



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
Carlsbad Fish and Wildlife Office  
2177 Salk Avenue, Suite 250  
Carlsbad, California 92008



In Reply Refer To:  
FWS-SDG-08B0136-11FE0361

JUN 11 2014

Ms. Kim Smith  
Branch Chief, Environmental Resource Studies  
California Department of Transportation  
4050 Taylor Street  
San Diego, California 92110

Attention: Ms. Rush Abrams, Associate Environmental Planner

Subject: Emergency Consultation for the State Route 76 Melrose Drive to South Mission  
Storm Debris Removal, San Diego County, California

Dear Ms. Smith:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion addressing emergency consultation on the removal of storm debris for the State Route 76 (SR-76) Melrose Drive to South Mission Highway Improvement Project in San Diego County and the effects of the emergency action on the federally endangered arroyo toad [*Anaxyrus californicus* (*Bufo microscaphus* c.)], in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). Your request for consultation was received on February 7, 2011.

The California Department of Transportation (Caltrans) has assumed the Federal Highway Administration's (FHWA) responsibilities under the Act for this consultation in accordance with Section 1313, Surface Transportation Project Delivery Program, of the Moving Ahead for Progress in the 21st Century Act (MAP-21) of 2012, as described in the National Environmental Policy Act (NEPA) assignment Memorandum of Understanding between FHWA and Caltrans (effective October 1, 2012) and codified in 23 U.S.C. 327. This correspondence has been delayed due to our focus on other transportation project priority workload at the request of your agency.

The federally endangered least Bell's vireo (*Vireo bellii pusillus*, vireo) and southwestern willow flycatcher (*Empidonax traillii extimus*, flycatcher); the federally threatened coastal California gnatcatcher (*Poliophtila californica californica*, gnatcatcher); and designated critical habitat for the vireo, flycatcher, gnatcatcher, and arroyo occur within the action area. We consider the effects of the emergency action to be insignificant (i.e., an effect that is sufficiently small that a person would not be able to meaningfully measure, detect or evaluate it) on these species and the

identified designated critical habitats because: 1) all emergency work was completed in less than 2 days, outside the vireo, flycatcher, and gnatcatcher breeding season and under the supervision of a CFWO-approved biologist; 2) the very small amount of temporary disturbance resulting from the debris removal work (crushing of two small patches of mulefat scrub within 0.58 acre of equipment access paths) was expected to recover rapidly as was demonstrated by a site visit on May 11, 2011, that showed the equipment movement pathways had already largely overgrown; and 3) the debris removal work resulted in no permanent impacts to any primary constituent elements of the identified designated critical habitats. Based on this evaluation, we concur with Caltrans' not likely to adversely affect determination for the vireo, flycatcher, and gnatcatcher, designated critical habitat for these three species of birds, and designated critical habitat for the arroyo toad.

This biological opinion is based on information provided in: 1) Request for Re-initiation of Section 7 Consultation for SR-76 Melrose to Mission Highway Improvement Project, San Diego County, California (Caltrans 2011); and 2) other sources of information including survey reports and email correspondence. A complete project file of this consultation is maintained at the Carlsbad Fish and Wildlife Office (CFWO).

## CONSULTATION HISTORY

On October 1, 2008, we completed formal section 7 consultation for the SR-76 Melrose Drive to South Mission Highway Improvement Project (FWS-SDG-08B0136-12F0076).

On December 22, 2010, a significant rainstorm event occurred while the SR-76 Melrose Drive to South Mission Highway Improvement Project was under construction. The construction haul bridge for the project was completely washed away, with pieces scattered downstream.

On January 7, 2011, we received an email message from Caltrans informing us of the need to conduct emergency debris removal work, at which time we provided initial avoidance and minimization measures.

On January 10, 2011, representatives from Caltrans and CFWO attended an onsite meeting to discuss options for debris removal.

On January 14, 2011, we provided revised avoidance and minimization measures.

On January 19, 2011, representatives from Caltrans and CFWO monitored the initial emergency debris removal work.

On January 20, 2011, the emergency debris removal work was completed.

On January 24, 2011, we received an email summary of how avoidance and minimization measures were implemented in the field by the biological monitor.

On February 7, 2011, we received the written request for emergency consultation from Caltrans.

## **BIOLOGICAL OPINION**

### **DESCRIPTION OF THE EMERGENCY ACTION**

The SR-76 Melrose Drive to South Mission Highway Improvement Project (FWS-SDG-08B0136-12F0076) is located on SR-76 between Melrose Drive and South Mission Road within the San Luis Rey River Valley in San Diego County, California. On December 22, 2010, a significant rainstorm event occurred while improvements to the SR-76 Melrose Drive to South Mission Highway were under construction. The project's construction haul bridge over the San Luis Rey River was completely washed away, with pieces, such as wood beams and crane mats, scattered downstream. Emergency work to clean up the scattered debris was conducted on January 19 and 20, 2011. Loose boards were retrieved with hand-crews. Five large crane mats, weighing over 5,000 pounds each, were retrieved from the downstream area with an excavator. A sixth crane mat washed farther downstream, past the historic Bonsall Bridge was retrieved with a compact track loader (bobcat).

Conservation measures were provided to, and implemented by, Caltrans to minimize incidental take of arroyo toads and other listed species during emergency work activities. The measures provided specific to the arroyo toad are summarized as follows:

1. A qualified biologist will serve as biological monitor for the project to ensure that the conservation measures are implemented and there are no unanticipated impacts to listed species and their habitats. The biological monitor will be familiar with the habitats, plants, and wildlife of the project area, and will be present while equipment is being used to ensure that issues relating to biological resources are appropriately and lawfully managed. The biologist's name, address, telephone number, and work schedule on the project will be submitted to the CFWO prior to initiating project impacts. The biological monitor will be provided with a copy of these measures.
2. Equipment will not enter the waterway.
3. Mats will be placed under equipment where possible to prevent equipment oils from reaching the ground.
4. Work will be conducted during daylight hours to avoid night-lighting disturbance of listed species.
5. Vehicle speed will not exceed 15 miles per hour.
6. Preconstruction arroyo toad surveys will be conducted by a qualified biologist along equipment access paths and areas where personnel and equipment will be working to remove debris. These surveys will repeatedly cover the work area throughout the

evening and in the daytime just prior to debris removal work to detect arroyo toads. In the event of rainfall, the work area will be checked for toads before any work is done. If arroyo toads are found, they will be avoided to the maximum extent feasible. If translocation of arroyo toads is required, such work will be conducted by a biologist permitted by the Service to handle arroyo toads. Caltrans will submit the biologist's name, address, telephone number, and work schedule on the project to the CFWO for review and approval prior to initiating project impacts. In order to keep the CFWO apprised of presence and number of arroyo toads in the project area, the biologist will provide brief email reports to the CFWO within 24 hours of observing or translocating arroyo toads in association with the project.

7. Arroyo toad fencing for the State Route 76 Melrose Drive to South Mission Highway Improvement Project will be repaired or replaced in as timely a fashion as is allowed for by winter flooding conditions. Following completion of exclusionary fence installation, additional arroyo toad translocation surveys will be initiated to insure any individuals that may have entered the site during the breach are relocated outside of the impact area.
8. Arroyo toads will be handled in an expedient manner with minimal harm. Do not handle captured toads for more than 15 minutes. Do not handle larval toads out of the water for longer than 30 seconds, and do not retain them for longer than 5 minutes. Any arroyo toad exhibiting signs of physiological distress will be immediately released in the most proximal and safe suitable habitat.
9. If an arroyo toad is killed or injured, the CFWO will be notified immediately. Within 3 working days, follow up such verbal notification in writing. With the written notification, include a report of the circumstances that led to the injury or mortality.
10. Preserve any dead specimens in accordance with standard museum practices. All preserved specimens will be properly labeled and deposited with one of the designated depositories, including The California Academy of Sciences, San Francisco, California; the Santa Barbara Natural History Museum, Santa Barbara, California; the Los Angeles County Museum of Natural History, Los Angeles, California; or the San Diego Natural History Museum, San Diego, California.
11. Caltrans will notify the CFWO in writing within 30 days of completing debris removal activities associated with the proposed project. This notification will include: 1) photographic documentation of the project impact area before, during, and after debris removal work and 2) documentation of any take of listed species that resulted from the proposed project.
12. The contracts of the project biologist(s) will allow direct communication with the CFWO at any time regarding the proposed project.

13. An effort will be made to remove all trash and debris that is in proximity to project access routes from the riparian habitat regardless of its origin.
14. Debris removal work will commence as rapidly as possible such that it may be completed prior to the breeding season and prior to potential additional flooding activity that may result in its dispersal over a broader habitat area.

### *Action Area*

According to 50 CFR § 402.02 pursuant to section 7 of the Act, the “action area” refers to all areas that will be affected directly or indirectly by the Federal action and is not limited to the immediate area involved in the action. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area as determined by our agency.

In this consultation, we define the action area to be approximately half a mile of the San Luis Rey River floodplain, downstream from the washed out bridge, where debris was removed. This includes the approximately 0.58 acre temporary impact area consisting of the movement paths where the excavator and bobcat accessed the downstream area for large debris removal (Figure 1).

### STATUS OF THE SPECIES

The status of the arroyo toad was described in detail in the biological opinion for the SR-76 Melrose Drive to South Mission Highway Improvement Project (FWS-SDG-08B0136-08F0900) dated October 1, 2008. Additional information can be found in the recovery plan for the arroyo toad and 5-year review for the arroyo toad (Service 1999, 2009). Please refer to these documents for detailed information on the life history requirements of the species, threats to the species, and conservation needs of the species.

### ENVIRONMENTAL BASELINE

Regulations implementing the Act (50 CFR §402.02) define the environmental baseline as the past and present impacts of all Federal, State, or private actions and other human activities in the action area. Also included in the environmental baseline are the anticipated impacts of all proposed Federal projects in the action area that have undergone section 7 consultation, and the impacts of State and private actions which are contemporaneous with the consultation in progress.

Arroyo toads were documented within the debris removal area during several surveys (EDAW, Inc. 2006, 2007, AMEC 2004; URS 2004). Actual construction of the SR-76 Melrose Drive to South Mission Highway Improvement Project and deposition of debris in the action area resulting from the storm event are the only changes in the environmental baseline since issuance of the October 1, 2008, biological opinion.

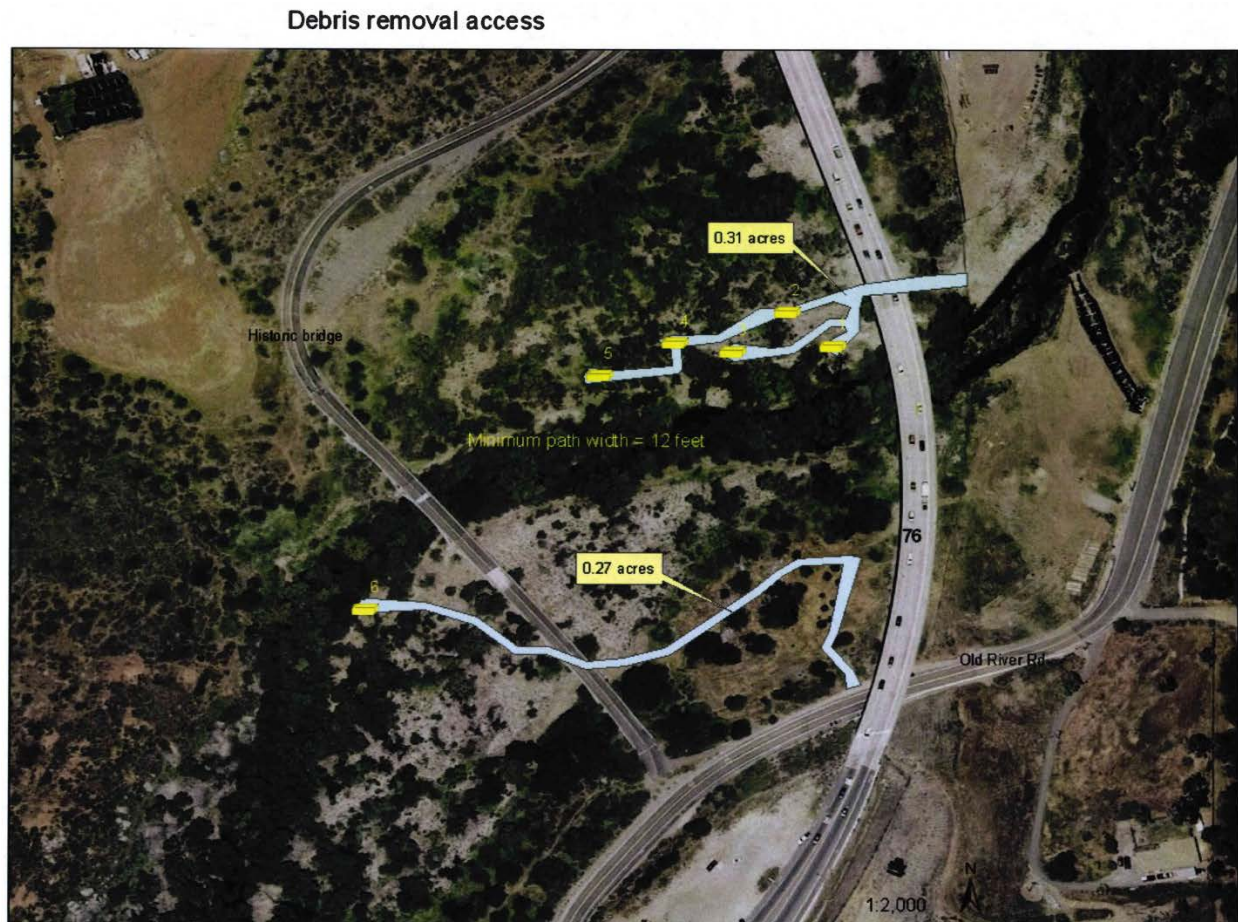


Figure 1. (Source: Caltrans. 2011. Request for Re-initiation of Section 7 Consultation for SR-76 Melrose to Mission Highway Improvement Project, San Diego County, California.)

## EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects of an action on the species, together with the effects of other activities that are interrelated and interdependent with that action, which will be added to the environmental baseline. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. Indirect effects are those that are caused by the proposed action, are later in time, and still reasonably certain to occur.

### *Direct Effects*

We provided arroyo toad avoidance and minimization measures for Caltrans to implement during the debris removal work on January 14, 2011, as listed in the project description above. According to post-project summaries provided by the biological monitor and Caltrans, all written measures were successfully implemented. Preconstruction arroyo toad surveys were conducted

by a CFWO-approved biologist on the evenings of January 18 and 19 within and adjacent to all access routes and work areas. Prior to the initiation of debris removal, all work areas were surveyed the mornings of January 19 and 20. No arroyo toads were detected.

No vegetation was trimmed; however, some mulefat scrub was crushed to gain access to two of the debris piles. Roots remained intact, and the vegetation is expected to quickly recover. No equipment entered the active channel nor was equipment staged on site. All equipment was checked prior to entering the work area, and no leaks were detected. All work was conducted during daylight hours. Vehicle speeds did not exceed 15 miles per hour.

All debris removal efforts were completed between 7 a.m. and 2 p.m. January 19, 2011, and 7 a.m. and 10 a.m. January 20, 2011. Exclusionary fence repairs were completed by March 15. Caltrans and their biological consultants monitored all activities associated with debris removal, and no take of listed species was detected.

During the site visit on January 10, we verbally recommended using equipment to lift the crane mats and remove them. We advised against cutting them up for removal with small equipment, such as a gator, as in excess of 50 trips would have been required to remove each of the 6 crane mats using this method. We also advised that mats should be lifted by equipment and not dragged in order to provide for an even distribution of weight on the ground surface to minimize potential crushing of buried aestivating arroyo toads.

The first five crane mats were lifted with an excavator and removed from the north shore of the river on January 19. The sixth crane mat washed farther downstream, past the historic Bonsall Bridge on the south shore of the river. Removal of this crane mat was complicated by the presence of a Native American cultural site along the access route, which did not allow for the passage of the excavator. We verbally recommended use of a spider excavator; however, a compact track loader (bobcat) and telescopic handler (sky trak) had already been procured to remove the remaining mat. However, this equipment proved to be insufficient to lift the 5,000+ pound crane mat; thus it was dragged from the south shore of the river to a terrace at the edge of the floodplain.

The debris removal work resulted in temporary disturbance from driving heavy equipment, including an excavator and compact track loader with telescopic handler, over approximately 0.58 acre of arroyo toad aestivation habitat within the San Luis Rey River floodplain. No arroyo toads were observed by the project biological monitors throughout the action. However, any arroyo toads that may have been aestivating or buried in the substrate would have been impossible to detect. Any arroyo toads that were aestivating within the project impact area may have been crushed or injured during project implementation.

Quantifying the number of arroyo toads within the project impact area is difficult for a number of reasons. The exact distribution and population size is difficult to estimate due to the dynamic conditions associated with arroyo toad habitat. Suitable habitat may change from year to year

depending on climatic conditions, flooding, or other natural or human-related events (Service 1999), which in turn influence reproductive success and juvenile survival.

In addition, except during the early juvenile stage (first 4 to 5 weeks), arroyo toads forage at night and burrow during the day. Nocturnal activity is usually associated with rainfall and moderate temperatures and some nights of very high relative humidity (Service 1999).

Therefore, detection of arroyo toads outside of the breeding season is very difficult, with limited ability for anticipating when the species may be active. Lastly, no reliable survey method exists for determining the locations or densities of arroyo toads that may be burrowed within upland habitat.

Due to these constraints, the precise number of arroyo toads that may have been located within the project area is not known. However, the total amount of arroyo toad habitat impacted was only 0.58 acre, and the project incorporated the measures listed above to avoid and minimize impacts to arroyo toads resulting from the debris removal work. These measures included employing an experienced arroyo toad biologist to oversee emergency debris removal work, lifting rather than dragging most of the debris to better distribute weight and reduce soil disturbance, ensuring vehicle speeds did not exceed 15 miles per hour, avoiding night work, and conducting all work in less than 2 days and outside of the arroyo toad active season. For these reasons, it is likely that only a few arroyo toads were impacted within the project footprint. Loss of a few arroyo toads as a result of the emergency action will not appreciably reduce the overall numbers, distribution, or reproduction of arroyo toads in the San Luis Rey River or rangewide.

### *Indirect Effects*

We have not identified any additional effects to arroyo toad that were caused by the debris removal project and occurred or will occur later in time.

### *Effect on Recovery*

The project resulted in minor, direct impacts to arroyo toad habitat and likely killed or injured only a few arroyo toad individuals. These impacts are small relative to the amount of habitat and number of arroyo toads within the San Luis Rey River and rangewide and should not affect overall recovery of the species. Furthermore, the removal of construction debris from within arroyo toad habitat was a necessary action to prevent more damaging, long-term impacts to the arroyo toad and its habitat.

## CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. We are unaware of



any future non-Federal actions that are reasonably certain to occur within the action area and may affect the arroyo toad.

## CONCLUSION

After reviewing the current status of the arroyo toad, the environmental baseline for the action area, effects of the action, and the cumulative effects, it is our biological opinion that the action, as implemented, is not likely to jeopardize the continued existence of the arroyo toad. We reached this conclusion by considering the following:

- The possible loss, through crushing, of a few of aestivating arroyo toads within the temporary impact area did not likely reduce the overall numbers, distribution, or reproduction of the species in the action area or rangewide;
- Adverse effects to the arroyo toad were reduced by implementation of the avoidance and minimization measures that were developed in conjunction with Caltrans during the emergency action as identified in the “Project Description” of this biological opinion. No take was observed during implementation of the emergency action by project biological monitors; and
- The very small amount of temporary disturbance resulting from the debris removal work (crushing of two small patches of mulefat scrub within 0.58 acre of equipment access paths) has already demonstrated signs of rapid recovery based on the May 11, 2011, site visit.

## INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Harm is further defined by us to include significant habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by us as an action that 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, 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 7(o)(2) of the Act, such incidental take is not considered a prohibited taking under the Act, provided that such taking is in compliance with this incidental take statement.

## AMOUNT OR EXTENT OF TAKE

The exact distribution and population size of arroyo toads is difficult to determine due to the dynamic conditions associated with their habitat and biology and because detection of arroyo

toads outside of the breeding season is very difficult. Therefore, it is difficult to precisely quantify the amount of take that occurred. As described in the effects analysis, a few aestivating arroyo toads may have been affected by project construction work; however, no arroyo toads were observed during project implementation.

Because we were not able to effectively monitor the number of individuals impacted during construction, we have established estimated levels of take based on the amount of arroyo toad habitat impacted. Take of arroyo toad is estimated to have occurred as follows:

- Death or injury of a few arroyo toads associated with temporary disturbance of 0.58 acre of arroyo toad habitat.

## EFFECT OF TAKE

In the accompanying biological opinion, we determined that this level of take is not likely to result in jeopardy to the arroyo toad.

## REASONABLE AND PRUDENT MEASURES

Generally, Reasonable and Prudent Measures are not included in emergency consultations because the take has already occurred.

## TERMS AND CONDITIONS

Generally, Terms and Conditions are not included in emergency consultations because the take has already occurred.

## 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 to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

Coordination efforts occurred during the emergency event initiated in January 2011 that resulted in the development of appropriate measures to avoid and minimize take of the arroyo toad within the action area. Caltrans implemented those measures in its response to the emergency action, and we are not providing any further recommendations to minimize the effects of the action on the arroyo toad.

This concludes formal consultation on the emergency action as outlined in materials submitted to us for the State Route 76 Emergency Debris Removal Project. If you have any questions

Ms. Kim Smith (FWS-SDG-08B0136-11FE0361)

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regarding this biological opinion, please contact Sally Brown of this office at 760-431-9440, extension 278.

Sincerely,



for

Scott A. Sobiech  
Acting Field Supervisor

### LITERATURE CITED

- AMEC Earth & Environmental, Inc. (AMEC). 2004. Final natural environment study report, field surveys for State Route 76 middle segment. Prepared for Caltrans. Project No. 323640010. 47 pp. + Appendices A & B. June.
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- URS. 2004. State Route 76 biological survey report. Prepared for Caltrans District 11. Project No. 26814656.00100. 7 Sections + Appendices A–C. June 30.
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