because it considers that all of its lands are managed in a manner that is conducive to the recovery of the desert tortoise. The permanent study plot in the Ivanpah Valley is located within the Mojave National Preserve and provides information on the status of desert tortoises in this general region. Data on desert tortoises on this permanent study plot were collected in 1980, 1986, 1990, and 1994; the densities of desert tortoises of all sizes per square mile were 386, 393, 249, and 164, respectively (Berry 1996). (Numerous data sets are collected from the study plots and various statistical analyses conducted to provide information on various aspects of trends. We cannot, in this biological opinion, provide all of this information; therefore, we have selected the density of desert tortoises of all sizes per square mile to attempt to indicate trends.) The number of juvenile and immature desert tortoises on the study plot declined, although the number of adult animals remained fairly constant. The notes accompanying this report indicated that the "ill juvenile and dead adult male (desert) tortoises salvaged for necropsy contained contaminants;" it also cited predation by common ravens and the effects of cattle grazing as causative factors in the decline in the number of juvenile and immature desert tortoises on the study plot (Berry 1996). In 2002, workers found 55 desert tortoises on this plot; this number does not represent a density estimate (Berry 2005). The average density of desert tortoises in this recovery unit was 5.1 per square mile (Service 2006c). The line-distance sampling from which this density was derived was conducted from 2001 through 2005.

#### Eastern Mojave Recovery Unit

The Eastern Mojave Recovery Unit extends from west of Clark Mountain, south through the Mojave National Preserve, and east into southern Nevada. Within this recovery unit, the Bureau designated the Shadow Valley and Piute-Fenner desert wildlife management areas within California and the Piute-El Dorado Desert Wildlife Management Area in Nevada.

The Shadow Valley Desert Wildlife Management Area, which occupies approximately 101,355 acres, lies north of Interstate 15 and west of the Clark Mountains. The Mojave National Preserve is located to the south of the interstate. Data on desert tortoises on a permanent study plot in this area were collected in 1988 and 1992; the densities of desert tortoises of all sizes per square mile were 50 and 58, respectively (Berry 1996). Although these data seem to indicate a slight increase in the number of desert tortoises, in 2002, workers found five desert tortoises on this plot; this number does not represent a density estimate (Berry 2005). Some signs of shell disease have been observed in the population in recent years (Bureau 2002).

The Bureau's Piute-Fenner Desert Wildlife Management Area lies to the east of the southeast portion of the Mojave National Preserve and is contiguous with National Park Service lands. It occupies approximately 173,850 acres. The Goffs permanent study plot, which is located within the Mojave National Preserve, provides information on the status of desert tortoises in this general region. Data on desert tortoises on this permanent study plot were collected in 1980,

1990, and 1994; Berry (1996) estimated the densities of desert tortoises of all sizes at approximately 440, 362, and 447 individuals per square mile, respectively. As Berry (1996) noted, these data seem to indicate that this area supported “one of the more stable, high density populations” of desert tortoises within the United States. Berry (1996) also noted that “a high proportion of the animals (had) shell lesions.” In 2000, only 30 live desert tortoises were found; Berry (2000) estimated the density of desert tortoises at approximately 88 animals per square mile. The shell and skeletal remains of approximately 393 desert tortoises were collected; most of these animals died between 1994 and 2000. Most of the desert tortoises exhibited signs of shell lesions; three salvaged desert tortoises showed abnormalities in the liver and other organs and signs of shell lesions. None of the three salvaged desert tortoises tested positive for upper respiratory tract disease.

The Piute-Eldorado Desert Wildlife Management Area is located entirely in southern Nevada and is contiguous with California’s Piute-Fenner Desert Wildlife Management Area. Based on various methods, the recovery plan estimates the density of desert tortoises in this desert wildlife management area as being from 40 to 90 adults per square mile (Service 1994c). A kernel analysis of the results of distance sampling data from 2001 depicted large areas where only carcasses were detected (Tracy et al. 2004). Only six live desert tortoises were encountered in approximately 103 miles of transects during this sampling effort; this encounter rate is very low.

The average density of desert tortoises in this recovery unit was 54.3 per square mile (Service 2006c). The line-distance sampling from which this density was derived was conducted from 2001 through 2005.

#### Northern Colorado Recovery Unit

The Northern Colorado Recovery Unit extends from Interstate 40 south, almost to Interstate 10 and from the eastern portions of Joshua Tree National Park east to the Colorado River; it is located immediately south of the Eastern Mojave Recovery Unit. The 874,843-acre Chemehuevi Desert Wildlife Management Area, which is managed by the Bureau, is the sole conservation area for the desert tortoise in this recovery unit.

Two permanent study plots are located within this desert wildlife management area. At the Chemehuevi Valley and Wash plot, 257 and 235 desert tortoises were registered in 1988 and 1992, respectively (Berry 1999). During the 1999 spring survey, only 38 live desert tortoises were found. The shell and skeletal remains of at least 327 desert tortoises were collected; most, if not all, of these animals died between 1992 and 1999. The frequency of shell lesions and nutritional deficiencies appeared to be increasing and may be related to the mortalities.

The Upper Ward Valley permanent study plot was surveyed in 1980, 1987, 1991, and 1995; Berry (1996) estimated the densities of desert tortoises of all sizes at approximately 437, 199, 273, and 447 individuals per square mile, respectively. In 2002, workers found 17 desert tortoises on this plot; this number does not represent a density estimate (Berry 2005).

The average density of desert tortoises in this recovery unit was 19.0 per square mile (Service 2006c). The line-distance sampling from which this density was derived was conducted in 2001, 2003, 2004, and 2005.

#### Eastern Colorado Recovery Unit

The Eastern Colorado Recovery Unit, which is located immediately south of the Northern Colorado Recovery Unit, extends from just north of Interstate 10 south to the Mexico border near Yuma, Arizona; the Salton Sink and Imperial Valley form the western edge of this recovery unit, which extends east to the Colorado River. The Chuckwalla Desert Wildlife Management Area, which covers 818,685 acres, is the sole conservation area for the desert tortoise in this recovery unit. The Marine Corps (Chocolate Mountains Aerial Gunnery Range), Bureau, and National Park Service (Joshua Tree National Park) manage the Federal lands in this recovery unit and desert wildlife management area. Two permanent study plots are located within this desert wildlife management area.

At the Chuckwalla Bench plot, Berry (1996) calculated approximate densities of 578, 396, 167, 160, and 182 desert tortoises per square mile in 1979, 1982, 1988, 1990, and 1992, respectively. In 1997, workers found 52 desert tortoises on this plot; this number does not represent a density estimate (Berry 2005). At the Chuckwalla Valley plot, Berry (1996) calculated approximate densities of 163, 181, and 73 desert tortoises per square mile in 1980, 1987, and 1991, respectively. Tracy et al. (2004) concluded that these data show a statistically significant decline in the number of adult desert tortoises over time; they further postulate that the decline on the Chuckwalla Bench plot seemed to be responsible for the overall significant decline within the recovery unit.

The average density of desert tortoises in this recovery unit was 18.1 per square mile (Service 2006c). The line-distance sampling from which this density was derived was conducted from 2001 through 2005.

#### Western Mojave Recovery Unit

Although desert tortoises were historically widespread in the western Mojave Desert, their distribution within this region was not uniform. For example, desert tortoises likely occurred at low densities in the juniper woodlands of the western Antelope Valley and in the sandier habitats in the Mojave River valley. They were also likely largely absent from the higher elevations of the Ord and Newberry mountains and from playas and the areas immediately surrounding these dry lakes. Several large areas of land that are not managed by the Bureau lie within the Western Mojave Recovery Unit; because of their size, these areas are not affected by the Bureau's management of public lands and are therefore not part of the action area for this consultation. These areas lie primarily on military bases, within Joshua Tree National Park, and in areas of private land.

Desert tortoises occur over large areas of Fort Irwin, which is managed by the Department of the Army (Army). At Fort Irwin, the Army conducts realistic, large-scale exercises with large numbers of wheeled and tracked vehicles. In areas where training has occurred for many decades, desert tortoises persist in relatively low numbers primarily on the steep, rugged slopes of the mountain ranges that occur throughout Fort Irwin. Through Public Law 107-107, approximately 118,600 acres were added to Fort Irwin along its southwestern and eastern boundaries in 2002. Approximately 97,860 acres of the Superior-Cronese Critical Habitat Unit lie along the original southern boundary of Fort Irwin and in the parcel to the southwest that was added in 2002 (Charis Professional Services Corporation 2003, Army 2004). Currently, the Army may conduct some low intensity training in these areas on occasion and some preparations for the onset of force-on-force training should begin soon. To date, these parcels have not been used for force-on-force training; within the next few years, the Army will begin to use a large portion of these lands for maneuvers with numerous wheeled and tracked vehicles. In our biological opinion regarding the effects of the use of these lands for training on the desert tortoise (Service 2004), we noted that approximately 1,299 to 1,349 adult desert tortoises may occur within the action area for that consultation. The Army established several conservation areas, totaling approximately 16,900 acres, just inside the boundaries of Fort Irwin where maneuvers would not occur. The Army calculated that approximately 152 desert tortoises may reside within these areas; these animals are unlikely to be affected by use of the new training lands. Additionally, because of other restrictions that the Army will follow during training, approximately 5,500 acres of critical habitat of the desert tortoise within the additional training lands will not be used for force-on-force training. These lands lie primarily on and around dry lakes, which generally do not support large numbers of desert tortoises, because the lake beds themselves do not provide suitable habitat and the areas immediately surrounding the playas usually support substrates composed of clays and silt that are not suitable for burrowing. Finally, in the Eastgate portion of Fort Irwin, approximately 288 desert tortoises may be exposed to additional training; however, most of these animals are located in an area that is unlikely to receive much used by vehicles and are thus unlikely to be affected. The Army and Service have agreed that desert tortoises within new training areas that are likely to be killed by maneuvers will be translocated to newly acquired lands to the south of Fort Irwin; a plan for this translocation is currently under development.

The Navy has designated approximately 200,000 acres of the South Range at the Naval Air Weapons Station, China Lake as a management area for the desert tortoise (Service 1995). Through a consultation with the Service (1992), the Navy agreed to try to direct most ground-disturbing activities outside of this area, to use previously disturbed areas for these activities when possible, and to implement measures to reduce the effects of any action on desert tortoises. This area also encompasses the Superior Valley Tactical Bombing Range located in the southernmost portion of the Mojave B South land management unit of the Naval Air Weapons Station; it continues to be used as an active bombing range for military test and training operations by the Navy and Department of Defense. In the 3 years for which we had annual reports available, activities conducted by the Navy did not kill or injure any desert tortoises (Navy 1995, 2001, 2002). In general, desert tortoises occur in low densities on the North Range of the Naval Air Weapons Station; Kiva Biological Consulting and McClenahan and Hopkins

Associates (in Service 1992) reported that approximately 136 square miles of the North Range supported densities of 20 or fewer desert tortoises per square mile. The South Range supported densities of 20 or fewer desert tortoises per square mile over an area of approximately 189 square miles and densities of greater than 20 per square mile on approximately 30 square miles. The higher elevations and latitude in this area may be responsible for these generally low densities (Weinstein 1989 in Bureau et al. 2005).

The Indian Wells Valley, which is located to the southwest of the Naval Air Weapons Station, likely supported desert tortoises at higher densities in the past. Urban, suburban, and agricultural development in this area is likely cause of the lower densities that are currently found in this area.

Edwards Air Force Base is used primarily to test aircraft and weapons systems used by the Department of Defense. Desert tortoises occur over approximately 220,800 acres of the installation. Approximately 80,640 acres of the base have been developed for military uses or are naturally unsuitable for use by desert tortoises, such as Rogers and Rosamond dry lakes. Based on surveys conducted between 1991 and 1994, approximately 160,640 acres of the base supported 20 or fewer desert tortoises per square mile. Approximately 55,040 acres supported densities between 21 and 50 desert tortoises per square mile; from 51 to 69 desert tortoises per square mile occurred on several smaller areas that totaled 5,120 acres (U.S. Air Force 2004). We expect that current densities are somewhat lower, given the regional declines in desert tortoise numbers elsewhere in the Western Mojave Recovery Unit.

Desert tortoises may have been more common in the past the area west of Highway 14 between the town of Mojave and Walker Pass; high levels of off-road vehicle use and extensive livestock grazing are potential causes for the current scarcity of desert tortoises in this area. Four townships of private land east of the city of California City and south of the Rand Mountains supported large numbers of desert tortoises as late as the 1970s; high levels of off-road vehicle use, extensive grazing of sheep, scattered development, and possibly poaching have greatly reduced the density of desert tortoises in this area.

The direct and indirect effects of urban and suburban development extending from Lancaster in the west to Lucerne Valley in the east has largely eliminated desert tortoises from this area. A few desert tortoises remain on the northern slopes of the San Bernardino Mountains, south of Lucerne Valley; however, they seem to be largely absent from the portion of this area in Los Angeles County (Bureau et al. 2005).

The northern portion of Joshua Tree National Park is within the planning area for the West Mojave Plan. Given the general patterns of visitor use at Joshua Tree National Park, we expect that this area receives little use.

Private lands between the northern boundary of Joshua Tree National Park and the southern boundary of the Marine Corps Air Ground Combat Center continue to support desert tortoises; the primary threat to desert tortoises in this area is urbanization.

Desert tortoises occur within the Marine Corps Air Ground Combat Center in densities of greater than 50 per square mile in limited areas; most of the installation, however, supports from 0 to 5 animals per square mile (Jones and Stokes Associates 1998 in Natural Resources and Environmental Affairs Division 2001). The Marine Corps' integrated natural resource management plan also notes that the number of desert tortoises may have declined in the more heavily disturbed areas of the Marine Corps Air Ground Combat Center and that vehicles, common ravens, and dogs are responsible for mortalities. In general, the Marine Corps Air Ground Combat Center supports a wide variety of training exercises that include the use of tracked and wheeled vehicles and live fire.

The average density of desert tortoises in this recovery unit was 16.4 per square mile (Service 2006c). The line-distance sampling from which this density was derived was conducted from 2001 through 2005.

### **Status of Critical Habitat**

The Service designated critical habitat for the desert tortoise in portions of California, Nevada, Arizona, and Utah in a final rule, published February 8, 1994 (59 *Federal Register* 5820). Critical habitat is designated by the Service to identify the key biological and physical needs of the species and key areas for recovery and focuses conservation actions on those areas. Critical habitat is composed of specific geographic areas that contain the biological and physical attributes that are essential to the species' conservation within those areas, such as space, food, water, nutrition, cover, shelter, reproductive sites, and special habitats. These features are called the primary constituent elements of critical habitat. The specific primary constituent elements of desert tortoise critical habitat are: sufficient space to support viable populations within each of the six recovery units and to provide for movement, dispersal, and gene flow; sufficient quality and quantity of forage species and the proper soil conditions to provide for the growth of these species; suitable substrates for burrowing, nesting, and overwintering; burrows, caliche caves, and other shelter sites; sufficient vegetation for shelter from temperature extremes and predators; and habitat protected from disturbance and human-caused mortality.

The final rule for designation of critical habitat did not explicitly ascribe specific conservation roles or functions to the various critical habitat units. Rather, it refers to the strategy of establishing recovery units and desert wildlife management areas recommended by the recovery plan for the desert tortoise, which had been published as a draft at the time of the designation of critical habitat, to capture the "biotic and abiotic variability found in desert tortoise habitat" (59 *Federal Register* 5820, see page 5823). Specifically, we designated the critical habitat units to follow the direction provided by the draft recovery plan for the establishment of desert wildlife management areas. Note that each critical habitat unit functions independently of the others in terms of providing the physical and biological needs of individual desert tortoises; that is, desert tortoises are not required to move between or among units to complete their life histories. For this reason, we have not presented specific information related to the status of individual critical habitat units that are located outside of the action area. We also note that the critical habitat units in aggregate are intended to protect the variability that occurs across the large range of the desert

tortoise; the loss of any specific unit would eliminate elements of the species' behavioral, ecological, and genetic variability.

We did not designate the Desert Tortoise Natural Area and Joshua Tree National Park in California and the Desert National Wildlife Refuge in Nevada as critical habitat because they are "primarily managed as natural ecosystems" (59 *Federal Register* 5820, see page 5825) and provide adequate protection to desert tortoises. Since the designation of critical habitat, Congress increased the size of Joshua Tree National Park; a portion of the expanded boundary of Joshua Tree National Park lies within critical habitat of the desert tortoise.

For all critical habitat units, the primary constituent elements are generally functioning, to the best of our knowledge, in a manner that would support the key biological and physical needs of the desert tortoise. In some specific areas within the boundaries of critical habitat, such as within and adjacent to dry lakes, some of the primary constituent elements are naturally absent; desert tortoises do not usually reside in such areas in large numbers. In other areas, human activities have decreased the ability of some of the primary constituent elements to function to the maximum extent; such areas include but are not limited to unpaved roads and areas around water sources within cattle allotments. These areas are too numerous to mention specifically; generally, however, these areas comprise a relatively small portion of the critical habitat unit and do not compromise the conservation role of the units as a whole. Non-native annual plant species are an exception to the general statements in the previous sentences. These species are widely distributed throughout critical habitat units and, in some cases such as Sahara mustard (*Brassica tournefortii*), continuing to spread rapidly; their abundance in any given area varies annually according to weather patterns. Although we do not understand their complete role in relation to the ecology of the desert tortoise, we know that these species can exclude the native annual species on which the desert tortoise depends and can lead to the spread of wildfires. The role of these species with regard to the proper functioning of critical habitat units is an important topic for further research.

The action area lies partially within the Fremont-Kramer Critical Habitat Unit, which covers approximately 518,000 acres. The following information regarding land ownership is from LaPre (2005d). The critical habitat unit includes 65,483 acres within Edwards Air Force Base. The Bureau manages approximately 283,710 acres of this area. The State Lands Commission manages 457 acres. Approximately 163,857 acres are privately owned.

Disturbance within the portion of the Fremont-Kramer Critical Habitat Unit that occurs within Edwards Air Force Base includes targets, buildings, parking lots, roads, road shoulders, trails, and cleared areas. Approximately 1,670 acres within critical habitat have been disturbed by human activities, including approximately 323 acres of primary and secondary roads. Additionally, approximately 195.3 miles of abandoned jeep trails and other minor routes are located within critical habitat on Edwards Air Force Base (Collis 2005).

The California Department of Fish and Game's Fremont Valley Ecological Reserve consists of 1,090 acres in 5 properties. The California Department of Fish and Game also manages the West

Mojave Desert Ecological Reserve, which consists of 22 properties totaling 11,817 acres northeast of Kramer Junction. The parcels managed by the California Department of Fish and Game are scattered among lands managed by the Bureau..

The California Desert Conservation Area Plan of 1980 designated lands north of California City in Kern County as an area of critical environmental concern and a research natural area. The Desert Tortoise Research Natural Area, which includes 25,695 acres, is managed jointly by the Bureau, California Department of Fish and Game, and the Desert Tortoise Preserve Committee, a non-profit group established to acquire and manage lands for protection of the desert tortoise. The northern portion of the Desert Tortoise Research Natural Area (3,045 acres) is within the Fremont-Kramer Critical Habitat Unit.

Approximately 174 acres of the Golden Valley Wilderness is included within the Fremont-Kramer Critical Habitat Unit, just outside the southwestern corner of the U.S. Navy's Mojave B Range. The remaining wilderness extends the protected habitat to the northwest.

In past years, sheep grazed this critical habitat unit in several allotments. No sheep grazing has occurred within the vast majority of the critical habitat unit since at least the early 1990s, as a result of section 7(a)(2) consultations between the Bureau and Service. A portion of the Pilot Knob Allotment, which was grazed by cattle, overlies this critical habitat unit. It has not been grazed for approximately 15 years; the private interests in that allotment have been acquired by a conservation group.

Contingent corridor P, which is 2 miles wide, traverses the critical habitat adjacent to Route 395; this corridor contains two 115-kilovolt power lines, a coaxial cable, and a 12-inch pipeline. Utility corridors G and Q cross the Fremont-Kramer Critical Habitat Unit. Corridor G is 2 miles wide and contains a 30-inch pipeline. Corridor Q is also 2 miles wide; it contains a 12-inch pipeline.

Several popular off highway vehicle routes are found within the Fremont-Kramer Critical Habitat Unit. The Rand Mountains, which are located between the Desert Tortoise Research Natural Area on the west and the Rand Mining District on the east, have been extremely popular with off-highway vehicle users. The Bureau has expended considerable effort to control recreational use in this area.

### **Recovery Plan for the Desert Tortoise**

The recovery plan for the desert tortoise is the basis and key strategy for recovery and delisting of the desert tortoise. The recovery plan divides the range of the desert tortoise into 6 distinct population segments or recovery units and recommends the establishment of 14 desert wildlife management areas throughout the recovery units. Within each desert wildlife management area, the recovery plan recommends implementation of reserve level protection of desert tortoise populations and habitat, while maintaining and protecting other sensitive species and ecosystem functions. The recovery plan also recommends that desert wildlife management areas be

designed to follow the accepted concepts of reserve design and be managed to restrict human activities that negatively affect desert tortoises (Service 1994c). The delisting criteria established by the recovery plan are:

1. The population within a recovery unit must exhibit a statistically significant upward trend or remain stationary for at least 25 years;
2. Enough habitat must be protected within a recovery unit or the habitat and desert tortoises must be managed intensively enough to ensure long-term viability;
3. Populations of desert tortoises within each recovery unit must be managed so discrete population growth rates ( $\lambda$ s) are maintained at or above 1.0;
4. Regulatory mechanisms or land management commitments that provide for long-term protection of desert tortoises and their habitat must be implemented; and
5. The population of the recovery unit is unlikely to need protection under the Endangered Species Act in the foreseeable future.

The recovery plan based its descriptions of the six recovery units on differences in genetics, morphology, behavior, ecology, and habitat use over the range of the Mojave population of the desert tortoise. The recovery plan contains generalized descriptions of the variations in habitat parameters of the recovery units and the behavior and ecology of the desert tortoises that reside in these areas (pages 20 to 22 in Service 1994c). The recovery plan (pages 24 to 26 from Service 1994c) describes the characteristics of desert tortoises and variances in their habitat, foods, burrow sites, and phenotype across the range of the listed taxon. Consequently, to capture the full range of phenotypes, use of habitat, and range of behavior of the desert tortoise as a species, conservation of the species across its entire range is essential.

#### **Assessment of the Recovery Plan**

In 2003, the Service appointed a group of researchers to conduct a scientific assessment of the recovery plan for the desert tortoise, which was completed in 1994. This group, called the Desert Tortoise Recovery Plan Assessment Committee, completed its assessment in 2004. The group found that the recovery plan was “fundamentally sound, but some modifications for contemporary management will likely make recovery more successful” (Tracy et al. 2004). The group also found that analyses showed desert tortoise populations were declining in some portions of the range, assessing the density of desert tortoises is difficult, and “the original paradigm of desert tortoises being recovered in large populations relieved of intense threats may be flawed...”(Tracy et al. 2004). Finally, the group reviewed the distinct population segments (or recovery units) described in the recovery plan and concluded they should be modified; briefly, the Desert Tortoise Recovery Plan Assessment Committee recommends leaving the Western Mojave and Upper Virgin River units intact and recombining the remaining four into three distinct population segments.

The Service subsequently determined that the recovery plan for the desert tortoise should be revised, with a substantial level of input from stakeholders. We propose to release a draft revised recovery plan in 2008.

### **Relationship of Recovery Units, Distinct Population Segments, Desert Wildlife Management Areas, and Critical Habitat Units**

The recovery plan (Service 1994c) recognized six recovery units or evolutionarily significant units across the range of the listed taxon, based on differences in genetics, morphology, behavior, ecology, and habitat use of the desert tortoises found in these areas. The boundaries between these areas are vaguely defined. In some cases, such as where the Western Mojave Recovery Unit borders the Eastern Mojave Recovery Unit, a long, low-lying, arid valley provides a fairly substantial separation of recovery units. In other areas, such as where the Eastern Mojave Recovery Unit borders the Northern Colorado Recovery Unit, little natural separation exists. Because of the vague boundaries, the acreage of these areas has not been quantified. Over the years, workers have commonly referred to the areas as “recovery units;” the term “distinct population segment” has not been in common use. As mentioned previously in the Assessment of the Recovery Plan section of this biological opinion, the Desert Tortoise Recovery Plan Assessment Committee suggests that five recovery units (or distinct population segments) would more appropriately represent variation across the range of the desert tortoise rather than the six described in the recovery plan; because this concept is not yet universally accepted, we will continue to refer to the recovery units described in the recovery plan in this biological opinion. The recovery plan recommended that land management agencies establish one or more desert wildlife management areas within each recovery unit. As mentioned previously in the Recovery Plan for the Desert Tortoise section of this biological opinion, the recovery plan recommended that these areas receive reserve-level management to remove or mitigate the effects of the human activities responsible for declines in the number of desert tortoises. As was the case for the recovery units, the recovery plan did not determine precise boundaries for the desert wildlife management areas; the recovery team intended for land management agencies to establish these boundaries, based on the site-specific needs of the desert tortoise. At this time, desert wildlife management areas have been established throughout the range of the desert tortoise, except in the Western Mojave Recovery Unit.

Based on the recommendations contained in the draft recovery plan for the desert tortoise (59 Federal Register 5820), the Service designated critical habitat units throughout the range of the desert tortoise. The 14 critical habitat units have defined boundaries and cover specific areas throughout the 6 recovery units.

The Bureau used the boundaries of the critical habitat units and other considerations, such as conflicts in management objectives and more current information, to propose and designate desert wildlife management areas through its land use planning processes. In California, the Bureau also classified these desert wildlife management areas as areas of critical environmental concern, which, as we mentioned in the Description of the Proposed Action section of this biological opinion, allows the Bureau to establish management goals for specific resources in

defined areas. Through the land use planning process, the Bureau established firm boundaries for the desert wildlife management areas.

Finally, we note that the Department of Defense installations and National Park Service units in the California desert did not establish desert wildlife management areas on their lands. Where the military mission is compatible with management of desert tortoises and their habitat, the Department of Defense has worked with the Service to conserve desert tortoises and their habitat. Examples of such overlap include the bombing ranges on the Navy's Mojave B and the Chocolate Mountains Aerial Gunnery Ranges; although the target areas are heavily disturbed, most of the surrounding land remains undisturbed. Additionally, the Army has established several areas along the boundaries of Fort Irwin where training with vehicles is prohibited; desert tortoises persist in these areas, which are contiguous with lands off-base. We discussed the situation at Joshua Tree National Park in the Status of Critical Habitat section of this biological opinion. The National Park Service did not establish desert wildlife management areas within the Mojave National Preserve, because the entire preserve is managed at a level that is generally consistent with the spirit and intent of the recovery plan for the desert tortoise.

The following table depicts the relationship among recovery units, desert wildlife management areas, and critical habitat units through the range of the desert tortoise.

<b>Critical Habitat Unit</b>	<b>Desert Wildlife Management Area</b>	<b>Recovery Unit</b>	<b>State</b>	<b>Acreage of Critical Habitat Unit</b>
Chemehuevi	Chemehuevi	Northern Colorado	CA	937,400
Chuckwalla	Chuckwalla	Eastern Colorado	CA	1,020,600
Fremont-Kramer	Fremont-Kramer	Western Mojave	CA	518,000
Ivanpah Valley	Ivanpah Valley	Eastern Mojave	CA	632,400
Pinto Mountain	Joshua Tree	Western Mojave/ Eastern Colorado	CA	171,700
Ord-Rodman	Ord-Rodman	Western Mojave	CA	253,200
Piute-Eldorado- CA Piute-Eldorado- NV	Fenner Piute-Eldorado	Eastern Mojave Northeastern Mojave/ Eastern Mojave	CA NV	453,800 516,800
Superior-Cronese	Superior-Cronese Lakes	Western Mojave	CA	766,900
Beaver Dam: NV UT AZ	Beaver Dam Beaver Dam Beaver Dam	Northeastern Mojave (all)	NV UT AZ	87,400 74,500 42,700
Gold Butte-Pakoon NV AZ	Gold Butte-Pakoon Gold Butte-Pakoon	Northeastern Mojave (all)	NV AZ	192,300 296,000
Mormon Mesa	Mormon Mesa Coyote Spring	Northeastern Mojave	NV	427,900
Upper Virgin River	Upper Virgin River	Upper Virgin River	UT	54,600

## Fires

Since December 2004, numerous wildfires have occurred in desert tortoise habitat across its range. Although we know that some desert tortoises were killed by the wildfires, mortality estimates are not available at this time. We estimate that approximately 500,000 acres of potential desert tortoise habitat burned in the Northeastern Mojave Recovery unit in 2005. This number includes areas of critical habitat that burned, which are noted in the following table. All data are from Clayton (2005).

Recovery Unit	Critical Habitat Unit	Acres Burned
Upper Virgin River	Upper Virgin River	10,446
Northeastern Mojave	Beaver Dam Slope	46,757
Northeastern Mojave	Gold Butte-Pakoon	62,466
Northeastern Mojave	Mormon Mesa	15,559
Eastern Mojave	Piute-Eldorado	154
Eastern Mojave	Ivanpah	1,065
Total		136,447

The 136,447 acres of critical habitat that burned represent approximately 2.1 percent of the total amount of critical habitat that was designated for the desert tortoise. Given the patchiness with which the primary constituent elements of critical habitat are distributed across the critical habitat units and the varying intensity of the wildfires, we cannot quantify precisely the extent to which these fires disrupted the function and value of the critical habitat.

## ENVIRONMENTAL BASELINE

### Action Area

The implementing regulations for section 7(a)(2) of the Act define the action area to be “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” We consider the action area to be the area inside the ultimate right-of-way between postmiles 19.05 and 35.60 on Route 395. The action area covers approximately 236 acres. Noise and dust may be detectable beyond the right-of-way but we cannot measure the extent to which they may affect surrounding habitat.

The action area also includes the area that the California Department of Transportation will acquire as mitigation pursuant to its compliance with the California Endangered Species Act. Because the California Department of Transportation does not know the location of the lands to be acquired, we can provide no further information on them at this point in time.

### Habitat Characteristics of the Action Area

The following description of the action area is summarized from the biological assessment (California Department of Transportation 2007a), unless otherwise noted. The 16.5-mile-long,

236-acre project area lies between 2,674 to 2,857 feet in elevation. Mojave creosote bush scrub and desert saltbush scrub comprise the plant communities in the action area.

### **Status of the Desert Tortoise in the Action Area**

The California Department of Transportation did not survey the action area for desert tortoises. Two desert tortoises were found within the action area during surveys for other sensitive species. We expect, based on work conducted by Von Seckendorff Hoff and Marlow (2002) and reviews contained in Boarman (2002), that the density of desert tortoises in the action area is lower than in the surrounding areas outside of the action area because of the presence of Route 395. The Status of the Desert Tortoise – Western Mojave Recovery Unit section of this biological opinion notes that desert tortoises occur at an overall density of 16.4 per square mile in this recovery unit.

### **Status of Critical Habitat in the Action Area**

The northern portion of the action area lies within the Fremont-Kramer Critical Habitat Unit. It extends along approximately 11 and 8 miles of the critical habitat unit on the east and west sides of the road, respectively. (The southern boundary of the critical habitat unit is farther south on the east side of the road than on the west.) We note that the California Department of Transportation estimated that the proposed fencing of the ultimate right-of-way would remove approximately 82 acres of critical habitat, with the remaining 154 acres being comprised of habitat that had not been designated as critical. However, given that critical habitat extends along approximately 11 and 8 miles of the critical habitat unit on the east and west sides of the road and the length of both sides of the route to be fenced is approximately 33 miles, over half of the action area seems to lie within critical habitat. Assuming that the right-of-way is approximately the same width for the entire length of the action area, we calculate that approximately 136 acres of the action area lie within critical habitat and that approximately 100 acres of the action area lie outside of critical habitat. Despite the acreage of critical habitat provided in the biological assessment, we will use this figure throughout the remainder of this document because it will lead to a more conservative analysis of the effects of the action on critical habitat. Staff from the California Department of Transportation did not know the origin of the acreages in the biological assessment; the person responsible for drafting the document has since left the agency.

Based on our general knowledge of critical habitat in the vicinity of roads and information in the biological assessment (California Department of Transportation 2007a), we describe the known and expected conditions of each primary constituent element adjacent to Route 395 in the following paragraphs.

Sufficient Space to Support Viable Populations Within Each of the Six Recovery Units and to Provide for Movement, Dispersal, and Gene Flow. The action area comprises a small portion of the Fremont-Kramer Critical Habitat Unit. It is also a linear segment in the critical habitat unit, with a large edge-to-area ratio; such configuration is the least desirable from the perspective of managing reserve areas. For these reasons, the action area currently does not support sufficient

space to support a viable population; it is also not configured appropriately for the purposes of conservation.

Route 395 currently supports volumes of traffic that likely prevent most desert tortoises from crossing it. Therefore, the existing road likely precludes movement, dispersal, and gene flow of desert tortoises.

Sufficient Quality and Quantity of Forage Species and the Proper Soil Conditions to Provide for the Growth of these Species. The amount of disturbance in the action area is typical of road sides in this region; it includes undesignated turnout areas, erosion resulting from runoff from the highway, and invasive species (California Department of Transportation 2007a). The quality and quantity of forage species and quality of soil conditions would generally improve the farther one moves away from the road; we expect this factor to hold for this and the remaining primary constituent elements of critical habitat.

Suitable Substrates for Burrowing, Nesting, and Overwintering. The disturbance mentioned in the previous paragraph would also reduce the quality of substrates available to desert tortoises for burrowing, nesting, and overwintering.

Burrows, Caliche Caves, and Other Shelter Sites. The previously mentioned roadside disturbance decreases the ability of the action area to support burrows, caliche caves, and other shelter sites; high levels of disturbance will generally eliminate these sites in most substrates.

Sufficient Vegetation for Shelter from Temperature Extremes and Predators. The previously mentioned roadside disturbance has removed vegetation from many areas near the freeway.

Habitat Protected from Disturbance and Human-Caused Mortality. Roads can be a constant source of disturbance and human-caused mortality of desert tortoises in an area. Disturbance occurs as a result of general use, maintenance, and vehicle-related fires. Desert tortoises are crushed by vehicles that are using the roads; roads also serve as access to others who collect desert tortoises illegally. In general, habitat is not well protected from disturbance and human-caused mortality along roads.

In general, the condition of the primary constituent elements of critical habitat improves as the distance from a road increases because the amount of disturbance associated with the road decreases. We expect that the primary constituent elements adjacent to Route 395 in the action area are functioning at a substantial degree below optimal condition because of the heavy traffic along this portion of the road and its long history of use.

## EFFECTS OF THE ACTION

Several aspects of the proposed action may affect desert tortoises within the action area. These aspects are the capture and relocation of any desert tortoises that may be inside the exclusion

fence, the installation of the fence to exclude desert tortoises from the freeway, and offsite conservation measures. We will discuss these aspects in the following paragraphs.

### **Capture and Relocation of Desert Tortoises**

#### *Desert Tortoise*

Some potential exists that capturing desert tortoises may cause elevated levels of stress that may render these animals more susceptible to disease or predation. Because the California Department of Transportation has proposed to use only experienced biologists approved by the Service, the likelihood that the stress levels of the desert tortoises would be substantially elevated will likely be minimized to the maximum degree possible.

Relocated desert tortoises occasionally try to return to the site from which they were removed. Because the areas to be disturbed in this proposed action has the potential to include the entire home range of one or more desert tortoises, translocated animals may attempt to re-enter their former territories and thus spend relatively greater amounts of time above ground. This change in behavior patterns may expose them to elevated risks of predation and exposure to temperature extremes that they would otherwise avoid. In such cases, desert tortoises may be killed or injured.

Even in a worst-case scenario (that is, translocated desert tortoises are subjected to elevated levels of stress and attempt to return to capture sites), we anticipate that few animals are likely to be affected by the proposed action. We base this statement on the fact that two desert tortoises were detected within the action area. Additionally, Von Seckendorff Hoff and Marlow (2002) found that “reductions in (desert) tortoise sign are easily detectable more than (2.48 miles) from the roadway” on heavily used paved roads. The reductions in the amount of sign relate to lowered numbers of desert tortoises, likely because of mortality sources associated with the road (e.g., vehicle strikes, poaching) and possibly as a result of other factors (e.g., avoidance of noise, habitat degradation). As we discussed in the Environmental Baseline section of this biological opinion, Route 395 is likely responsible, at least to some degree, for the scarcity of desert tortoises in the action area.

The translocation of any desert tortoises from the project area into surrounding habitat has the potential to disrupt the behavior and social structure of resident animals. Such disruption may impair their breeding, feeding, and sheltering by elevating the frequency and intensity of aggressive interactions between individuals. We anticipate that, overall, such an effect is likely to be minor, given that few desert tortoises are likely to be translocated and, thus, few resident animals are likely to be affected.

#### *Critical Habitat*

The capture and relocation of desert tortoises from the area inside the fence will not affect critical habitat outside of the fenced area. We have reached this conclusion because activities

associated with moving desert tortoises conducted within critical habitat would generally not result in measurable disturbance of the primary constituent elements of critical habitat. Although walking through critical habitat or constructing artificial burrows for translocated desert tortoises would cause some disturbance of substrates and possibly vegetation, the effects of these activities cannot be measured in a meaningful way when considered in the context of the ability of the 518,000-acre Fremont-Kramer Critical Habitat Unit to support the conservation of the desert tortoise.

### **Installation of the Fence to Exclude Desert Tortoises from the Highway**

#### *Desert Tortoise*

The California Department of Transportation has proposed to install fencing to prevent desert tortoises from entering the area considered to be the ultimate right-of-way for Route 395. Desert tortoises could be killed or injured by work vehicles during installation of the fence. Because of the relatively limited amount of activity associated with the installation of the fence and the proposed presence of a qualified biologist to protect desert tortoises during this activity, few individuals are likely to be killed or injured.

The presence of Route 395 has fragmented habitat and probably substantially disrupted the movement of desert tortoises across this portion of the desert; we expect that few desert tortoises are able to cross over the highway, although they may use culverts to pass under it. The presence of the permanent fencing to preclude desert tortoises from entering the roadway will not substantially alter the degree of fragmentation in this region.

Most importantly, the installation of the fence to exclude desert tortoises from 16.5 miles of the freeway would substantially reduce the level of mortality of individuals of this species. Because desert tortoises would no longer be able to gain access to the freeway, they would no longer be subject to being struck by vehicles or collected by passersby. We consider the protection of individual desert tortoises, particularly females of breeding age, from potential ongoing sources of mortality to be a key component of recovering this species; in fact, the fencing of this section of Route 395 is recommended in the recovery plan for the desert tortoise (Service 1994).

The California Department of Transportation is not proposing to install culverts under Route 395 at this time. Consequently, the installation of the fence will separate desert tortoises that reside on opposite sides of the highway. Generally, such fragmentation can result in deleterious effects on the viability of populations in the long term. In the case of the desert tortoise, however, we consider the protection of mature adults, particularly females, to be more important than the slight decrease in population connection that may currently be present. That is, under the current conditions, desert tortoises are likely able to cross Route 395 infrequently; however, most are likely killed as they attempt crossing. At the present time, genetic diversity in this region, and the overall conservation of the desert tortoise, will be better served by preventing animals from attempting to cross the road. In the long term, issues of maintaining genetic diversity throughout

the region may be managed through periodic, careful relocation of a few individual desert tortoises.

The loss of approximately 100 acres of habitat as a result of the proposed action would not appreciably reduce the ability of the desert tortoise to survive and recover in the wild for several reasons. First, the habitat that would be lost is distributed in 2 narrow strips along Route 395; such long, narrow strips hold little conservation value because of the large edge-to-volume ratio of the area. Secondly, habitat values in this area are somewhat diminished by the presence of Route 395. Finally, although the incremental loss of habitat over many separate actions can have an aggregative effect on the desert tortoise, the Service considers the area of land located within the desert wildlife management areas designated by the Bureau to be sufficient to provide for the long-term survival and recovery of the desert tortoise.

### *Critical Habitat*

Approximately 136 acres of critical habitat would be permanently unavailable to desert tortoises after installation of the exclusion fence (California Department of Transportation 2007a). Because the entire area within the exclusion fence would no longer function as critical habitat, we will not discuss the specific impacts of the proposed road work on the primary constituent elements. That is, in contrast to most other circumstances, where some value or function of critical habitat remains within the action area after the activity has concluded, the area within the exclusion fence will not have any value to desert tortoises because they will be completely excluded from this area.

The loss of the 136 acres of critical habitat is unlikely to affect the conservation value or function of the Fremont-Kramer Critical Habitat Unit in a substantial manner for two primary reasons. First, the 136-acre area would be located in two relatively long and narrow strips on either side of Route 395. Loss of habitat in this configuration would not substantially degrade the reserve design of the Fremont-Kramer Critical Habitat Unit because of the extremely large perimeter-to-area ratio of the strips along the highway.

Second, the area outside the fence provides sufficient habitat for desert tortoises to breed, feed, seek shelter, or conduct other necessary ecological functions. The 136 acres of critical habitat that would be essentially removed from the Fremont-Kramer Critical Habitat Unit comprise approximately 0.026 percent of the 518,000-acre critical habitat unit.

## **Construction**

### *Desert Tortoise*

After the fence is installed, qualified biologists will survey the action area to find and remove all desert tortoises. The California Department of Transportation would not begin ground-disturbing activities until this survey is completed.

For these reasons, we anticipate that desert tortoises are unlikely to be killed or injured by heavy equipment or workers during construction activities. Juvenile desert tortoises are difficult to detect during surveys; therefore, the potential exists that they may be missed during the surveys and remain in the work areas during construction. Given that few desert tortoises inhabit the action area, the likelihood that juveniles are present is low.

The California Department of Transportation's commitment to prevent common ravens from accessing construction-related trash should reduce the likelihood that these birds will gain substantial subsidies during construction. Although common ravens may be attracted to the heightened levels of human activity during construction to some degree, we expect this slight local increase is likely to be minor and temporary because of the lack of substantial subsidies. Post-construction, the exclusion fence is likely to reduce the number of road-killed animals, which, in turn, would reduce subsidies to common ravens and possibly lead to a decrease in their overall abundance in the local area. The education program that California Department of Transportation will provide should prevent workers from killing, injuring, or otherwise affecting desert tortoises as a result of being uninformed.

#### *Critical Habitat*

The effects of construction on critical habitat would be minimal because of the small area immediately adjacent to the highway that would be affected. Moreover, these effects would be entirely masked by the removal of the area from the critical habitat unit by the exclusion fence.

We note that the biological effects of the proposed action on habitat that has not been designated as critical would be the same as those on critical habitat. However, these effects are not considered in our analysis as to whether the proposed action is likely to result in the destruction or adverse modification of critical habitat.

#### **Offsite Conservation Measures**

##### *Desert Tortoise*

The California Department of Transportation has proposed to acquire up to 872 acres of habitat that will be preserved in perpetuity for the conservation of the desert tortoise to offset the adverse effects of the Route 395 project. This measure would contribute to the recovery of the desert tortoise to some degree, because it has the potential to remove threats on the land through appropriate management.

##### *Critical Habitat*

If the acquisition of habitat occurs within a critical habitat unit, the California Department of Transportation would assist to some degree in the conserving the function and value of the critical habitat unit. Although such an acquisition would comprise only a small portion of, for example, the Fremont-Kramer Critical Habitat Unit, this conservation measure would preclude

future private development on the land that could have numerous direct and indirect effects on the critical habitat unit.

## Summary

### *Desert Tortoise*

The California Department of Transportation has proposed numerous measures to avoid, minimize, reduce, and offset the adverse effects on the desert tortoise of the proposed action. Consequently, we expect that few, if any, desert tortoises will be killed or injured by the proposed project. Given numerous factors, including the facts that desert tortoises will move through habitat over time and the protective measures proposed by the California Department of Transportation are likely to prevent most mortality, we cannot predict, with absolute certainty, the number of desert tortoises that may be killed or injured during construction activities. The California Department of Transportation has proposed to fence approximately 16.5 miles of Route 395 to preclude entry by desert tortoises. We expect that this fencing will provide substantive benefits to the desert tortoise in this portion of the Fremont-Kramer Critical Habitat Unit by reducing the number of animals that are killed or injured by traffic on the roadway.

### *Critical Habitat*

As a result of the proposed action, approximately 136 acres of critical habitat would be permanently unavailable. Because this area would be located in two narrow strips adjacent to the roadway and it constitutes a small portion of the critical habitat unit, the proposed action is not likely to substantially reduce the conservation value or function of the Fremont-Kramer Critical Habitat Unit. Additionally, the California Department of Transportation's proposal to acquire up to 872 acres of private land to manage for the conservation of the desert tortoise will contribute to its recovery, to some degree.

## CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. The action area is entirely within the right-of-way of the California Department of Transportation; consequently, we do not anticipate any cumulative effects will occur in this area.

## CONCLUSION

### *Desert Tortoise*

After reviewing its current status, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the

proposed widening of Route 395 between postmiles 19.05 and 35.6 and the installation of desert tortoise fencing in this area is not likely to jeopardize the continued existence of the desert tortoise. We reached this conclusion primarily because the proposed action will affect a very limited number of desert tortoises; additionally, the California Department of Transportation has proposed numerous measures to avoid, reduce, and minimize the potential adverse effects of the action on the desert tortoise.

### *Critical Habitat*

After reviewing the current status of critical habitat, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the proposed widening of Route 395 between postmiles 19.05 and 35.6 and the installation of desert tortoise fencing in this area is not likely to adversely modify critical habitat of the desert tortoise. We reached this conclusion primarily because the proposed action will affect a relatively small amount of critical habitat that is distributed parallel to the highway. Additionally, the California Department of Transportation has proposed to acquire up to 872 acres of private land to manage for the conservation of the desert tortoise.

## INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described in this incidental take statement are non-discretionary; the California Department of Transportation must undertake these measures or make them binding conditions of any authorization provided to contractors. The California Department of Transportation has a continuing duty to regulate the activities covered by this incidental take statement. If the California Department of Transportation fails to assume and implement the terms and conditions of the incidental take statement or to make them enforceable terms of its contracts, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the California Department of Transportation must report the progress of the action and its impact on the species

to the Service as specified in the incidental take statement (50 Code of Federal Regulations 402.14(i)(3)).

We anticipate that all desert tortoises within the action area may be taken during construction of the facility; because only two desert tortoises were detected during surveys for other species and because of the proximity of the road to a heavily used road, we expect that the total number of animals that may be taken during construction will be low. We anticipate that most of these individuals will be captured and translocated to nearby suitable habitat.

We cannot quantify the precise numbers of desert tortoises that may be captured, killed, or injured as a result of the actions that the California Department of Transportation has proposed because desert tortoises move over time; for example, animals may have entered the action area since the time of the surveys. We consider this circumstance unlikely, given that desert tortoises are typically not abundant adjacent to heavily used roads. Additionally, the protective measures proposed by the California Department of Transportation are likely to prevent mortality or injury of any desert tortoises. The exemption provided by this incidental take statement to the prohibitions against take contained in section 9 of the Act extends only to the action area as described in the Environmental Baseline - Action Area section of this biological opinion; maps of the action area are available in the biological assessment (California Department of Transportation 2007a).

#### REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of desert tortoises during the widening of and installation of rumble strips and an exclusion fence for desert tortoises on the ultimate right-of-way on Route 395:

1. The California Department of Transportation must ensure that only experienced biologists conduct surveys for and translocate desert tortoises during the implementation of the proposed project.
2. The California Department of Transportation must ensure that the level of incidental take that occurs during implementation of the proposed action is commensurate with the analysis contained in this biological opinion.

Our evaluation of the proposed action includes consideration of the protective measures proposed by the California Department of Transportation in its biological assessment and reiterated in the Description of the Proposed Action section of this biological opinion. Consequently, any changes in these protective measures may constitute a modification of the proposed action that causes an effect to the desert tortoise that was not considered in the biological opinion and require re-initiation of consultation, pursuant to the implementing regulations of the section 7(a)(2) of the Act (50 Code of Federal Regulations 402.16). The following reasonable and prudent measures and terms and conditions are intended to compliment and clarify the protective measures proposed by the California Department of Transportation.

**TERMS AND CONDITIONS**

To be exempt from the prohibitions of section 9 of the Act, the California Department of Transportation must comply with the following terms and conditions, which implement the reasonable and prudent measures described in the previous section, and the reporting and monitoring requirements. These conditions are non-discretionary.

1. The following term and condition implements reasonable and prudent measure 1:

The California Department of Transportation must ensure that only biologists authorized by the Service under the auspices of this biological opinion conduct clearance surveys for and translocate desert tortoises. We request that you provide us with the credentials of authorized biologists who you wish to conduct these duties at least 30 days prior to the time they must be in the field. In the past, the Service has required our written approval of any authorized biologists and biological monitors that the consulting agency desired to use during implementation of the proposed action. We are altering this procedure to require only that we approve the authorized biologists. The authorized biologist we approve, in coordination with the consulting agency, will be responsible for selecting additional monitors to ensure that the protective measures proposed by the consulting agency and terms and conditions required by the Service are fully implemented. The authorized biologist will assign appropriate tasks to any additional monitors, based on their experience; consequently, these monitors will be considered qualified biologists for the approved additional tasks.

2. The following terms and conditions implement reasonable and prudent measure 2:

- a. To ensure that the measures proposed by the California Department of Transportation are effective and are being properly implemented, the California Department of Transportation must contact the Service immediately if it becomes aware that a desert tortoise has been killed or injured by project activities. At that time, the Service and the California Department of Transportation must review the circumstances surrounding the incident to determine whether additional protective measures are required. Project activities may continue pending the outcome of the review, provided that the California Department of Transportation's proposed protective measures and any appropriate terms and conditions of this biological opinion have been and continue to be fully implemented.
- b. If four desert tortoises are killed or injured during implementation of the proposed action, the California Department of Transportation must re-initiate consultation, pursuant to the implementing regulations for section 7(a)(2) of the Endangered Species Act at 50 Code of Federal Regulations 402.16, on the proposed action. Because we do not expect that the handling of desert tortoises is likely to result in injury or mortality, we are not establishing a criterion for re-initiation of formal consultation for this activity.

## REPORTING REQUIREMENTS

Within 60 days of the completion of the proposed action, the California Department of Transportation must provide a report to the Service that provides details on the effects of the action on the desert tortoise. Specifically, the report must include information on any instances when desert tortoises were killed, injured, or handled; the circumstances of such incidents; and any actions undertaken to prevent similar instances from re-occurring. We recommend that the California Department of Transportation provide us with any recommendations that would facilitate the implementation of the protective measures while maintaining protection of the desert tortoise. We also request that the California Department of Transportation provide us with the names of any monitors who assisted the authorized biologist and an evaluation of the experience they gained on the project; the qualifications form on our website ([http://www.fws.gov/ventura/sppinfo/protocols/deserttortoise\\_monitor-qualifications-statement.pdf](http://www.fws.gov/ventura/sppinfo/protocols/deserttortoise_monitor-qualifications-statement.pdf)), filled out for this project, along with any appropriate narrative would provide an appropriate level of information. This information would provide us with additional reference material in the event these individuals are submitted as potential authorized biologists for future projects.

## DISPOSITION OF DEAD OR INJURED DESERT TORTOISES

Within 3 days of locating any dead or injured desert tortoises, you must notify the Service's Division of Law Enforcement (370 Amapola Avenue, Suite 114, Torrance, California 90501) and the Ventura Fish and Wildlife Office by telephone (805 644-1766) and by facsimile (805 644-3958). The report must include the date, time, location of the carcass, a photograph, cause of death, if known, and any other pertinent information.

Injured desert tortoises must be taken to a qualified veterinarian for treatment. If any injured desert tortoises survive, the Service must be contacted regarding their final disposition.

Care must be taken in handling dead specimens to preserve biological material in the best possible state for later analysis. The remains of desert tortoises must be placed with the U.S. Geological Survey (Contact: Kristin Berry, U.S. Geological Survey, 22835 Calle San Juan De Los Lagos, Moreno Valley, California 92553, (951-697-5361); if the U.S. Geological Survey does not want the carcass because the damage is too extensive, the carcass must be disposed of in an appropriate manner. Prior to the onset of ground-disturbing activities, the California Department of Transportation must contact the U.S. Geological Survey to determine whether it wants carcasses and to determine the proper handling of carcasses that it desires.

## CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement

recovery plans, or to develop information. We have no conservation recommendations at this time.

#### REINITIATION NOTICE

This concludes formal consultation on the proposed widening of and installation of rumble strips and an exclusion fence for desert tortoises on the ultimate right-of-way on Route 395 in San Bernardino County. Reinitiation of formal consultation is required where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (a) if the amount or extent of taking specified in the incidental take statement is exceeded; (b) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (c) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) if a new species is listed or critical habitat designated that may be affected by the identified action (50 Code of Federal Regulations 402.16).

If you have any questions regarding this biological opinion, please contact Ray Bransfield of my staff at (805) 644-1766, extension 317.

Sincerely,



Carl T. Benz  
Assistant Field Supervisor

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