



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
Carlsbad Fish and Wildlife Office  
6010 Hidden Valley Road, Suite 101  
Carlsbad, California 92011



In Reply Refer To:  
FWS-OR-09B0458-11I0399

**JUN 23 2011**

Mr. Chris Flynn  
Senior Environmental Planner  
California Department of Transportation  
District 12  
3347 Michelson Drive, Suite 100  
Irvine, California 92612-1692

Attention: Kedest Ketsela, Associate Environmental Planner

Subject: Informal Section 7 Consultation for the I-5 HOV Lane Extension Project between Avenida Pico and San Juan Creek Road, Orange County, California

Dear Mr. Flynn:

This is in response to your letter dated May 9, 2011, requesting our concurrence with your determination that the subject project is not likely to adversely affect the federally endangered least Bell's vireo (*Vireo bellii pusillus*, "vireo") and the federally threatened coastal California gnatcatcher (*Polioptila californica californica*, "gnatcatcher") and its designated critical habitat in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The California Department of Transportation (Caltrans) has assumed the Federal Highway Administration's responsibilities under the Act for this consultation in accordance with Sections 6004 and 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) 2005, as described in the National Environmental Policy Act Delegation Pilot Program Memorandum of Understanding between Federal Highway Administration and Caltrans (effective July 1, 2007) and codified in Renewed 23 U.S.C. 326 and 23 U.S.C. 327.

The Orange County Transportation Authority, in cooperation with Caltrans, the City of Dana Point, the City of San Clemente, and the City of San Juan Capistrano, is proposing to widen Interstate 5 (I-5) between Avenida Pico and San Juan Creek Road. The proposed project will add one high-occupancy vehicle (HOV) lane in each direction on I-5 throughout the project limits, reestablish existing auxiliary lanes and construct new auxiliary lanes, and improve several existing on- and off-ramps. The project limits on I-5 extend from 0.4 mile (mi) south of the Avenida Pico Undercrossing (Post Mile [PM] 3.0) to 0.1 mi south of the San Juan Creek Road Undercrossing (PM 8.7). While the Natural Environmental Study for the proposed project includes several alternatives, consultation has been requested for Alternative 4b. Alternative 4b differs from the other alternatives in that the Avenida Pico Overcrossing structure will be reconfigured with a

**TAKE PRIDE<sup>®</sup>  
IN AMERICA** 

northbound loop on-ramp and realigned northbound off-ramp. In addition, no buffer will be included between the HOV lanes and general travel lanes instead of the 4 foot (ft) buffer proposed under Alternatives 2 and 3.

We have reviewed the information provided to us, including *I-5 HOV Lane Extension Project Natural Environmental Study I-5 Between Avenida Pico and San Juan Creek Road 12-ORA-05 (PM 3.0/8.7)* (Caltrans 2010). The gnatcatcher and vireo are known to occur in the vicinity of the project. Gnatcatchers were observed within most of the coastal sage scrub (CSS) within the I-5 right-of-way in the vicinity of the project. Up to seven pairs of gnatcatchers were observed during the surveys (LSA Associates, Inc. 2010a). However, the project will not result in any direct permanent impacts to gnatcatchers or their critical habitat. Project Alternative 4b will result in the permanent loss of 0.4 acre (ac) of unoccupied CSS and temporary impacts to 0.32 ac of unoccupied CSS. A small portion of the temporary impact area, totaling 0.018 ac of ornamentals and disturbed CSS, is located within Unit 6 of designated gnatcatcher critical habitat. The function of Unit 6 is to support a stable population of gnatcatchers and to provide connectivity between populations to the south in San Diego County and farther north in Orange County.

Vireos were observed at three locations in the vicinity of the project during focused surveys conducted in 2010 (LSA Associates, Inc. 2010b). Project Alternative 4b will result in the permanent loss of 0.07 ac of unoccupied degraded riparian scrub habitat that is located approximately 0.25 mi away from the vireo occupied areas.

The following measures have been incorporated into the project design to avoid and minimize impacts to the gnatcatcher and vireo:

1. A biologist (“Project Biologist”) approved by the Carlsbad Fish and Wildlife Office (CFWO) will be on site during: a) initial clearing and grubbing; and b) weekly during project construction within 61 meters (200 ft) of offsite gnatcatcher and vireo habitat to ensure compliance with all conservation measures. The Project Biologist will be familiar with gnatcatchers, vireos, and their habitat and will have experience monitoring these species. Caltrans will submit the biologist’s name, address, telephone number, and work schedule on the project to the CFWO prior to initiating project impacts. The biologist will be provided with a copy of this consultation.
2. Under the supervision of the Project Biologist, the limits of project impacts (including construction staging areas and access routes) will be clearly delineated with bright orange plastic fencing, stakes, flags, or markers that will be installed in a manner that does not impact habitats to be avoided and such that they are clearly visible to personnel on foot and operating heavy equipment. If work occurs beyond the fenced or demarcated limits of impact, all work will cease until the problem has been remedied to the satisfaction of the CFWO. Temporary construction fencing and markers will be removed upon project completion.
3. The clearing and grubbing of native habitats for the project will be conducted between September 1 and February 14 to avoid the gnatcatcher and vireo breeding season (or sooner

than September 1 if the Project Biologist demonstrates to the satisfaction of the CFWO that all nesting is complete). If vegetation clearing must be conducted during the breeding season, Caltrans will re-initiate consultation with the CFWO to address unanticipated effects to these species.

4. The Project Biologist will submit a final report to the CFWO within 120 days of project completion including photographs of impact areas and adjacent habitat, documentation that authorized impacts were not exceeded, and documentation that general compliance with all conservation measures was achieved. The report will specify numbers, locations, and sex of gnatcatchers and vireos (if observed), observed gnatcatcher and vireo behavior (especially in relation to project activities), and remedial measures employed to avoid and minimize impacts to gnatcatchers and vireos. Raw field notes should be available upon request by the CFWO.
5. An employee education program will be developed. Each employee (including temporary, contractors, and subcontractors) will receive a training/awareness program prior to working on the proposed project. They will be advised of the potential impact to the listed species and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area (including photographs), their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area.
6. Caltrans will ensure that the following conditions will be implemented with regard to project landscaping:
  - a. Caltrans will ensure that project landscaping does not include exotic plant species listed on the California Invasive Plant Council's (Cal-IPC) "Invasive Plant Inventory" list. A copy of the complete list can be obtained from Cal-IPC's web site at <http://www.cal-ipc.org>.
  - b. If invasive weed species are already growing within the project area, special care will be taken during transport, use, and disposal of soils containing invasive weed seeds to ensure that invasive weeds are not spread into new areas by the project. All heavy equipment will be washed and cleaned of debris prior to entering a new area to minimize the spread of invasive weeds. Eradication strategies will be implemented should an invasion of nonnative plant species occur.
  - c. The 0.32 ac CSS temporary impact area will be revegetated with native coastal sage scrub species. The proposed seed palette will be provided to the CFWO for review and approval prior to application in the field. A 3-year plant establishment period is proposed that will include exotic species removal and reapplication of seed as necessary.
7. Caltrans will ensure that the following conditions will be implemented during project construction.

- a. The project site will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site.
- b. Pets of project personnel will not be allowed on the project site.
- c. Impacts from fugitive dust will be avoided and minimized through watering and other appropriate measures.
- d. Cut and fill will be balanced within the project or the construction contractor will identify the source or disposal location. All spoils and material disposal will be disposed of properly.
- e. Appropriate erosion and siltation controls will be installed prior to the onset of vegetation clearing and be maintained in good repair until the completion of project construction. Erosion and sediment control devices used for the proposed project, including fiber rolls and bonded fiber matrix, will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.
- f. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will be restricted to designated disturbed/developed areas. These designated areas will be located in such a manner as to prevent run-off from entering existing native vegetation areas.
- g. Should construction occur within or adjacent to CSS or riparian habitats during the February 15 to August 31 gnatcatcher and vireo nesting season, all construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers to reduce construction noise.
- h. All pile driving for the project that will occur near habitats that support gnatcatchers and vireos will be conducted between September 1 and February 14 to avoid the gnatcatcher and vireo breeding season (or sooner than September 1 if the Project Biologist demonstrates to the satisfaction of the CFWO that all nesting is complete) and to minimize construction noise impacts to nesting gnatcatchers and vireos.
- i. If nighttime construction is necessary, all project lighting (e.g., staging areas, equipment storage sites, roadway) will be selectively placed and directed onto the roadway or construction site and away from sensitive habitats. Light glare shields will be used to reduce the extent of illumination into sensitive habitats.

Temporary indirect impacts may occur to gnatcatcher and vireo as a result of noise, night lighting, introduction of invasive species, dust, erosion, sedimentation, and human encroachment resulting from the project. Noise and vibrations associated with the use of heavy equipment during construction of the proposed project has the potential to disrupt vireo and gnatcatcher nesting and foraging behaviors in adjacent habitat by masking intraspecific communication and startling birds

(e.g., see Dooling and Popper 2007 for a discussion of observed effects of highway noise on birds). Gnatcatchers and vireos that nest and forage in habitats adjacent to the existing I-5 freeway are subjected to existing noise and vibration and continue to use the habitat. Once construction is complete, project operations are anticipated to result no change in noise levels (LSA Associates, Inc. 2010c). In addition, measures (listed above) have been incorporated into the project to reduce the effects of construction noise on essential vireo and gnatcatcher behaviors (breeding, feeding, sheltering) to the level of insignificance. For the purposes of section 7 consultation, an insignificant effect is one that is sufficiently small that a person would not be able to meaningfully measure, detect, or evaluate it.

Construction and operational lighting has the potential to affect gnatcatchers and vireos. Light that alters natural light patterns in ecosystems can lead to increased predation, disorientation, and disruption of inter-specific interactions (Longcore and Rich 2004). Measures (listed above) will be implemented by Caltrans to reduce the impacts of lighting on gnatcatcher and vireo behavior in the adjacent habitat to the level of insignificance. The project has also incorporated measures (listed above) to prevent the introduction and spread of invasive species, and to minimize construction dust, erosion, sedimentation, and human encroachment into the adjacent habitat. I-5 is an existing facility, so with the proposed measures, any increase in habitat degradation associated with these factors is likely to be insignificant.

The primary constituent elements of designated gnatcatcher critical habitat consist of CSS and other vegetation communities necessary to support core gnatcatcher populations and provide connectivity within populations. The temporary impacts to 0.018 ac of unoccupied ornamentals and disturbed CSS on the edge of Unit 6 of designated gnatcatcher critical habitat will not affect the function of the unit to support a stable population of gnatcatchers and to provide connectivity between populations to the south in San Diego County and farther north in Orange County. With the incorporation of the above measures, the proposed project impacts on the primary constituent elements in Unit 6 of gnatcatcher critical habitat are considered to be insignificant.

Because the above measures have been incorporated into the project, we concur with your determination that the proposed project is not likely to adversely affect the vireo and gnatcatcher and its designated critical habitat. We base our concurrence on the following reasons: 1) no direct permanent or temporary impacts to vireo and gnatcatcher occupied habitat will occur; 2) the permanent loss of 0.4 ac unoccupied CSS and 0.07 ac unoccupied riparian scrub and the temporary loss of 0.32 ac of unoccupied CSS, including 0.018 ac of disturbed CSS and ornamentals within gnatcatcher critical habitat, is not anticipated to significantly interfere with essential gnatcatcher and vireo breeding, feeding, or sheltering behaviors; 3) construction activities will be modified to limit noise, night lighting, introduction of invasive species, dust, erosion, sedimentation, and human encroachment disturbance to gnatcatchers and vireos as described in the measures above to ensure that gnatcatcher and vireo breeding, feeding and sheltering activities in the adjacent habitat are not substantially disrupted. In addition, the project's temporary impact areas will be restored, which will support the survival and recovery of these species.

Therefore, the interagency consultation requirements of section 7 of the Act have been satisfied. Although our concurrence ends informal consultation, obligations under section 7 of the Act will be

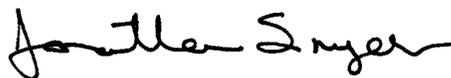
reconsidered if new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not previously considered or this action is subsequently modified in a manner that was not considered in this assessment.

This document does not authorize take under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. §§ 703-712). In order to avoid violation of the MBTA, Caltrans will avoid take of active nests through implementation of the following measures:

- In order to avoid impacts to nesting birds, any native or exotic vegetation removal, tree trimming activities, or bridge demolition will occur outside of the nesting season. The nesting season is from February 15 to August 31. In the event that vegetation clearing is necessary during the nesting season, a qualified biologist will conduct a preconstruction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction or clearing will not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active.
- To prevent project effects to bridge- and crevice-nesting birds (i.e., swifts and swallows), all work on existing bridges with potential habitat that is conducted between February 15 and October 31 will include the removal of all bird nests prior to construction under the guidance and observation of a qualified biologist. Removal will occur prior to February 1 of that year, before the swallow colony returns to the nesting site. Removal of swallow nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by a qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or the completion of construction. All nest exclusion techniques will be coordinated between the Caltrans District Biologist and the resource agencies.

Thank you for your coordination on this project. If you have any questions regarding this letter, please contact Sally Brown of my staff at (760) 431-9440, extension 278.

Sincerely,



for Karen A. Goebel  
Assistant Field Supervisor

Literature Cited:

- California Department of Transportation (Caltrans). 2010. I-5 HOV Lane Extension Project Natural Environmental Study I-5 Between Avenida Pico and San Juan Creek Road 12-ORA-05 (PM 3.0/8.7). 90+pp.
- Dooling, R. J. and A. N. Popper. 2007. The effects of highway noise on birds. Prepared by Environmental BioAcoustics LLC for the California Department of Transportation, Sacramento, California. 74 pp.
- Longcore, T. and C. Rich. 2004. Ecological light pollution. *Front Ecological Environment* 2(4):191-198.
- LSA Associates, Inc. 2010a. Coastal California Gnatcatcher Winter Survey Results: Interstate-5 High Occupancy Vehicle (HOV) Lane Extension Project, October 2009–January 2010. 3+pp.
- LSA Associates, Inc. 2010b. Least Bell's Vireo Survey Results: Interstate 5 High-Occupancy Vehicle Lane Extension Project, April–July 2010. 3+pp.
- LSA Associates, Inc. 2010c. Noise Study Report I-5 HOV Lane Addition Project.