

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 Service is not aware of any cumulative effects to the California red-legged frog that are reasonably certain to occur within the action area.

Conclusion

After reviewing the current status of the California red-legged frog, the environmental baseline for the action area; the effects of the proposed Interstate 580 Eastbound HOV Project from East of Greenville Road to Hacienda Drive and the cumulative effects; it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of this listed species. We based these determinations on the following: (1) pre-construction surveys will be conducted for California red-legged frogs and individuals found in the project work area will be relocated to nearby suitable habitat; (2) a Service-approved biologist will monitor all activities that may result in the take of listed species; (3) a compensation package will be developed that provides in-perpetuity management for 12.6 acres of California red-legged frog habitat within Alameda County; and (4) other conservation measures, as described in the *Proposed Conservation Measures* of this biological opinion, that will be fully implemented by Caltrans.

INCIDENTAL TAKE STATEMENT

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, movement, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including movement, 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 this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by Caltrans so that they become binding conditions of any grant or permit issued to Caltrans as appropriate, in order for the exemption in section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity covered by this Incidental Take Statement. If Caltrans: (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document; and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Amount or Extent of Take

The Service anticipates that incidental take of the California red-legged frog will be difficult to detect due to their small size, wariness, and cryptic nature. Finding an injured or dead California red-legged frog is unlikely because of their relatively small body size, rapid carcass deterioration, and likelihood that the remains will be removed by a scavenger. Losses of this species may also be difficult to quantify due to a lack of baseline survey data and seasonal/annual fluctuations in their numbers due to environmental or human-caused disturbances. There is a risk of harm, harassment, injury and mortality as a result of the proposed construction activities, the permanent and temporary loss/degradation of suitable habitat, and capture and relocation efforts; therefore, the Service is authorizing take incidental to the proposed action as: (1) the injury and mortality of no more than two adult or juvenile California red-legged frogs, and (2) the capture, harm and harassment of all California red-legged frogs within the 131.94-acre action area. Upon implementation of the following *Reasonable and Prudent Measures*, California red-legged frogs within the action area in proportion to the amount and type of take outlined above will become exempt from the prohibitions described under section 9 of the Act. No other forms of take are exempted under this opinion.

This biological opinion does not authorize take for Federal and non-Federal actions associated with the maintenance of Interstate 580, and the associated Caltrans ROW. Routine Caltrans' maintenance activities such as the removal/displacement of sand, silt, sediment, debris, rubbish, vegetation, and other obstruction flow; the control of weeds, grasses and emergent vegetation, minor repair of existing facilities, rip-rap replacement, and culvert replacement may affect the California red-legged frog. Such maintenance activities and their potential effects to listed species are not evaluated in this biological opinion.

Effect of the Take

The Service has determined that this level of anticipated take for the California red-legged frog is not likely to jeopardize the continued existence of this species.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize the effect of the proposed action on the California red-legged frog. Caltrans will be responsible for implementation of and compliance with these measures:

1. Caltrans will implement the *Proposed Conservation Measures* as described in this biological opinion; and
2. Caltrans will implement additional actions to minimize adverse effects to the California red-legged frog.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans shall ensure compliance with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

1. The following Terms and Conditions implement Reasonable and Prudent Measure one (1):
 - a. Caltrans shall minimize the potential for harm, harassment, or killing of the California red-legged frog resulting from project related activities by implementing the conservation measures as described in the *Description of the Proposed Action* of this biological opinion.
 - b. Caltrans shall require all contractors to comply with the Act in the performance of the action and shall perform the action as outlined in the *Description of the Proposed Action* of this biological opinion and supporting documentation provided to the Service by Caltrans.
 - c. Caltrans shall include language in their contracts that expressly requires contractors and subcontractors to work within the boundaries of the project footprints identified in this biological opinion, including vehicle parking, staging, laydown areas, and access roads.
2. The following Terms and Conditions implement Reasonable and Prudent Measure two (2):
 - a. During construction within or adjacent to suitable California red-legged frog habitat, the Service-approved biologist(s) shall check all excavated steep-walled holes or trenches greater than 1-foot deep for California red-legged frogs prior to the start of each day's construction activities. To prevent inadvertent entrapment of California red-legged frogs during construction, steep-walled holes or trenches more than one-foot deep shall be covered at the close of each working day by plywood or similar materials. Alternatively, an additional 4-foot high vertical barrier, independent of exclusionary fences, shall be used to further prevent the inadvertent entrapment of frogs. If it is not feasible to cover an excavation or provide an additional 4-foot high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. Animals shall be captured and moved from harm when necessary. The Service shall be notified of the incident by telephone and e-mail within one working day to report the incident.
 - b. Each California red-legged frog encounter shall be treated on a case-by-case basis in coordination with the Service but general guidance is as follows: (1) leave the non-injured frog if it is not in danger, or (2) move the frog to a nearby location if it is in danger.

These two options are further described below.

1. When a California red-legged frog is encountered in the action area the first priority is to stop all activities in the surrounding area that have the potential to result in the harm, harassment, injury, or death of the individual. Then the monitor needs to assess the situation in order to select a course of action that will minimize adverse effects to the individual. Contact the Service once the site is secure. The contacts for this situation are Ryan Olah, Coast Bay/Forest Foothills Division Chief, (ryan_olah@fws.gov) or John Cleckler (john_cleckler@fws.gov). They can be reached at (916) 414-6600. If you get voicemail message for these contacts then contact John Cleckler on his cell phone at (916) 712-6784. The issue of contacting people on the weekend or after office hours is addressed later.

The first priority is to avoid contact with the frog and allow it to move out of the action area and hazardous situation on its own to a safe location. The animal should not be picked up and moved because it is not moving fast enough or it is inconvenient for the construction activities. This guidance only applies to situations where a California red-legged frog is encountered on the move during conditions that make their upland travel feasible. This does not apply to California red-legged frogs that are uncovered or otherwise exposed or in areas where there is not sufficient adjacent habitat to support the life history of the California red-legged frog should they move outside the immediate area.

Avoidance is the preferred option if the California red-legged frog is not moving and is using aquatic habitat or is within some sort of burrow or other refugia. The area should be well marked for avoidance by construction and a Service-approved biological monitor should be assigned to the area when work is taking place nearby.

2. The animal should be captured and moved when it is the only option to prevent its death or injury.

If appropriate habitat is located immediately adjacent to the capture location then the preferred option is short distance relocation to that habitat. This must be coordinated with the Service but the general guidance is the frog should not be moved outside of the radius it would have traveled on its own. Under no circumstances should a frog be relocated to another property without the owner's written permission. It is Caltrans' responsibility to arrange for that permission.

The release must be coordinated with the Service and will depend on where the individual was found and the opportunities for nearby release. In most situations the release location is likely to be into the mouth of a small burrow or other suitable refugia and in certain circumstances pools without non-native predators may be suitable.

Only Service-approved biologists for the project can capture California red-legged frogs. Nets or bare hands may be used to capture California red-legged frogs. Soaps,

oils, creams, lotions, repellents, or solvents of any sort cannot be used on hands within two hours before and during periods when they are capturing and relocating California red-legged frogs. To avoid transferring disease or pathogens between sites during the course of surveys or handling of the frogs, Service-approved biologists must use the following guidance for disinfecting equipment and clothing. These recommendations are adapted from the Declining Amphibian Population Task Force's Code which can be found in their entirety at: <http://www.open.ac.uk/daptf/>

1. All dirt and debris, including mud, snails, plant material (including fruits and seeds), and algae, must be removed from nets, traps, boots, vehicle tires and all other surfaces that have come into contact with water and/or an amphibian. Cleaned items should be rinsed with clean water before leaving each site.
 2. Boots, nets, traps, etc., must then be scrubbed with either a 70 percent ethanol solution, a bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water), QUAT 128 (quaternary ammonium, use 1:60 dilution), or a six percent sodium hypochlorite 3 solution and rinsed clean with water between sites. Avoid cleaning equipment in the immediate vicinity of a pond or wetland. All traces of the disinfectant must be removed before entering the next aquatic habitat.
 3. Used cleaning materials (liquids, etc.) must be disposed of safely, and if necessary, taken back to the lab for proper disposal.
 4. Service-approved biologists must limit the duration of handling and captivity. While in captivity, individual California red-legged frogs shall be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. Containers used for holding or transporting should not contain any standing water.
- c. Erosion control materials other than seeding only shall consist of hydraulically applied erosion control products, organic mulches free of non-native seeds, organic mulch control nettings with loose weave construction (the strands slide along cross strands) and openings over 4 centimeters, staked in straw bales or temporary erosion control fencing. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials shall not be used.
- d. Any revegetation plans shall be reviewed and approved by the Service. In addition, annual monitoring reports on the success of the plantings shall be provided to the Service.
- e. If pumping is used for dewatering, intakes shall be completely screened with wire mesh no larger than 0.2 inches to prevent frogs from entering the pump.
- f. The Service-approved biologist(s) shall permanently remove, from the project site, any exotic wildlife species, such as bullfrogs and crayfish, to the extent possible.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize 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 that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and data bases. The Service requests notification of the implementation of any conservation recommendations in order to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats. We propose the following conservation recommendations:

1. Enhancing habitat connectivity and wildlife passage across roads as well as reducing road effects should be included in the *Purpose and Need* section of environmental documents. FHWA agreed to coordinate with the Service on wildlife movement issues in a June 2, 2010, letter addressed to Mr. Greg Costello of the Western Environmental Law Center. As their NEPA delegate, Caltrans is expected to adopt the commitments made by FHWA to consider wildlife movement in transportation planning and project development.
2. Caltrans should include a wildlife passage section in their biological assessments that include an analysis of the existing passage and how the project will affect passage. The analysis should include identification of the species' resources on both sides of the project boundaries, an appropriately timed road mortality survey to identify "hot spots," and strategic locations where the species could benefit from the enhancement of an existing crossing or the installation of a new crossing. Caltrans should coordinate with their headquarters office and the University of California at Davis Road Ecology Center to develop a passage and road effects approach. Further guidance is provided by FHWA's *Wildlife Vehicle Collision Reduction Study* (available at: <http://www.fhwa.dot.gov/environment/hconnect/wvc/index.htm>) and Caltrans' *Wildlife Crossings Guidance Manual* (http://www.dot.ca.gov/hq/env/bio/wildlife_crossings/).
3. Efforts should be made to establish upland culverts designed specifically for wildlife movement rather than accommodations for hydrology. Transportation agencies should also acknowledge the value of enhancing human safety by providing safe passage for wildlife in their early project design.
4. Caltrans should use the internal system they have developed to keep track of road mortality records and the University of California at Davis, Road Ecology Center's *California Roadkill Observation System* (<http://www.wildlifecrossing.net/california/>). For reference, the Washington State Department of Transportation (DOT) developed a *Wildlife Carcass Removal Database* where they record information submitted by their maintenance crews (http://www.wsdot.wa.gov/Environment/Biology/bio_esa.htm). The importance of such a system is demonstrated by the public-access reporting system used in Idaho that resulted in more than double the previous DOT road mortality estimates (Kociolek 2009).
5. Caltrans should consider establishing functioning preservation and creation conservation banking systems to further the conservation of the California red-legged frog and other listed

species. Such banking systems also may be utilized for other required mitigation (i.e., seasonal wetlands, riparian habitats, etc.) where appropriate. Efforts should be made to preserve habitat along roadways in association with wildlife crossings.

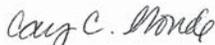
6. Caltrans should continue to pursue multifaceted compensation packages such as the one developed for the proposed Interstate 580/Isabel Avenue Interchange Construction Project (Service File No.: 1-1-07-F-0280) on future formal consultations with the Service.
7. Caltrans should continue to develop and implement their Early Statewide Biological Mitigation Planning Project that has been developed by the University of California at Davis, Road Ecology Center through Caltrans funding.

REINITIATION--CLOSING STATEMENT

This concludes formal consultation on the proposed Interstate 580 Eastbound HOV Project. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion, including work outside of the project footprint analyzed in this opinion and including vehicle parking, staging, lay down areas, and access roads; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion including use of rodenticides or herbicides; relocation of utilities; and use of vehicle parking, staging, lay down areas, and access roads; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.

If you have any questions regarding this reinitiation of the biological opinion for the Interstate 580 Eastbound HOV Project, please contact John Cleckler or Ryan Olah, Coast Bay/Forest Foothills Division Chief, at the letterhead address or at (916) 414-6600.

Sincerely,


 Susan K. Moore
 Field Supervisor

cc:

Scott Wilson, California Department of Fish and Game, Yountville, California
 Marcia Grefsrud, California Department of Fish and Game, Tracy, California
 Issa Bouri and Denis Coghlan, California Department of Transportation, Oakland, California
 Stephen Haas, Alameda County Transportation Commission, Oakland, California

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



In Reply Refer To:
81420-2008-F-0495-R002-1

Ms. Melanie Brent
California Department Transportation
Environmental Division, MS 8E
111 Grand Avenue
Oakland, California 94612

JUL 02 2012

Subject: Reinitiation of Formal Consultation on the Effects of the Proposed Interstate 580 Eastbound High Occupancy Vehicle (HOV) Project from East of Greenville Road to Hacienda Drive in Alameda County, California (Caltrans EA 29081)

Dear Ms. Brent:

This is in response to your June 12, 2012, request for reinitiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Interstate 580 Eastbound HOV Project from East of Greenville Road to Hacienda Drive in Alameda County, California. This reinitiation is prompted by the changes to the project description. The California Department of Transportation (Caltrans) has increased the proposed construction footprint with the addition of 2.63 acres of temporary work area and because topsoil will no longer be salvaged onsite. At issue are the potential effects of the project description changes on the threatened California red-legged frog (*Rana draytonii*). This amendment to the biological opinion has been prepared in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*)(Act).

This reinitiation amendment is based on: (1) the October 26, 2011 revised biological opinion (Service file #81420-2008-F-0495-R001-3); (2) Caltrans' June 12, 2012 request for reinitiation; and (3) other information available to the Service.

The following changes are made to the October 26, 2011, biological opinion:

1. Add to the Consultation History:

October 26, 2011	The Service issued a revised biological opinion (Service File # 81420-2008-F-0495-R001-3).
June 14, 2012	The Service received a June 12, 2012, letter from Caltrans requesting reinitiation of formal consultation based on revisions to

Ms. Melanie Brent

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the project description. The revised project information included the addition of 2.63 acres of temporary work areas needed for vehicle access, staging, and construction. Further project revisions include the removal of disturbed topsoil in the project footprint due to contamination.

2. Change the first paragraph of *Proposed Conservation Measure 1* on page 12 from:

Caltrans will compensate for their adverse effects to the California red-legged frog due to habitat loss by providing 3:1 compensation which equates to 12.6 acres. With Service approval, the proposed compensation will be completed using one or a combination of the following:

To:

Caltrans will compensate for their adverse effects to the California red-legged frog due to habitat loss by providing 3:1 compensation which equates to 20.4 acres. With Service approval, the proposed compensation will be completed using one or a combination of the following:

3. Change *Proposed Conservation Measure 29* on page 17 from:

A Revegetation Plan will be prepared for restoration of temporary work areas. Pavement and base will be removed; topography blended with the surrounding area; and topsoil will be salvaged from the new alignment area to be placed over the restored area, which will then be revegetated with native grassland species.

To:

A Revegetation Plan will be prepared for restoration of temporary work areas. Pavement and base will be removed; contaminated topsoil will be removed from the site and disposed; and topography will be blended with the surrounding area and revegetated with native grassland species.

4. Change the second paragraph of the *Effects of the Proposed Action* section on page 25 from:

Caltrans proposes to minimize construction related effects by implementing the *Conservation Measures* included in the project description section of this biological opinion. Effective implementation of *Conservation Measures* will likely minimize effects to the California red-legged frog but adverse effects are still likely to occur. Therefore, the project has the potential to result in a variety of adverse effects that would result in take of the California red-legged frog. Construction could result in the killing, harming and/or harassment of juveniles and adults inhabiting areas of suitable aquatic and upland habitat. The project as proposed in Caltrans revised project information and

in the project description of this biological opinion would result in the removal of approximately 4.175 acres of California red-legged frog habitat.

To:

Caltrans proposes to minimize construction related effects by implementing the *Conservation Measures* included in the project description section of this biological opinion. Effective implementation of *Conservation Measures* will likely minimize effects to the California red-legged frog but adverse effects are still likely to occur. Therefore, the project has the potential to result in a variety of adverse effects that would result in take of the California red-legged frog. Construction could result in the killing, harming and/or harassment of juveniles and adults inhabiting areas of suitable aquatic and upland habitat. The project as proposed in Caltrans revised project information and in the project description of this biological opinion would result in the removal of approximately 6.8 acres of California red-legged frog habitat.

5. Change the last paragraph of the *Effects of the Proposed Action* section on page 26 from:

As described in *Conservation Measure 1*, Caltrans has proposed in-perpetuity preservation of 12.6 acres of high quality California red-legged frog habitat that will be located within Alameda County. This habitat preservation is likely to offset adverse effects of habitat loss and fragmentation and assist in the protecting large areas of contiguous California red-legged frog habitat and other wildlife species within a functioning ecosystem. Additional benefits of preserving habitat is distancing individuals and habitat from the effects of development and providing habitat for dispersal.

To:

As described in *Conservation Measure 1*, Caltrans has proposed in-perpetuity preservation of 20.4 acres of high quality California red-legged frog habitat that will be located within Alameda County. This habitat preservation is likely to offset adverse effects of habitat loss and fragmentation and assist in the protecting large areas of contiguous California red-legged frog habitat and other wildlife species within a functioning ecosystem. Additional benefits of preserving habitat is distancing individuals and habitat from the effects of development and providing habitat for dispersal.

6. Change the *Conclusion* section on page 27 from:

After reviewing the current status of the California red-legged frog, the environmental baseline for the action area; the effects of the proposed Interstate 580 Eastbound HOV Project from East of Greenville Road to Hacienda Drive and the cumulative effects; it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of this listed species. We based these determinations on the following: (1) pre-construction surveys will be conducted for California red-legged frogs and individuals found in the project work area will be relocated to nearby suitable habitat; (2) a Service-approved biologist will monitor all activities that may result in the take of

listed species; (3) a compensation package will be developed that provides in-perpetuity management for 12.6 acres of California red-legged frog habitat within Alameda County; and (4) other conservation measures, as described in the *Proposed Conservation Measures* of this biological opinion, that will be fully implemented by Caltrans.

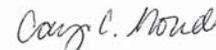
To:

After reviewing the current status of the California red-legged frog, the environmental baseline for the action area; the effects of the proposed Interstate 580 Eastbound HOV Project from East of Greenville Road to Hacienda Drive and the cumulative effects; it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of this listed species. We based these determinations on the following: (1) pre-construction surveys will be conducted for California red-legged frogs and individuals found in the project work area will be relocated to nearby suitable habitat; (2) a Service-approved biologist will monitor all activities that may result in the take of listed species; (3) a compensation package will be developed that provides in-perpetuity management for 20.4 acres of California red-legged frog habitat within Alameda County; and (4) other conservation measures, as described in the *Proposed Conservation Measures* of this biological opinion, that will be fully implemented by Caltrans.

The remainder of the October 26, 2011, biological opinion is unchanged. This concludes the reinitiation of formal consultation on the proposed Interstate 580 Eastbound HOV Project. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in the opinion, including work outside of the project footprint analyzed in the opinion and including vehicle parking, staging, lay down areas, and access roads; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the opinion, including use of rodenticides or herbicides; relocation of utilities; and use of vehicle parking, staging, lay down areas, and access roads; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.

If you have any questions regarding this amendment for the Interstate 580 Eastbound HOV Project, please contact John Cleckler or Ryan Olah, Coast Bay/Forest Foothills Division Chief, at the letterhead address or at (916) 414-6600.

Sincerely,


 Susan K. Moore
 Field Supervisor

Ms. Melanie Brent

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cc:

Scott Wilson and Melissa Escaron, California Department of Fish and Game, Yountville,
California

John Yeakel and Denis Coghlan, California Department of Transportation, Oakland, California

Gary Sidhu, Alameda County Transportation Commission, Oakland, California

Memorandum

*Flex your power!
Be energy efficient!*

To: Valerie Shearer
Senior Environmental Planner
Office of Environmental Analysis

Date: July 5, 2013

File: 04-ALA-580
PM R7.8/R19.9
EA 0G1900
EFIS tbd

From: Christopher States
Caltrans Branch Chief
Office of Biological Sciences and Permits

Subject: No effect determination for the Interstate 580 (I-580) Eastbound Express Lanes Project

The California Department of Transportation (Department), in cooperation with the Alameda County Transportation Commission (Alameda CTC), proposes to convert the existing I-580 eastbound high-occupancy vehicle (HOV) lane to an express lane facility.

The project limits extend from just west of the Hopyard Road/Dougherty Road overcrossing to just east of the Greenville Road undercrossing in the cities of Dublin, Pleasanton, and Livermore in Alameda County (Post Miles R7.8 to R19.9). The total length of the project is approximately 12.1 miles.

The project would not require any roadway expansion, placement of additional pavement, or acquisition of right-of-way. Construction is scheduled to begin in the summer of 2014 and be completed by the fall of 2015.

The I-580 Eastbound Express Lanes Project is a companion project to the Alameda CTC I-580 Eastbound HOV Lane Project (PA-ED EA 258-290810; construction EAs 290844 and 290834) and the Alameda CTC I-580 Eastbound Auxiliary (Aux) Lane Project (PA-ED EA 290810¹; construction EA 2908U1). The I-580 Eastbound HOV Lane and Aux Lane Projects are in construction and scheduled for completion in fall of 2015.

Project Description

Express Lanes Project construction would consist of pavement striping and installation of signage, tolling structures, and conduits for electrical and communication feeds, service and controller cabinets, additional lighting structures, and portions of vehicle detection systems. All construction activities and permanent project elements would be in the median, on existing pavement or sidewalks, in the permanent impact footprint of the I-580 Eastbound HOV Lane Project, or in the permanent and temporary impact areas of the I-580 Eastbound Aux Lane Project. Figure 1 shows the locations of the construction

¹ The Aux Lane Project is a subproject/phase of the Eastbound HOV Lane Project. A NEPA/CEQA Re-Validation of the Eastbound HOV Lane Project Mitigated Negative Declaration/Finding of No Significant Impact for the Aux Lane Project was approved in November 2011.

activities associated with the I-580 Eastbound Express Lanes Project. These activities would occur within the project footprint of the I-580 HOV and Aux Lane Projects.

To avoid additional impacts to designated habitat for listed species, the following construction activities will take place concurrently with I-580 Eastbound HOV and Aux Lane Projects construction through implementation of a Construction Change Order (CCO; hereafter referred to as "CCO work"). The CCO work will be restricted to either the impact footprint of the I-580 Eastbound HOV and Aux Lane Projects or existing pavement or sidewalks. The CCO will include the following project elements and construction activities

- Trenching to allow for the placement of conduit, or placement of additional conduit in already-open trenches;
- Installation of service and controller cabinets and their concrete pad foundations. The footprint of the cabinets will be either 11.25 by 16 inches or 26 by 34 inches, depending on type. Based on the numbers and footprints identified, the total area of permanent disturbance from the cabinets is estimated to be less than 200 square feet;
- Potential installation of metal beam guard rails or concrete barriers to protect a small number of cabinet locations.

No maintenance vehicle pullouts or California Highway Patrol enforcement areas for the Express Lanes Project are currently proposed in the impact areas identified by the HOV and Aux Lane Project. If comments or recommendations from the Office of Traffic Safety result in the addition of pullouts in these areas, those features would also be constructed as part of the CCO work and would constitute additional structures within the project footprint of the I-580 Eastbound HOV and Aux Lane Projects.

In addition to the CCO work, construction of the Express Lanes Project will include installation of overhead signs, tolling structures, and lighting. The overhead signs and tolling structures will be installed in already paved areas or in the median of I-580. The lighting will be installed on the overhead signs, tolling structures, and double mast-arm lighting standards in the median. Ground disturbance in unpaved areas will be limited to the CCO work.

Preliminary Biological Review

This project is within the U.S. Geological Survey (USGS) Livermore, Altamont, and Dublin quadrangles. On June 6, 2013, URS Biologist Nicole Rucker performed a review of federal and state threatened, endangered, and special-status species within these quadrangles using the U.S. Fish and Wildlife Service (USFWS) Endangered Species List website, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) database. Using photographs, aerial images, and environment documents for the I-580 Eastbound HOV and Aux Lane Projects, the project area was assessed for potential biological constraints that may affect project completion.

Table 1. Federally or state listed and candidate species, critical habitat, or special-status species occurring or known to potentially occur in the project footprint.

Common Name	Scientific Name	Federal/State/ CNPS Status	Habitat	Habitat/Species Presence Rationale
Amphibians				
California red-legged frog	<i>Rana draytonii</i>	FT/SSC/-	Aquatic Artificial flowing waters Artificial standing waters Freshwater marsh Marsh & swamp Riparian forest Riparian scrub Riparian woodland Sacramento/San Joaquin flowing waters South coast flowing waters South coast standing waters Wetland	Present. Suitable habitat is present within and adjacent to the Arroyo Las Positas and the Arroyo Seco.
		Critical habitat		Not Present. The project footprint does not occur within critical habitat for this species.
California tiger salamander	<i>Ambystoma californiense</i>	FT/ST/-	Cismontane woodland Meadow & seep Riparian woodland Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.
		Critical habitat		Not Present. The project footprint does not occur within critical habitat for this species.
Foothill yellow-legged frog	<i>Rana boylei</i>	-/SSC/-	Aquatic Chaparral Cismontane woodland Coastal scrub Klamath/North coast flowing waters Lower montane coniferous forest Meadow & seep Riparian forest Riparian woodland Sacramento/San Joaquin flowing waters	Absent. Suitable habitat is not present within the project footprint.
Western spadefoot	<i>Spea hammondi</i>	-/SSC/-	Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.
Birds				
Bank swallow	<i>Riparia riparia</i>	MBTA/-ST	Banks and high cliffs Riparian	Present. Suitable nesting habitat is located under the Arroyo Las Positas and the box culvert at Tassajara Creek.
Burrowing owl	<i>Athene cucularia</i>	-/SSC/-	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojave an desert scrub Sonoran desert scrub Valley & foothill grassland	Present. Burrowing owls are known to occur within the project footprint. Suitable habitat is present within the annual grasslands.
California horned lark	<i>Eremophila alpestris acida</i>	None	Marine intertidal & splash zone communities Meadow & seep	Present. Suitable habitat is present within the annual grasslands.
Cooper's hawk	<i>Accipiter cooperii</i>	MBTA/-	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest	Present. Suitable habitat is present within the annual grasslands.
Ferruginous hawk	<i>Buteo regalis</i>	MBTA/-	Great Basin grassland Great Basin scrub Pinon & juniper woodlands Valley & foothill grassland	Present. Suitable habitat is present within the annual grasslands.

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Habitat

The project footprint consists of three areas: 1) the permanent impact footprint of the I-580 Eastbound HOV Project, 2) the permanent and temporary impact areas of the I-580 Aux Lane Project, and 3) the paved roadway and the median, which is mostly paved and contains areas of ruderal and landscaped median vegetation.

The habitat within project footprint is a mixture of annual grasslands, ruderal and landscaped vegetation, and riparian scrub at the Arroyo Las Positas. Trees and shrubs located within this impact footprint are mainly highway landscaping, but may also contain a small number volunteer plants. In some locations, riparian corridors that cross under I-580 fall within the project footprint.

Unpaved median areas contain a mosaic of ruderal roadside and landscaped vegetation that is subject to routine Caltrans highway maintenance. These areas are dominated by nonnative species such as black mustard (*Brassica nigra*), sweet fennel (*Foeniculum vulgare*), and a variety of thistles.

Listed Flora/Fauna

The project footprint was assessed for federal and state listed and special-status plant and animal species using the USFWS Endangered Species List website, CNDDDB, and CNPS databases for the Livermore, Altamont, and Dublin quadrangles, and the 2006 Natural Environmental Study (NES), 2011 NES Addendum, 2007 Biological Opinion, 2007 Biological Opinion amendment, and 2011 Biological Opinion amendment for the I-580 Eastbound HOV and Aux Lane Projects. Table 1 lists the species and their potential to occur in the project area.

The NES, NES Addendum, and Biological Opinion for the I-580 Eastbound HOV Lane project identified suitable habitat for California red-legged frog (CRLF) at Cottonwood Creek. The amendment to the Biological Opinion identified suitable habitat for CRLF at Stations 617+00 to 640+00, 657+00 to 703+00, and 728+00 to 739+00, shown in yellow in Figure 1. This habitat is a specific area within the I-580 Eastbound Aux Lane Project footprint. The NES and NES Addendum identified the combined impact area of the HOV and Aux Lane Projects as potential habitat for other species listed in Table 1.

CCO work for the I-580 Eastbound Express Lanes Project will take place in this area concurrently with construction of the HOV and Aux Lane Projects. The CCO work will be limited to annual grassland and ruderal areas of the project footprint and will not take place in riparian or wetland areas. The CCO work will not result in additional impacts to these species beyond those already identified and mitigated for under the HOV and Aux Lane Projects.

Overhead signs and tolling structures will be constructed within paved areas or the median, which contains ruderal and landscaped vegetation. During consultation for the I-580 Eastbound HOV Lane Project, the median was not identified as habitat for CRLF. Although suitable habitat is present along the outside edge of eastbound I-580, this habitat is located within specific areas that are separated from the median by several lanes

Common Name	Scientific Name	Federal/State CNPS Status	Habitat	Habitat/Species Presence	Rationale
Hoary bat	<i>Lasiurus cinereus</i>	--/SSC/--	Broadleaved upland forest Cismontane woodland Lower montane coniferous forest North coast coniferous forest	Present. Suitable roosting habitat exists under the bridge structures within the project footprint.	Present. Suitable roosting habitat exists under the bridge structures within the project footprint.
Pallid bat	<i>Antrozous pallidus</i>	--/SSC/--	Chaparral Coastal scrub Desert wash Great Basin grassland Great Basin scrub Mojavean desert scrub Riparian woodland Sonoran desert scrub Upper montane coniferous forest Valley & foothill grassland	Present. Suitable roosting habitat exists under the bridge structures within the project footprint.	Present. Suitable roosting habitat exists under the bridge structures within the project footprint.
San Joaquin kit fox	<i>Vulpes macrotis nuttallii</i>	FE/ST/--	Chenopod scrub Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.	Absent. Suitable habitat is not present within the project footprint.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	--/SSC/--	Broadleaved upland forest Chaparral Chenopod scrub Great Basin grassland Great Basin scrub Joshua tree woodland Lower montane coniferous forest Meadow & seep Mojavean desert scrub Riparian forest Riparian woodland Sonoran desert scrub Sonoran thorn woodland Upper montane coniferous forest Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.	Present. Suitable roosting habitat exists under the bridge structures within the project footprint.
Yuma myotis	<i>Myotis yumanensis</i>	--/SSC/--	Lower montane coniferous forest Riparian forest Riparian woodland Upper montane coniferous forest	Present. Marginal foraging and roosting habitat exists along the outside edge of the I-580 eastbound lanes and under the bridges at the Arroyo Los Positas and Arroyo Seco.	Present. Suitable habitat is present within and adjacent to the Arroyo Los Positas, Arroyo Seco, and Cayetano Creek.
Reptiles					
Alameda whipsnake	<i>Masticophis lateralis</i>	FT/ST/--	Valley and foothill grasslands	Absent. Suitable habitat is not present within the project footprint.	Not Present. The project footprint does not occur within critical habitat for this species.
San Joaquin whipsnake	<i>Masticophis flagellum ruddocki</i>	--/SSC/--	Chenopod scrub Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.	Absent. Suitable habitat is not present within the project footprint.
Western pond turtle	<i>Emys marmorata</i>	--/SSC/--	Aquatic Artificial flowing waters flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	Present. Suitable habitat is present within and adjacent to the Arroyo Los Positas, Arroyo Seco, and Cayetano Creek.	Present. Suitable habitat is present within and adjacent to the Arroyo Los Positas, Arroyo Seco, and Cayetano Creek.
Southwestern pond turtle	<i>Emys marmorata pallida</i>	--/SSC/--	Aquatic Artificial flowing waters	Present. Suitable habitat is present within and adjacent to the Arroyo Los Positas, Arroyo Seco, and Cayetano Creek.	Present. Suitable habitat is present within and adjacent to the Arroyo Los Positas, Arroyo Seco, and Cayetano Creek.
Plants					

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Common Name	Scientific Name	Federal/State CNPS Status	Habitat	Habitat/Species Presence	Rationale
Little willow fly catcher	<i>Empidonax traillii brewsteri</i>	MBT/ASE/--	Riparian	Present. Suitable habitat is present within the riparian corridors associated with the Arroyo Los Positas and Arroyo Seco.	Present. Suitable habitat is present within the annual grasslands, riparian scrub and landscaped vegetation.
Loggerhead shrike	<i>Lanius ludovicianus</i>	MBT/AS/SC/--	Broadleaved upland forest Desert wash Joshua tree woodland Mojave an desert scrub Pinon & juniper woodlands Riparian woodland Sonoran desert scrub	Present. Suitable habitat is present within the annual grasslands, riparian scrub and landscaped vegetation.	Pre Present. Suitable habitat is present within the annual grasslands.
Tricolored blackbird	<i>Agelaius tricolor</i>	MBT/AS/SC/--	Freshwater marsh Marsh & swamp Swamp Wetland	Present. Suitable habitat is present within the annual grasslands.	Present. Suitable habitat is present in the riparian community associated with the Arroyo Los Positas.
White-tailed kite	<i>Elianus leucurus</i>	--/FP/--	Cismontane woodland Marsh & swamp Riparian woodland Valley & foothill grassland Wetland	Present. Suitable habitat is present within the annual grasslands.	Present. Suitable habitat is present in the riparian community associated with the Arroyo Los Positas.
Invertebrates					
Conservancy fairy shrimp	<i>Branchinecta conservator</i>	FE/--	Valley & foothill grassland Vernal pool Wetland	Not Present. The project footprint is outside the known range for this species.	Not Present. The project footprint is outside the known range for this species.
Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	FE/L/--	Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.	Absent. Suitable habitat is not present within the project footprint.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT/L/--	Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.	Not Present. The project footprint does not occur within critical habitat for this species.
Mammals					
American badger	<i>Taxidea taxus</i>	--/SSC/--	Alkali marsh Alkali playa Alpine Alpine dwarf scrub Bog & fen Brackish marsh Broadleaved upland forest Chaparral Chenopod scrub Cismontane woodland Closed-coke coniferous forest Coastal bluff scrub Coastal dunes Coastal prairie Coastal scrub Desert dunes Desert wash Freshwater marsh Great Basin grassland Great Basin scrub Interior dunes Lone formation Joshua tree woodland Limestone Lower montane coniferous forest Marsh & swamp Meadow & seep Mojavean desert scrub Montane dwarf scrub North coast coniferous forest Old growth Pavement plan Redwood Riparian forest Riparian scrub Riparian woodland Salt marsh Sonoran desert scrub Sonoran thorn woodland Ultramafic Upper montane coniferous forest Upper Sonoran scrub Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.	Absent. Suitable habitat is not present within the project footprint.

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Common Name	Scientific Name	Federal/State CNPS Status	Habitat	Habitat/Species Presence Rationale
Palmette-bracted bird's-beak	<i>Chloropyron palmatum</i>	FE/SE/CNPS List 1B.1	Chenopod scrub Meadow & seep Valley & foothill grassland Wetland	Present. Suitable habitat is present within the annual grassland.
Prostrate vernal pool navarella	<i>Navaretia prostrata</i>	-/-/CNPS List 1B.1	Coastal scrub Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.
Recurring larkspur	<i>Delphinium recurvatum</i>	-/-/CNPS List 1B	Chenopod scrub Cismontane woodland Valley & foothill grassland alkaline	Present. Suitable habitat is present within the annual grassland.
Round-leaved filaree	<i>California macrophylla</i>	-/-/CNPS List 1B.1	Cismontane woodland Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Saline clover	<i>Trifolium hydrophilum</i>	-/-/CNPS List 1B.2	Marsh & swamp Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.
San Joaquin spear-scale	<i>Atriplex joaquiniana</i>	-/-/CNPS List 1B.2	Chenopod scrub Meadow & seep Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.

Note:
Data for listed species are from the USFWS species database, the CNDDB, and the CNPS database for the Livermore, Altamom, and Dublin U.S. Geological Survey (USGS) quadrangles (Figures 2 and 3).

Status:
FE = Federally Endangered, FT = Federally Threatened, SE=State Endangered, ST=State Threatened, SSC= Special Concern, FS = Fully Protected Species, MBTA=Migratory Bird Treaty Act

California Native Plant society (CNPS) California List:

(1A) Presumed extinct in California, (1B) Rare, threatened, or endangered in California and elsewhere, (2) Rare, threatened, or endangered in California, but more common elsewhere, (3) More information is needed, (4) Limited distribution, watch list

Threat Rank:

0.1 Seriously threatened in California (more than 80% of occurrences threatened / high degree of immediacy of threat)
0.2 Fairly threatened in California (20% to 80% occurrences threatened / moderate degree of immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

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Common Name	Scientific Name	Federal/State CNPS Status	Habitat	Habitat/Species Presence Rationale
Alkali milk-vech	<i>Astragalus tener</i> var. <i>tener</i>	-/-/CNPS List 1B.2	Alkali playa Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.
Bent-flowered fiddleneck	<i>Amsinckia lunata</i>	-/-/CNPS List 1B	Coastal scrub Cismontane woodland Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Big tarplant	<i>Blepharozia plumosa</i>	-/-/CNPS List 1B.1	Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Big-scale balsamroot	<i>Balsamorhiza macrolepis</i>	-/-/CNPS List 1B.2	Cismontane woodland Ultramafic Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Brittscale	<i>Atriplex depressa</i>	-/-/CNPS List 1B.2	Alkali playa Chenopod scrub Meadow & seep Valley & foothill grassland Vernal pool Wetland	Absent. Suitable habitat is not present within the project footprint.
Caper-fueled topidocarpum	<i>Topidocarpum cappendeum</i>	-/-/CNPS List 1B.1	Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.
Congong's tarplant	<i>Centromadia parryi</i> ssp. <i>condonii</i>	-/-/CNPS List 1B.1	Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Diablo helianthella	<i>Helianthella castanea</i>	-/-/CNPS List 1B.2	Broadleaved upland forest Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland
Diamond-petaled California poppy	<i>Eschscholzia rombigetala</i>	-/-/CNPS List 1B.1	Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Fragrant fritillary	<i>Fritillaria liliacea</i>	-/-/CNPS List 1B	Cismontane woodland coastal prairie coastal scrub Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland
Hairless popcornflower	<i>Platophobys glaber</i>	-/-/CNPS List 1A	Marsh & swamp Salt marsh Vernal pool Wetland	Not Present. Suitable habitat is not present within the project footprint.
Heartscale	<i>Atriplex cordulata</i> var. <i>cordulata</i>	-/-/CNPS List 1B.2	Chenopod scrub Meadow & seep Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.
Hispid bird's-beak	<i>Chloropyron molle</i> ssp. <i>hispidum</i>	-/-/CNPS List 1B.1	Alkali playa Meadow & seep Wetland	Present. Suitable habitat is present within the annual grassland.
Hospital Canyon larkspur	<i>Delphinium californicum</i> ssp. <i>interius</i>	-/-/CNPS List 1B.2	Chaparral Cismontane woodland Meadow & seep	Absent. Suitable habitat is not present within the project footprint.
Large-flowered fiddleneck	<i>Amsinckia grandiflora</i>	-/-/CNPS List 1B	Cismontane Valley & foothill grassland	Present. Suitable habitat is present within the annual grassland.
Lesser saltscale	<i>Atriplex minuscule</i>	-/-/CNPS List 1B.1	Alkali playa Chenopod scrub Valley & foothill grassland	Absent. Suitable habitat is not present within the project footprint.
Livermore tarplant	<i>Deinandra baccigalpii</i>	-/-/CNPS List 1B.2	Meadow & seep	Absent. Suitable habitat is not present within the project footprint.
Oregon polemonium	<i>Polemonium carneum</i>	-/-/CNPS List 2.2	Coastal prairie Coastal scrub Lower montane coniferous forest	Absent. Suitable habitat is not present within the project footprint.

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of traffic, which would prevent species movement. Installation of signs and tolling structures will not affect CRLF. Lighting will be installed within the median on overhead signs, tolling structures, and double mast-arm lighting standards. As the median lacks habitat and connectivity to habitat for CRLF, the installation of lighting will not affect the species. The height and shade type for the lighting standards will be selected to avoid the casting of light beyond the outer edge of pavement. With this project design provision, no species impacts from diffused lighting are anticipated.

During assessment of the project footprint for federal and state listed and special-status plant and animal species, it was determined that the hoary bat (*Lasiurus cinereus*) has potential to roost on the existing bridge structures within the project limits. Because the bridges span I-580, there is potential for this species to be present within the project footprint. However, the Express Lanes Project does not include construction activities on bridges. As a result, no impacts to this species will occur.

Wetlands/Waters

Although several waterways cross under I-580 in the project footprint, construction activities will not occur at these locations. The jurisdictional delineation completed for the I-580 Eastbound HOV Lane Project identified wetlands and other waters of the United States along the outside edge of eastbound I-580. No wetlands or other waters were identified within the median.

Express Lanes Project construction will not take place in wetlands or other waters, and no additional impacts to wetlands or waters will occur. Installation of overhead signs, tolling structures, and lighting would not affect wetlands or waters because none are present in the median.

Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), Title 50 Code of Federal Regulations part 10, and California Fish and Game Code Sections 3503, 3513 and 3800 protect the occupied nests and eggs of migratory birds. Birds nest in a variety of places which include trees, shrubs, man-made structures, and on the ground. The project area contains trees and shrubs suitable for nesting. Caltrans' Avoidance and Minimization measures will provide protection for potential nesting bird species for this project (see Avoidance and Minimization section below).

Permits

It has been concluded during conversations between Denis Coghlan (Caltrans Biology) and representatives of the USFWS and CDFW, that Express Lanes Project construction activities within the permanent and temporary impact footprint of the I-580 Eastbound Aux Lane Project can occur as a CCO to the HOV Lane Project. These construction elements must be in compliance with the Biological Opinion and subsequent amendments and Special Provisions of the July 2012 bid book and any subsequent bid book amendments for the HOV and Aux Lane Projects.

The construction activities for the Express Lanes Project that are not part of the CCO—installation of signage, tolling structures, and lighting—will be limited to areas that lack sensitive species habitat. Therefore, consultation with the USFWS and CDFW will not be required. Because the project will not affect waters or wetlands, no CDFW Section 1602 or U.S. Army Corps of Engineers (USACE) 404 permits will be required.

Avoidance and Minimization Measures

In addition to the term and conditions found in NES and permits for the I-580 HOV and Aux Lane Projects, the following measures will be implemented to avoid and minimize impacts to biological resources:

- A Caltrans biologist must be afforded the opportunity to review the complete PS&E package, including layouts and specifications, prior to construction activity.
- A Caltrans biologist must conduct nesting bird surveys for work occurring between February 15 and September 1 to comply with the MBTA. The biologist will require at least seven working days notice prior to commencement of construction activities to perform nesting bird surveys.
- All construction activities will occur within the permanent and temporary impact areas associated with the HOV and Aux Lane Projects. Construction work within CRLF habitat will occur as a CCO.
- Contractors should use Caltrans Standard Best Management Practices (BMPs) to ensure water quality standards are maintained.
- No trees are to be removed.

Caltrans, under the authority of the Federal Highway Administration (FHWA), has determined that this project will have no effect on listed species, their habitats, or protected communities provided the required Avoidance and Minimization measures are followed. Any changes to the current design will require reassessment of biological resources. Please forward all plans to the Office of Biological Sciences and Permits as soon as possible.

If you have any questions, please contact Christopher States at (510) 286-7185.

**Part D3: Federal Highway Administration Project-Level Conformity Determination
(March 12, 2014)**

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U.S. Department
of Transportation
**Federal Highway
Administration**

California Division

March 12, 2014

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001

In Reply Refer To:
HDA-CA

Bijan Sartipi,
District Director
California Department of Transportation
111 Grand Avenue
P.O. Box 23360
Oakland, CA 94612

SUBJECT: FHWA Project Level Conformity Determination for the I-580 Eastbound Express Lanes Project

Attention: Allen Baradar, Office Chief, Chief of Environmental Engineering

Dear Mr. Baradar:

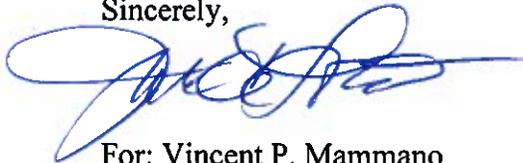
On February 10, 2014, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for a project level conformity determination for the I-580 Eastbound Express Lanes Project in Alameda County. The project is in an area that is designated Nonattainment for PM_{2.5}, Nonattainment for Ozone, and Maintenance for Carbon Monoxide (CO).

The project level conformity analysis submitted by Caltrans indicates that the transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Metropolitan Transportation Commission's (MTC) currently conforming *Plan Bay Area (RTP)* and the *2013 Federal Transportation Improvement Program (FTIP)*. The current conformity determinations for the RTP and FTIP were approved by FHWA and the Federal Transit Administration (FTA) on August 12, 2013. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 C.F.R. 93.116 and 93.123, the PM_{2.5} analysis is included in the documentation. The PM_{2.5} analysis demonstrates that the project will not create any new violation of the standards, or increase the severity or number of existing violations. Based on the information provided, FHWA finds that the Conformity Determination for the I-580 Eastbound Express Lanes Project in Alameda County conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.

If you have any questions pertaining to this conformity finding, please contact Stew Sonnenberg, FHWA Air Quality Specialist, at (916) 498-5889.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vincent P. Mammano', with a long horizontal flourish extending to the right.

For: Vincent P. Mammano
Division Administrator

Appendix E Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY 711
www.dot.ca.gov



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Be energy efficient!*

March 2013

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

"Caltrans improves mobility across California"

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Appendix F Environmental Commitment Record

Minimization and/or Mitigation Measure	Page Reference in IS/EA	Responsible Party	Timing
Traffic and Transportation/Pedestrian and Bicycle Facilities			
Prepare a TMP to minimize traffic disruptions from project construction. The TMP will provide for public outreach to inform the public of the times and locations of upcoming construction, construction signage in and approaching the project area, and incident management for traffic control in the vicinity of construction activities. With the TMP, no substantial adverse construction impacts are anticipated.	2-11	Alameda CTC, Caltrans	Final design
Visual/Aesthetics			
If construction operations or staging causes the death or removal of existing vegetation, replacement may be required in accordance with Caltrans policy.	2-20	Alameda CTC, Resident Engineer, Construction Contractor	Construction
Cultural Resources			
If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	2-23	Alameda CTC, Resident Engineer, Construction Contractor	Construction
Contact the County Coroner if human remains are discovered and stop disturbances and activities in or near any area suspected to overlie remains. Follow provisions of California Public Resources Code Section 5097.98 as applicable.	2-23	Alameda CTC, Resident Engineer, Construction Contractor	Construction
Paleontology			
Include standard construction contract specifications regarding paleontological resources.	2-25	Alameda CTC, Resident Engineer, Construction Contractor	Final design
Include one or more provisions in the construction contract that address paleontological monitoring during activities that have the potential to disturb high-sensitivity geologic units.	2-25	Alameda CTC, Resident Engineer, Construction Contractor	Final design
Once the project design is near completion, prepare a Final PMP based on the recommendations presented in the PIR/PER and/or the 2008 Preliminary PMP (PaleoResource Consultants and F & F GeoResource Associates, Inc. 2008). Implement the PMP at the time of construction.	2-25	Alameda CTC, Resident Engineer, Construction Contractor	Final design

Minimization and/or Mitigation Measure	Page Reference in IS/EA	Responsible Party	Timing
Hazardous Waste and Materials			
Disperse excavated soil that cannot be used as fill on site as directed in the Standard Specifications and Special Provisions, or remove it.	2-28	Resident Engineer, Construction Contractor	Final design, construction
Implement Best Management Practices to minimize or avoid spills or other hazardous materials.	2-28	Alameda CTC	Final design, construction
Air Quality			
Ensure that the construction contractor complies with Caltrans' Standard Specifications in Section 14 (2010).	2-37	Alameda CTC, Department	Final design, construction
Noise			
<p>Implement the following measures to minimize or reduce the potential for noise impacts resulting from project construction:</p> <ul style="list-style-type: none"> • Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. • Use "quiet" air compressors and other "quiet" equipment where such technology exists. • Prohibit unnecessary idling of internal combustion engines within 100 feet of residences. • Avoid staging of construction equipment within 200 feet of residences and locate all stationary noise-generating construction equipment, such as air compressors, portable power generators, or self-powered lighting systems as far practical from noise sensitive residences. • Require all construction equipment to conform to Section 14-8.02, Noise Control, of the latest Department Standard Specifications. 	2-51	Alameda CTC, Resident Engineer, Construction Contractor	Final design, construction
Biological Resources			
Implement the conservation measures set forth in the USFWS amended Biological Opinions for the I-580 Eastbound HOV Lane Project (USFWS File No. 81420-2008-F-0495-R001-3, October 26, 2011; and USFWS File No. 81420-2008-F-0495-R002-1, July 2, 2012).	2-52	Alameda CTC, Department	Preconstruction, construction
Implement the restrictions set forth in the No Effect Determination for the proposed project.	2-53	Alameda CTC, Department	Preconstruction, construction

Minimization and/or Mitigation Measure	Page Reference in IS/EA	Responsible Party	Timing
<p>Conduct nesting bird surveys for work occurring between February 15 and September 1 to comply with the Migratory Bird Treaty Act. Preconstruction surveys will be conducted no more than three days before the start of ground disturbing activities. If the surveys indicate the presence of migratory bird nests where activities would directly result in bird injury or death, a buffer zone will be placed around the nest. The size of the buffer may vary for different species and will be determined in coordination with the California Department of Fish and Wildlife. A qualified biologist will delineate the buffer using ESA fencing, pin flags, and/or yellow caution tape. The buffer zone will be maintained around all active nest sites until the young have fledged and are foraging independently. In the event that an active nest is found after the completion of preconstruction surveys and after construction begins, all construction activities within a 50-foot radius will be stopped until a qualified biologist has evaluated the nest and erected the appropriate buffer around it.</p>	2-53	Alameda CTC, Department	Preconstruction, construction

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Appendix G List of Acronyms

AB	California State Assembly Bill
ABAG	Association of Bay Area Governments
ADL	Aerially Deposited Lead
Alameda CTC	Alameda County Transportation Commission
BAAQMD	Bay Area Air Quality Management District
BATA	Bay Area Toll Authority
BT&H	Business, Transportation, and Housing
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CALINE4	California LINE Source Dispersion Model, version 4
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCO	Construction change order
CCTV	Closed Circuit Television
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (aka “Superfund”)
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CO	Carbon monoxide
CO ₂	Carbon dioxide
dBA	A-weighted decibels
Department	California Department of Transportation
DMS	Dynamic Message Sign
DPM	diesel particulate matter

EA	Environmental Assessment
EB	Eastbound
EMFAC	Emission Factors
ETS	Electronic Tolling System
FCAA	Clean Air Act, as amended in 1990
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
ft	feet
FTIP	Federal Transportation Improvement Programs
GHG	greenhouse gas
HFC-23	fluoroform
HFC-134a	s, s, s, 2 –tetrafluoroethane
HFC-152a	difluoroethane
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
I	Interstate
IGR	Intergovernmental Review
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ITS	Intelligent Transportation System
$L_{eq}(h)$	hourly equivalent sound level
LOS	Level of Service
m	meters
mg/m^3	Milligram Per Cubic Meter
MLD	Most Likely Descendent

MMT	million metric tons
MPG	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organizations
MSAT	Mobile Source Air Toxics
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NIA	No Information Available
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
NOAA	National Oceanic and Atmospheric Administration
O ₃	ozone
OSHA	Occupational Safety and Health Act
PA	Programmatic Agreement
Pb	lead
PM	Particulate Matter
PM _{2.5}	fine particulate matter
PM ₁₀	inhalable particulate matter
PM	Post Mile
ppb	parts per billion
ppm	part per million
Project	I-580 Eastbound Express Lanes Project
PG&E	Pacific Gas and Electric

PST	Pacific Standard Time
Q&A	Question and Answer
RCRA	Resource Conservation and Recovery Act of 1976
ROG	Reactive Organic Gas
RTP	Regional Transportation Plan
SFBAAB	San Francisco Bay Area Air Basin
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	sulfur dioxide
TCM	Transportation Control Measure
TDM	Traffic Demand Management
TIP	Transportation Improvement Plan
Title VI	Title VI of the Civil Rights Act of 1964
TNAP	Traffic Noise Analysis Protocol
TMC	Caltrans Traffic Management Center
TSCA	Toxic Substances Control Act
TSM	Traffic Systems Management
UC	University of California
USC	United States Code
USEPA	United States Environmental Protection Agency
VMT	vehicle miles traveled
vplpm	vehicles per lane per mile
µg/m ³	microgram per cubic meter

Appendix H List of Technical Studies

Air Quality Impact Assessment (URS 2013e)

Historic Property Survey Report (URS 2013c)

Mobile Source Air Toxics (URS 2013f)

Paleontological Identification Report / Paleontological Evaluation Report (URS 2013d)

Noise Abatement Decision Report (URS 2012a)

Noise Study Report (Illingworth & Rodkin 2011)

Storm Water Data Report (URS 2012b)

Traffic Operations Report (URS 2013a)

Visual Impact Assessment (URS 2013b)

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