# United States Department of the Interior

FISH AND WILDLIFE SERVICE
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In Reply Refer to:
08ESMF00-
2015-F-0981

NOV 18 2015

Jane M. Hicks
Chief, Regulatory Division
Attn: Kerri Schoenberg
San Francisco District
U. S. Army Corps of Engineers
1455 Market Street
San Francisco, California 94103-1398

Subject: Formal Consultation on the Coastside County Water District Property Rural Roads Improvement Project in Marin County, California and appending to the (U.S. Army Corps of Engineers (Corps) File Number SPN-2014-00418S) to the June 14, 2014 *Programmatic Biological Opinion for Issuance of Permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, including Authorizations Under 22 Nationwide Permits, for Project that May Affect the Threatened California Red-Legged Frog in Nine San Francisco Bay Area Counties, California.*

This letter is in response to the U.S. Army Corps of Engineers (Corps) June 27, 2015, request for initiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Formal Consultation on the Coastside County Water District Property Rural Roads Improvement Project (Project), Marin County, California. Your request was received by the Service on June 30, 2015. At issue are the potential effects of the proposed project on the threatened California red-legged frog (*Rana draytonii*) and its critical habitat, endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), and the threatened marbled murrelet (*Brachyramphus marmoratus*). This document is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The federal action on which we are consulting is the issuance of a Clean Water Act Section 404 permit to San Mateo County Resource Conservation District (RCD) for the Coastside County Water District Property Rural Roads Improvement. Pursuant to 50 CFR 402.12(j), you submitted a biological assessment and supplement for our review and requested concurrence with the findings presented therein. These findings conclude that the proposed project: may affect, and is likely to adversely affect California red-legged frog and its critical habitat; may affect not likely to adversely affect San Francisco garter snake, and marbled murrelet.

In considering your request, we based our evaluation on the following: (1) Biological Resources Assessment for the Coastside County Water District Property Rural Roads Improvement Project and supplemental information; (2) a site visit that occurred on September 9, 2015; (3) email correspondence between the Service and San Mateo Resource Conservation District (RCD); and (4) other information available to the Service.

The Service concurs that the proposed project may affect, but is not likely to adversely affect the marbled murrelet. This conclusion is based the extremely low probability of encountering a marbled murrelet based on the habitat surrounding the project area. In addition, based on the limited extent and timing of covered activities outside the nesting season, any effects to potential habitat for marbled murrelet would be insignificant and discountable.

The Service does not concur the proposed project may affect, but is not likely to adversely affect the San Francisco garter snake. This conclusion is based on biology and ecology of the species, and proximity to known occurrences. Please see the environmental baseline for additional information.

The remainder of this document provides our biological opinion on the effects of the proposed project on California red-legged frog, its critical habitat, and San Francisco garter snake.

## Consultation History

| Date: | Description |
|---|---|
| July 30, 2015 | The Service received a consultation request from the Corps for the proposed action. |
| September 9, 2015 | The Service the Corps, and the RCD meet and discuss the project. The Service and RCD conduct a site visit to the proposed project |
| September 11, 2015 to October 11, 2015 | The Service, Corps, RCD and its consultant exchanged emails regarding the proposed action and its description, effects and appropriate minimization. |

## Description of the Action

The project will implement erosion control and erosion prevention treatments (e.g., ditch relief culverts, stream crossings) along three roads in the Pilarcitos Creek watershed to reduce road-related sediment runoff. The three roads, encompass a total of 2.91 miles and 32 sediment delivery sites: (1) Pilarcitos Creek Road is approximately 1.34 miles long with 17 sediment delivery sites; (2) Cell Tower Road is approximately 0.94 miles long with 6 sediment delivery sites; and (3) Transformer Road is approximately 0.63 miles long with 9 sediment delivery sites.

Pilarcitos Creek Road

Within the project area, Pilarcitos Creek Road parallels Pilarcitos Creek for 1.34 miles along a canyon bottom. There are 18 individual erosion sites identified and approximately 0.41 mile of road surfaces, roadside ditches, and cutbacks along Pilarcitos Creek Road that are currently eroding and delivering sediment to the stream system (i.e., hydrologically connected), or show a potential to do so in the future. Erosion site types include four stream crossings, four ditch relief culverts, two landslides, one spring, three discharge points for road surface drainage, and four bank erosion areas.

Cell Tower Road

Cell Tower Road travels east from Pilarcitos Creek Road 0.94 mile to Cahill Ridge Road. There are six individual erosion sites and approximately 0.92 miles of road surfaces, roadside ditches, and cutbacks along Cell Tower Road that are currently eroding and delivering sediment to the stream system, or show a potential to do so in the future. Erosion site types include two stream crossings, three ditch relief culverts, and one discharge point for road surface drainage.

Transformer Road

Transform Road is a spur road that travels west from Pilarcitos Creek Road. This steep and windy dirt road is approximately 0.63 mile long and 10-feet wide and provides access to an existing transformer site. There are nine individual erosion sites and approximately 0.53 miles of road surfaces, roadside ditches, and cutbacks along Transformer Road that are currently eroding and delivering sediment to the stream system, or show a potential to do so in the future. Erosion site types include one stream crossing, two ditch relief culverts, three landslides, one discharge point for road surface drainage, and two ditch sites.

**Table 1. Locations of Proposed Treatment Sites**

| Site Number | Road Association | Latitude, Longitude (WGS84) | Section, Township, Range (MDM) | USGS 7.5' Quadrangle |
|---|---|---|---|---|
| 141 | Pilarcitos Creek Road | 37.50917N 122.38553W | 11, 5S, 5W | Montara Mtn |
| 142 | Pilarcitos Creek Road | 37.51002N 122.38468W | 11, 5S, 5W | Montara Mtn |
| 143 | Pilarcitos Creek Road | 37.51062N 122.38298W | 11, 5S, 5W | Montara Mtn |
| 144 | Pilarcitos Creek Road | 37.51158N 122.38336W | 11, 5S, 5W | Montara Mtn |
| 145 – 148 | Pilarcitos Creek Road | 37.51243N 122.38388W | 11, 5S, 5W | Montara Mtn |
| 149 | Pilarcitos Creek Road | 37.51535N 122.38610W | 11, 5S, 5W | Montara Mtn |
| 150 | Pilarcitos Creek Road | 37.51616N 122.38727W | 11, 5S, 5W | Montara Mtn |
| 167 – 169 | Pilarcitos Creek Road | 37.51819N 122.38899W | 10, 5S, 5W | Montara Mtn |
| 170 – 173 | Pilarcitos Creek Road | 37.52002N 122.39072W | 10, 5S, 5W | Montara Mtn |
| 142.1 – 142.9 | Transformer Road | 37.50992N 122.38721W | 10, 11, 5S, 5W | Montara Mtn |

| Site Number | Road Association | Latitude, Longitude (WGS84) | Section, Township, Range (MDM) | USGS 7.5' Quadrangle |
|---|---|---|---|---|
| 102 | Cell Tower Road | 37.50817N 122.37357W | 11, 5S, 5W | Montara Mtn |
| 103 – 104 | Cell Tower Road | 37.50891N 122.37612W | 11, 5S, 5W | Montara Mtn |
| 105 | Cell Tower Road | 37.51110N 122.37991W | 11, 5S, 5W | Montara Mtn |
| 106 – 107 | Cell Tower Road | 37.51148N 122.38283W | 11, 5S, 5W | Montara Mtn |

Proposed Improvements

As summarized above, the proposed project will implement various erosion control and erosion prevention treatments along three roads in the Pilarcitos Creek watershed to reduce road-related sediment runoff. There are seven general erosion site types within the project area, each of which generally falls into three categories:

- Stream crossings
- Bank erosion / landslide areas (including springs)
- Road drainage points (including ditch relief culverts, discharge points for road surface drainage, and ditch sites)

The following summarizes the general approach to implementing improvements within each of these categories.

*Stream Crossings*

Stream crossing improvements will include culvert repair or replacement at specific treatments sites along each road. In general, stream crossing treatments will require removal of the damaged culvert, replacement with a new appropriately sized pipe, and reconstruction of the fill slopes at a sustainable grade.

The disturbance area at stream crossings will generally occur within an area 10 to 15 feet upstream of the culvert inlet and 25 feet downstream of the culvert outlet. This disturbance area will be limited to the minimal size necessary and will be largely influenced both by the amount of aggraded sediment in the channel and the proximity of the drainage to a mainstem (perennial) stream.

*Bank Erosion / Landslide Areas*

In areas subject to bank erosion or landslides, loose material will be excavated and the site armored with imported riprap. These improvements will generally extend to the limit of downslope disturbance, or the edge of a mainstem channel, but will never extend upslope of the road.

*Road Drainage Improvements*

Road drainage improvements (e.g., road outsloping, rolling dips, ditch relief culvert installation, ditch clearing, etc.) will generally involve reshaping existing roads to improve drainage and decrease sedimentation. With the exception of rolling dip outlets and ditch relief culverts, impacts will be limited to the existing road footprint and up to 3-4 feet beyond the outboard edge of the road. Rolling dip and ditch relief culvert outlets could disturb up to 15 feet beyond the outside edge of the road.

Maintenance and Monitoring

Long-term maintenance of roads within the project area will remain the responsibility of CCWD (Pilarcitos Creek Road) and Randtron (Cell Tower Road and Transformer Road). Roads will be inspected annually and all locations indicating that runoff is not being directed off the roadbed (e.g., ruts, rills, surface erosion / degradation) will be identified and mapped. Stream crossings, ditches and culverts will be inspected for erosion, infrastructure damage, blockages, or changes in vertical or horizontal alignment. Maintenance activities could include repair of eroding or degraded infrastructure, grading the road surface, and/or shovel work to clear aggraded debris and sediment.

Annual road inspections and maintenance activities will occur prior to the rainy season. Roads may also be inspected following large or prolonged storm events to ensure the implemented treatments are functioning properly.

Construction Methodology

Proposed improvements will generally be implemented using heavy equipment, although some hand labor will be used at sites needing downspouts, new culverts or culvert repairs, or in areas where streams or drainages will need to be dewatered to allow for construction.

Dewatering may be required at some treatments sites if flowing water is present at the time of construction. In these instances, water will be isolated upstream of the work area using cofferdams and transported downstream / around the work site through a gravity fed diversion pipe (although a pump may be used if necessary) to keep the stream "live" below the work area. An additional dam will be installed downstream of the work area to capture any subsurface flow that might travel through the construction area. Water will be collected at the upstream and downstream locations and pumped away from the site to infiltrate into the ground without the potential for delivery to the stream.

At treatment sites for bank erosion on the Pilarcitos mainstem (i.e., Sites 143, 148, 169, and 171), the treatment site will be isolated from flowing water by installing plywood fencing. The fencing will limit soil from entering the waterway and minimize the need for dewatering.

Work Sequence

The following construction sequence is proposed:

- Conduct required pre-construction biological surveys
- Establish staging areas
- Mobilize equipment

- Install temporary erosion control measures
- Remove low hanging tree vegetation/ branches along roads, as necessary
- Temporarily dewater areas with flowing water (as needed) OR install plywood fencing along bank erosion treatment sites at Pilarcitos Creek (i.e., Sites 143, 148, 169, and 171)
- Implement improvements at treatment sites
- Seed and mulch temporarily disturbed soils with native vegetation

Construction Equipment

Heavy equipment, including excavators, dozers, backhoes, graders, rollers, dump trucks and/or water trucks may be used to implement the proposed improvements.

Construction Staging and Access

Access to the project area will be provided from Pilarcitos Creek Road, Cell Tower Road and Transformer Road. All equipment will be staged either on adjacent properties (e.g., Santa's Tree Farm) or in wide or open spots along the roads, away from and outside sensitive habitat areas. Where feasible, materials (rock, culverts, etc.) will be stockpiled temporarily at the site or delivered directly to the site as required.

Construction Schedule

Construction will occur in the late fall, after September 15 to avoid the marbled murrelet nesting season and prior to October 15 to accommodate in-water work windows for fish. All work will be completed in a dry or dewatered condition.

Construction will generally be completed during a 4 week period in 2016; improvements to some of the lower immediacy treatment sites may occur over a longer 5 year period (2016-2020).

Conservation Measures

The below conservation measures, which include the conservation measures from the Programmatic Biological Opinion along with other general conservation measures and best management practices provided by the applicant, will be implemented for the project. The amended measures listed below will replace those listed in the Programmatic Opinion and will be fully implemented by the Corps and the applicant to avoid, minimize, and compensate for the direct effects, indirect effects, both temporary and permanent, and cumulative effects to the California red-legged frog from Nationwide and other Corps permits expected to occur in the nine San Francisco Bay Area counties.

*Conservation Measures from Programmatic Biological Opinion*

1. For any project with greater than 0.5 acre of permanent impacts to suitable aquatic California red-legged frog habitat, and for any project with greater than 0.5 acre of suitable upland California re-legged frog habitat, the Corps will ensure harm to the California red-legged frog Nationwide or other permit action is minimized by the submittal of an appropriate habitat compensation proposal and, if appropriate, a restoration, monitoring, and management plan, at least thirty (30) calendar days prior to the date of initial ground disturbance (described in Compensation Section below).

2. The Corps will ensure the applicant implements the conservation measures of this programmatic biological opinion, and the appendage. The Corps will ensure the applicant designate a point of contact for the project. The point of contact will maintain a copy of this biological opinion and the appendage onsite for the duration of the construction period. Their name and telephone number will be provided to the Service no more than thirty (30) calendar days prior to the date of initial ground disturbance. At least fourteen (14) calendar days prior to the date of initial ground disturbance, the Corps will ensure the applicant submits a signed letter to the Service verifying that they possess a copy of this programmatic biological opinion and the appendage, and have read and fully understand their responsibilities.

3. If verbally requested before, during, or upon completion of ground disturbance and construction activities, the applicant will ensure the Service, California Department of Fish and Wildlife, and/or their designated agents can immediately and without delay, access and inspect the project site for compliance with the project description, conservation measures, and reasonable and prudent measures of this programmatic biological opinion and appendage, and to evaluate project effects to the California red-legged frog and its habitat.

4. A Service-approved biologist(s) will be onsite during all activities that may result in take of the California red-legged frog. The qualifications of the biologist(s) will be submitted to the Service for review and written approval at least thirty (30) calendar days prior to the date of construction at the project site. The Service-approved biologist(s) will keep a copy of the programmatic biological opinion and the appendage in their possession when onsite.

5. No more than twenty-four (24) hours prior to construction (including installation of fencing, waddle or other materials), a preconstruction survey for the California red-legged frog will be conducted by a Service-approved biologist at the project site. The survey will consist of at minimum walking the project area including area immediately outside the project boundary to ensure the absence of the species in the work area. The Service-approved biologist will investigate all potential areas that could be used by the California red-legged frog for feeding, breeding, sheltering, movement, and other essential behaviors. This includes examination of mammal burrows. If any adults, sub adults, juveniles, tadpoles, or eggs are found, the Service-approved biologist will contact the Service. Should the Service approve moving animals, the Corps through the applicant will ensure the Service approved biologist is given sufficient time to move the animals from the work site to an approved location before ground disturbance is initiated. Only Service-approved biologists will capture, handle, and monitor the California red-legged frog.

6. The Service-approved biologist(s) and point of contact will be given daily and weekly construction schedules including location and summary of expected work.

7. The Service-approved biologist(s) will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site, otherwise associated with the project, the Service, the Department, or their designated agents. The Service-approved biologist will have oversight over implementation of all the conservation measures in this programmatic biological opinion, and, through the applicant, will have the authority and responsibility to stop project

activities if they determine any of the associated requirements are not being fulfilled. If the Service approved biologist(s) exercises this authority, the Service will be notified by telephone and electronic mail within twenty-four (24) hours. The Service contact is the Coast Bay Division Chief of the Endangered Species Program at the Sacramento Fish and Wildlife Office at telephone (916) 414-6659.

8. The Service-approved biologist will conduct employee education training for employees working on earthmoving and/or construction activities. Personnel will be required to attend the presentation which will describe the California red-legged-frog, avoidance, minimization, and conservation measures, legal protection of the animal, and other related issues. All attendees will sign an attendance sheet along with their printed name, company or agency. Sign-in sheet(s) will be sent to the Service within seven (7) calendar days of the completion of the training.

9. To ensure that diseases are not conveyed between work sites by the Service-approved biologists, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.

10. The number of access routes, size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Environmentally sensitive areas (ESAs) will be clearly identified with 5-foot tall bright orange plastic fencing. to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable. The fencing will be inspected by the Service approved biologist and maintained daily by the applicant until the last day that construction equipment are at the project.

11. To the extent practicable, initial ground-disturbing activities will be avoided between November 1 and March 31 because that is the time period when California red-legged frogs are most likely to be moving through upland areas. When ground-disturbing activities must take place between November 1 and March 31, the Corps through the applicant will ensure that daily monitoring by the Service-approved biologist is completed for the California red-legged frog

12. To minimize harassment, injury death, and harm in the form of temporary habitat disturbances, all project-related vehicle traffic will be restricted to established roads, construction areas, predetermined access routes, equipment staging, storage, parking, and stockpile areas. Project-related vehicles will observe a 10-mile per hour speed limit within construction areas, except on County roads, and State and Federal highways. Off-road traffic outside of designated areas will be prohibited.

13. The Corps through the applicant will ensure bio-swales and bio-filtration are installed at the project site adjacent to roadways to avoid and minimize sediment loading and point source pollutants.

14. Stormwater pollution prevention plans (SWPPPs) and erosion control BMPs will be developed and implemented to minimize any wind- or water-related erosion and will be in

compliance with the requirements of the Corps. The applicant will include provisions in construction contracts for measures to protect sensitive areas and prevent and minimize Stormwater and non-stormwater discharges. Protective measures will include, at a minimum, those listed below:

a. No discharge of pollutants from vehicle or equipment cleaning will be allowed into any storm drains or water courses

b. Vehicle and equipment fueling and maintenance operations will be at least 50 feet away from water courses, except at established commercial gas stations or established vehicle maintenance facilities

c. Concrete waste and water from curing operations will be collected in washouts and will be disposed of and not allowed into water courses.

d. Spill containment kits will be maintained onsite at all times during construction operations and/or staging or fueling of equipment.

e. Dust control measures will include use of water trucks and organic tackifiers to control dust in excavation-and-fill areas, covering temporary access road entrances and exits with rock (rocking), and covering of temporary stockpiles when weather conditions require.

15. If a work site is to be temporarily dewatered or water diverted by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters to prevent California red-legged frogs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that will allow flow to resume with the least disturbance to the substrate.

16. Prior to placing RSP, a Service approved biologist will conduct a visual clearance survey, aquatic vegetation will be hand removed and second visual survey will be completed.

17. The Corps through the applicant will maintain all construction equipment to prevent leaks of fuels, lubricants, or other fluids.

18. Each encounter with the California red-legged frog will be treated on a case-by-case basis in coordination with the Service, but the general procedure is as follows: (1) the animal will not be disturbed if it is not in danger; or (2) the animal will be moved to a secure location if it is in any danger. These procedures are further described below:

a. When a California red-legged frog is encountered in the action area, all activities which have the potential to result in the harassment, injury, or death of the individual will be immediately halted. The Service-approved biologist will determine a course of action that will avoid or minimize adverse effects to the animal. To the maximum extent possible, contact with the frog will be avoided and the applicant will allow it to move out of the potentially hazardous situation to a secure location on its own volition. This procedure applies to situations where a California red-legged frog is encountered while it is moving to another location. It does not apply to animals that

are uncovered or otherwise exposed or in areas where there is not sufficient adjacent habitat to support the species should the individual move away from the hazardous location.

b. California red-legged frogs that are in danger will be relocated and released by the Service approved biologist outside the construction area within the same riparian area or watershed. If relocation of the frog outside the fence is not feasible (i.e., there are too many individuals observed per day), the biologist will relocate the animals to a Service preapproved location. Prior to the initial ground disturbance, the applicant will obtain approval of the relocation protocol from the Service in the event that a California red-legged frog is encountered and needs to be moved away from the project site. Under no circumstances will a California red-legged frog be released on a site unless the written permission of the landowner has been obtained by the applicant.

   The Service-approved biologist will limit the duration of the handling and captivity of the California red-legged frog to the minimum amount of time necessary to complete the task. If the animal must be held in captivity, it will be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. The container used for holding or transporting the individual will not contain any standing water.

c. The applicant will immediately notify the Service once the California red-legged frog and the site is secure. The contact for this situation is the Coast Bay Division Chief of the Endangered Species Program by email and at telephone (916) 414-6659.

19. Uneaten human food and trash attracts crows, ravens, coyotes, and other predators of the California red-legged frog. A litter control program will be instituted at each project site. All workers will ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. The trash containers will be removed from the project site at the end of each working day.

20. All grindings and asphaltic-concrete waste may be temporally stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any culvert, pond, creek, stream crossing, or other waterbody. On or before the date of project completion, the waste will be transported to an approved disposal site.

21. Temporarily disturbed project sites will be seeded with native vegetation and mulched to minimize the potential for erosion. Locally collected seed stock will be used to the extent practicable. Invasive, exotic plants will be controlled to the maximum extent possible. On the first and third years after construction, the RCD will verify that disturbed areas have adequately revegetated to minimize soil runoff. Revegetation will be documented in photos from designated photo stations and provided in annual reports to the Corps and the Service.

22. Habitat contours will be returned to their original configuration at the end of project activities. This measure will be implemented in all areas temporarily disturbed by activities associated with the project, unless the Service and the City determine that it is not feasible or modification of original contours will benefit the California red-legged frog.

23. Loss of soil from run-off or erosion will be prevented with straw bales, straw wattles, or similar means provided they do not entangle, block escape or dispersal routes of the California red-legged frog.

24. The Corps through the applicant will not apply insecticides or herbicides at the project site during construction or long-term operational maintenance where there is the potential for these chemical agents to enter creeks, streams, waterbodies, or uplands that contain potential habitat for the California red-legged frog.

25. No pets will be permitted at the project site, to avoid and minimize the potential for harassment, injury and death of the California red-legged frog.

26. No firearms will be allowed at the project site except for those carried by authorized security personnel, or local, State, or Federal law enforcement officials to avoid and minimize the potential for harassment, injury and death of the California red-legged frog.

27. Overnight staging of pipes, conduits and other materials that could provide shelter for California red-legged frogs will be capped and elevated above ground level. This is intended to reduce the potential for animals to climb into the conduits and other materials.

28. To the maximum extent practicable, no construction activities will occur during rain events or within 24-hours following a rain event. Prior to construction activities resuming, a Service approved biologist will inspect the action area and all equipment/materials for the presence of California red-legged frogs. The animals will be allowed to move away from the project site of their own volition or moved by the Service-approved biologist

29. To the maximum extent practicable, night-time construction will be minimized or avoided by the applicant. Because dusk and dawn are often the times when the California red-legged frog is most actively moving and foraging, to the maximum extent practicable, earthmoving and construction activities will cease no less than 30 minutes before sunset and will not begin again prior to no less than 30 minutes after sunrise. Except when necessary for driver or pedestrian safety, to the maximum extent practicable, artificial lighting at a project site will be prohibited during the hours of darkness.

30. Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form will not be used at the project site because California red-legged frogs can become entangled and trapped in them. Any such material found on site will be immediately removed by the Service-approved biologist, construction personnel, or the applicant. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials will not be used.

31. Watering guidelines for truck watering will be established to avoid any excessive run-off that may flow into contiguous or adjacent areas containing potential habitat for the California red-legged frog.

32. Trenches or pits one (1) foot or deeper that are going to be left unfilled for more than forty eight (48) hours will be securely covered with boards or other material to prevent the

California red-legged frog from falling into them. If this is not possible, the applicant will ensure wooden ramps or other structures of suitable surface that provide adequate footing for the California red-legged frog are placed in the trench or pit to allow for their unaided escape. Auger holes or fence post holes will be immediately filled or securely covered so they do not become pitfall traps for the California red-legged frog. The Service-approved biologist will inspect the trenches, pits, or holes prior to their being filled to ensure there are no California red-legged frogs in them. prior to initiation of work and after work has ceased to ascertain whether any individuals have become trapped. If the escape ramps fail to allow the animal to escape, the Service-approved biologist will remove and transport it to a safe location, or contact the Service for guidance.

33. The Service-approved biologist(s) will permanently remove any aquatic exotic wildlife species, such as bullfrogs and crayfish from the project site, to the maximum extent possible.

34. The Corps will ensure the applicant reports any information to the Service about take or suspected take of listed wildlife species not exempted by this programmatic biological opinion. The Service will be notified via electronic mail and telephone within twenty-four (24) hours from the time the information is received by the applicant. Notification will include the species, number of individuals, sex (if known), date, time, location of the incident or of the finding of a dead or injured animal, how the individual was taken, photographs of the specific animal, and names of the persons who observe the take and/or found the animal. The individual animal will be preserved, as appropriate, and held in a secure location until instructions are received from the Service regarding the disposition of the specimen or the Service takes custody of the specimen. The Service contacts are the Chief of the Coast Division, Endangered Species Program, Sacramento Fish and Wildlife Office at (916) 414-6659, and Resident Agent-in-Charge of the Service's Law Enforcement Division at (916 569-8444.

*Additional General Conservation Measures*

Measure BIO-1: Riparian and Wetland Habitat Protective Measures

1. Construction activities nearby or within sensitive natural community habitats (riparian habitat, wetlands, redwood forests) will be limited to the maximum extent feasible.

2. Any sensitive natural community habitat that does not fall within the construction footprint will be flagged and avoided with a 10 to 20 foot buffer, at a minimum.

3. Wetlands on site will be identified with protective fencing to avoid unintended impacts to wetlands outside the project footprint.

4. Work within waters will be conducted during the dry season, when water is not following, to the extent possible.

5. Worker environmental awareness training will be conducted for all construction crews and contractors. The education training will be conducted prior to starting work on the project and upon the arrival of any new worker. The training will include a brief review of locations of sensitive areas, possible fines for violations, avoidance measures, and correction actions will sensitive species be encountered. The program will cover mitigation measures,

environmental permits and regulatory compliance requirements. Additional training will be conducted as needed, including morning "tailgate" sessions to update crews as they advance into sensitive areas for projects with multiple work areas. In addition, a record of all personnel trained during the project will be maintained for compliance verification. Refer to Programmatic Biological Opinion General Measures No. 8 above for training requirements specific to California red-legged frog.

6. Prior to the start of construction within areas containing sensitive biological resources, the biological monitor will delineate and conspicuously flag all sensitive aquatic resources to prevent impacts to these resources. If required, setback or non-disturbance buffer zones around these resources will be established and monitored by a biologist.

Mitigation Measure BIO-2: Special-Status Reptile Protective Measures

1. A Service approved biologist will conduct preconstruction surveys and monitor for San Francisco garter snake prior to implementation of project activities. If San Francisco garter snakes are identified at the project site, work will be halted. If the identified animal(s) do not leave the project area of their own volition, the Service and California Department of Fish and Wildlife will be contacted to determine appropriate actions. Only Service-approved biologists will participate in activities associated with the capture, handling, or relocation of San Francisco garter snake.

*Best Management Practices*

BMP – 1: Staging and Stockpiling of Materials

1. All construction-related items, including equipment, stockpiled material, temporary erosion control treatments, and trash will be removed within 72 hours of project completion. All residual soils and/or materials will be cleared from the project site.

BMP – 2: On-Site Hazardous Materials Management

1. The products used and/or expected to be used and the end products that are produced and/or expected to be produced after their use will be inventoried.

2. As appropriate, containers will be properly labeled with a "Hazardous Waste" label and hazardous waste will be properly recycled or disposed of off-site.

3. Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage.

4. Petroleum products, chemicals, cement, fuels, lubricants, and nonstorm drainage water or water contaminated with the aforementioned materials shall not be allowed to enter receiving waters or the storm drainage system.

5. Sanitation facilities (e.g., portable toilets) will be surrounded by a berm, and a direct connection to the storm drainage system or receiving water will be avoided.

6. Sanitation facilities will be regularly cleaned and/or replaced, and inspected regularly for leaks and spills.

7. Waste disposal containers will be covered when they are not in use, and a direct connection to the storm drainage system or receiving water will be avoided.

8. All trash that is brought to a project site during construction activities (e.g., plastic water bottles, plastic lunch bags, food waste) will be removed from the site daily.

BMP – 3: Fire Prevention

1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.

2. During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site.

3. On days when the fire danger is high, flammable materials will be kept at least 10 feet away from any equipment that could produce a spark, fire, or flame.

4. On days when the fire danger is high, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials unless at least one round-point shovel or fire extinguisher is within immediate reach of the work crew (no more 25 feet away from the work area).

BMP – 4: Reduce Spread of Invasive Species

1. To prevent the spread of invasive species, all equipment will be washed prior to entering the project site, with special attention on cleaning the undercarriage and wheels of the vehicles. In the event that high- or medium-priority noxious weeds are disturbed or removed during construction or construction-related activities, the contractor should contain the plant material associated with these noxious weeds and dispose of it in a manner that will not promote the spread of the species. Areas where noxious weeds are disturbed or removed will be immediately replanted with fast-growing native grasses or a native erosion control seed mixture. If seeding is not possible the area will be covered with heavy black plastic solarization material until the end of the project.

**Action Area**

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." For the proposed project, the action area encompasses the approximately 2.91 miles of roads plus 300 foot buffer from the construction footprint boundary. Within this buffer area beyond the construction footprint, California red-legged frogs and San Francisco garter snake have the potential to be affected by noise and visual disturbance.

**Analytical Framework for the Jeopardy Determination**

The following analysis relies on four components to support the jeopardy determination for the California red-legged frog and San Francisco garter snake: (1) the *Status of the Species*, which evaluates the species' range wide condition, the factors responsible for that condition, and their survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of these species in the action area, the factors responsible for that condition, and the role of the action area in the species' survival and recovery; (3) the *Effects of the Action*, which determines the direct and indirect effects of the proposed Federal action and the effects of any interrelated or interdependent activities on these species; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on these three species.

In accordance with the implementing regulations for Section 7 and Service policy, the jeopardy determination is made in the following manner: the effects of the proposed Federal action are evaluated in the context of the aggregate effects of all factors that have contributed to the current status of the California red-legged frog and San Francisco garter snake. Additionally, for non-Federal activities in the action area, we will evaluate those actions likely to affect the species in the future, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both its survival and recovery in the wild.

The following analysis places an emphasis on using the range-wide survival and recovery needs of the California red-legged frog San Francisco garter snake, and the role of the action area in providing for those needs as the context for evaluating the significance of the effects of the proposed programmatic Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

**Analytical Framework Adverse Modification**

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

In accordance with policy and regulation, the adverse modification analysis in this biological opinion relies on four components: (1) the *Status of Critical Habitat*, which evaluates the range-wide condition of critical habitat for the California red-legged frog in terms of primary constituent elements (PCE)s, the factors responsible for that condition, and the intended recovery function of the critical habitat at the provincial and range-wide scale; (2) the *Environmental Baseline*, which evaluates the condition of the critical habitat in the action area, the factors responsible for that condition, and the recovery role of the critical habitat in the action area; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the PCEs and how that will influence the recovery role of affected critical habitat units and; (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the PCEs and how that will influence the recovery role of affected critical habitat units.

For purposes of the adverse modification determination, the effects of the proposed Federal action on the California red-legged frog critical habitat are evaluated in the context of the range-wide condition of the critical habitat at the provincial and range-wide scales, taking into account any cumulative effects, to determine if the critical habitat range-wide would remain functional (or would

retain the current ability for the PCEs to be functionally established in areas of currently unsuitable but capable habitat) to serve its intended recovery role for the California red-legged frog.

The analysis in this biological opinion places an emphasis on using the intended range-wide recovery function of California red-legged frog critical habitat and the role of the action area relative to that intended function as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the adverse modification determination.

**Status of the Species**

*California Red-legged Frog and California Red-legged Frog Critical Habitat*

Refer to pages 13 through 19 of the Programmatic Biological Opinion for the current status of the California red-legged frog and its critical habitat.

*San Francisco Garter Snake*

Refer to the *San Francisco Garter Snake (Thamnophis sirtalis tetrataenia) 5-Year Review: Summary and Evaluation* (Service 2006) for the current Status of the Species.

**Environmental Baseline**

The action area is entirely next to or uphill of Pilarcitos Creek. Vegetation in the action area consists of coastal scrub, mixed riparian and alder scrub habitat, wetland (seep) habitat, annual grassland and coast redwood forest. Coastal scrub is present along all three roads. Mixed riparian and alder scrub habitat are present along Pilarcitos Creek and other small tributaries. Two seep wetlands occur along Pilarcitos Creek Road. Annual grassland covers most of the west-facing slope in the canyon. Coast redwood forest is present west of the survey area and at the northern end of the survey area. In addition there are minimal amounts of ruderal vegetation along the unpaved roads, shoulders and pull outs that are subject to regular disturbance.

*California Red-legged Frog*

An individual California red-legged frog was observed in the action area on July 16, 2014 during surveys for the Project. The individual was located in upland habitat adjacent to Pilarcitos Creek. Aquatic breeding habitat is present in the survey area and California red-legged frog could use Pilarcitos Creek as a year round movement and dispersal corridor.

*California Red-legged Frog Critical Habitat*

The action area for the project site is located within the California red-legged frog's designated critical habitat unit SNM-l, Cahill Ridge. This unit is approximately 34,952 acres, located in north central San Mateo County, and contains aquatic habitat for breeding and non-breeding activities (PCE 1 and PCE 2), and upland habitat for foraging and dispersal activities (PCE 3 and PCE 4).

Unit SNM-l contains high-quality permanent and ephemeral aquatic habitats consisting of ponds and streams surrounded by riparian and emergent vegetation that provides for breeding and upland

areas for dispersal, shelter, and food. The unit represents the only unit in the San Francisco peninsula, and would assist in maintaining the distribution of the California red-legged frog population within the San Francisco area, and provide connectivity to units farther south into Santa Cruz County. The action area contains all four PCE's identified within the critical habitat designation: aquatic habitat suitable for breeding (PCE 1), aquatic non-breeding habitat (PCE 2), upland habitat for foraging (PCE 3), and upland habitat for dispersal (PCE 4). Threats that may require special management in this unit are development and nonnative invasive plants.

*San Francisco Garter Snake*

There is limited suitable habitat for this species in the survey area. Pilarcitos Creek within the action area does not have open water habitat or an abundance of emergent marsh vegetation; however Pilarcitos Creek can serve as a distribution corridor. No San Francisco garter snakes have been observed within the project site, but the project site is within the current range of the species, contains suitable riparian habitat for foraging, and contains its preferred prey item, the California red-legged frog. The nearest occurrences of San Francisco garter snake is approximately 1 mile north of the site, in the San Francisco State Fish and Game Refuge. Based on documented occurrences near the action area, the presence of habitat, and the biology and ecology of the species it is likely that San Francisco garter snake occur in the action area.

**Effects of the Action**

*California Red-legged Frog*

The proposed action will result in temporary effects to a total of 0.095 acre of California red-legged frog non-breeding aquatic habitat, upland foraging, and dispersal habitat within the action area. The proposed action will result in permanent effects to a total of 0.142 acre of California red-legged frog non breeding aquatic habitat, upland foraging, and dispersal habitat within the action area. No breeding habitat would be affected by project implementation because none of the project treatments would result in loss or degradation of the existing small pools in the action area. All vegetated areas that are disturbed will be restored with locally appropriate native vegetation.

The proposed action is anticipated to result in temporary disturbance of non-breeding, upland and dispersal habitat lasting less than one year from the completion of the Project. Rapid vegetation recovery is anticipated in the action area based on several conditions that promote rapid growth of vegetation. These include a cool coastal influence, typical of the area; the presence of perennial flow; and the active seeding. Full recovery of grasses and other herbaceous vegetation suitable for foraging and dispersal habitat for California red-legged frogs is anticipated within one year of completion of the project.

Limiting the staging areas to previously disturbed areas, and demarcating overland access routes to the shortest necessary to accomplish the project, with minimal disturbance to soil and vegetation, will avoid and minimize direct impacts to habitat for the California red-legged frog.

The proposed action may result in the following effects analyzed in the Programmatic Biological Opinion. These effects will be reduced by implementing the Conservation Measures in the Biological Opinion.

Direct effects to California red-legged frogs may include injury or mortality from being crushed by earth moving equipment, construction debris, and worker foot traffic. These impacts would be reduced by minimizing and clearly demarcating the boundaries of the action area and equipment access routes and locating staging areas outside of riparian areas or other water bodies. Avoiding work activities during the breeding season would reduce adverse impacts, particularly to eggs and tadpoles. In addition, relocating individual California red-legged frogs may further minimize injury or mortality.

Work activities, including noise and vibration, may harass California red-legged frog by causing them to leave the work area. This disturbance may increase the potential for predation and desiccation. Minimizing the area disturbed by proposed action activities and constraining activities to seasonal limits would reduce the potential for dispersal resulting from the action.

The potential exists for uninformed workers to intentionally or unintentionally harass, injure, harm, or kill a California red-legged frog. The potential for this impact could be greatly reduced by informing workers of the presence and protected status of this species and the measures that are being implemented to protect it during proposed action activities.

Trash left during or after proposed action activities could attract predators to work sites, which could, in turn, harass or prey on the listed species. For example, raccoons are attracted to trash and also prey opportunistically on the California red-legged frog. This potential impact can be reduced or avoided by careful control of waste products at all work sites.

The capture and handling of California red-legged frogs to move them from a work area involves harassment of individuals. Mortality may occur as a result of improper handling, containment, or transport of individuals or from releasing them into unsuitable habitat. Improper handling, containment, or transport of individuals would be reduced or prevented by use of a Service-approved biologist.

Accidental spills of hazardous materials or careless fueling or oiling of vehicles or equipment could degrade water quality or upland habitat to a degree where the California red-legged frog is adversely affected or killed. The potential for this impact to occur can be reduced by thoroughly informing workers of the importance of preventing hazardous materials from entering the environment, locating staging and fueling areas a minimum of 50 feet from riparian areas or other water bodies, and by having an effective spill response plan in place.

Temporary effects from loss of vegetative cover that provides sheltering and foraging habitat for the species would be minimized and compensated for by implementing the proposed restoration actions and monitoring to ensure that such effects to habitat do not extend more than one year from completion of the disturbance activities at a given work site.

*California Red-legged Frog Critical Habitat*

The proposed action will result in temporary effects to a total of 0.095 acres of California red-legged frog non-breeding aquatic habitat, upland foraging, and dispersal habitat within the action area. The proposed action will result in permanent effects to a total of 0.142 acre of California red-legged frog non breeding aquatic habitat, upland foraging, and dispersal habitat within the action area. No

breeding habitat would be affected by project implementation because none of the project treatments would result in loss or degradation of the existing small pools in the action area.

Implementation of the proposed project will directly affect 0.142 acres of critical habitat unit SNM-1 for the California red-legged frog. These effects include the permanent alteration of 0.142 acre of aquatic non-breeding (PCE 2) habitat for the restoration of scoured waterways. In addition, 0.095 acre of aquatic non-breeding habitat and of upland (PCE 3) and dispersal (PCE 4) habitat will be temporarily affected, but will be returned to pre-project conditions after construction of the proposed project.

The permanent alteration of 0.142 acres of the 34, 952 acres in critical habitat unit SNM-1 is minimal and will not appreciably diminish the value or function of the California red-legged frog designated critical habitat. This critical habitat unit, the only one in the San Francisco peninsula, will continue to serve its intended recovery function by supporting all four of the PCEs that are essential to the conservation of the California red-legged frog, maintaining the distribution of the California red-legged frog population within the San Francisco peninsula, and providing connectivity to units further south into Santa Cruz County. Therefore, the PCEs in Unit SNM-1 will remain intact, contributing to the high conservation value of the unit as a whole, and sustaining the unit's role in the conservation and recovery of the species.

*San Francisco Garter Snake*

The proposed project will result in the temporary disturbance of 0.095 acres of San Francisco garter snake dispersal habitat within the action area. The proposed action will result in permanent effects to a total of 0.142 acre dispersal habitat within the action area. Full recovery of temporarily disturbed dispersal habitat for San Francisco garter snake is anticipated within one year of completion of the project. Rapid vegetation recovery is anticipated in the action area based on several conditions that promote rapid growth of vegetation. These include a cool coastal influence, typical of the area; the presence of perennial flow; and the active seeding. Full recovery of grasses and other herbaceous vegetation suitable for foraging and dispersal habitat for of San Francisco garter snake is anticipated within one year of completion of the project.

Limiting the staging areas to previously disturbed areas, and demarcating overland access routes to the shortest necessary to accomplish the project, with minimal disturbance to soil and vegetation, would avoid and minimize direct impacts to habitat for the of San Francisco garter snake.

Direct effects to of San Francisco garter snake may include injury or mortality from being crushed by earth moving equipment, construction debris, and worker foot traffic. These impacts would be reduced by minimizing and clearly demarcating the boundaries of the action area and equipment access routes and locating staging areas outside of riparian areas or other water bodies and worker education.

Work activities, including noise and vibration, may harass of San Francisco garter snake by causing them to leave the work area. This disturbance may increase the potential for predation. Minimizing the area disturbed by proposed action activities would reduce the potential for dispersal resulting from the action.

The potential exists for uninformed workers to intentionally or unintentionally harass, injure, harm, or kill a of San Francisco garter snake. The potential for this impact could be greatly reduced by informing workers of the presence and protected status of this species and the measures that are being implemented to protect it during proposed action activities.

Trash left during or after proposed action activities could attract predators to work sites, which could, in turn, harass or prey on the listed species. For example, raccoons are attracted to trash and also prey opportunistically on the of San Francisco garter snake. This potential impact can be reduced or avoided by careful control of waste products at all work sites.

Accidental spills of hazardous materials or careless fueling or oiling of vehicles or equipment could degrade water quality or upland habitat to a degree where the San Francisco garter snake is adversely affected or killed. The potential for this impact to occur can be reduced by thoroughly informing workers of the importance of preventing hazardous materials from entering the environment, locating staging and fueling areas a minimum of 50 feet from riparian areas or other water bodies, and by having an effective spill response plan in place.

Temporary effects from loss of vegetative cover that provides sheltering and foraging habitat for the species would be minimized and compensated for by implementing the proposed restoration actions and monitoring to ensure that such effects to habitat do not extend more than one year from completion of the disturbance activities at a given work site.

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species.

**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. During this consultation, the Service did not identify any future non-federal actions that are reasonably certain to occur in the action area of the proposed project.

**Conclusion**

*California Red-legged Frog and California Red-Legged Frog Critical Habitat*

The proposed project, as described, fits within the parameters of the level of effects analyzed in the Programmatic Biological Opinion and is not likely to jeopardize the continued existence of the species or adversely modify its designated critical habitat.

*San Francisco Garter Snake*

After reviewing the current status of the San Francisco garter snake, the environmental baseline for the action area, the effects of the proposed project, and cumulative effects on the species, it is the Service's biological opinion that the proposed project, as described herein, is not likely to jeopardize the continued existence of the San Francisco garter snake. We based this determination on the

following: (1) the implementation of conservation measures, as described in the Description of the Proposed Action of this biological opinion, which minimize the potential for harassment, harm, injury, and mortality of the San Francisco garter snake; (2) the small amount of impacts due to the proposed project; and (3) the restoration of all areas temporarily disturbed.

## INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by FWS regulations at 50 CFR 17.3 as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the same regulations as an act which actually kills or injures wildlife. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the Corps so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to assume and implement the terms and conditions or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Corps must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR §402.14(i)(3)].

### Amount or Extent of Take

The Service anticipates that incidental take of the California red-legged frog will be difficult to detect because of their life history. California red legged frog can be difficult to locate due to their cryptic appearance and finding a dead or injured individual is unlikely due to their relatively small size. Losses of California red-legged frog may also be difficult to quantify due to seasonal fluctuations in their numbers, random environmental events, changes in water regime at their breeding ponds, or additional environmental disturbances. Therefore the Service anticipates that all California red-legged frogs within the action area will be subject to incidental take in the form of non-lethal harm and harassment In addition, the Service anticipates that no more than one (1) California red-legged frog will be subject to incidental take in the form of death or injury as a result of construction-related activities. Upon implementation of the following Reasonable and Prudent Measures, incidental take of California red-legged frog associated with the project will become exempt from the prohibitions described in section 9 of the Act. No other forms of take are exempted under this opinion.

The Service anticipates that incidental take of the San Francisco garter snake will be difficult to detect due to their low density, life history and the dense vegetative cover within the project footprint. Therefore the Service anticipates that all San Francisco garter snake within the action area will be subject to incidental take in the form of non-lethal harm and harassment. In addition, the Service expects that no San Francisco garter snake will be subject to incidental take in the form of death or injury as a result of construction-related activities as a result of conservations measures. Upon implementation of the following Reasonable and Prudent Measures, incidental take of San Francisco garter snake associated with the project will become exempt from the prohibitions described in section 9 of the Act. No other forms of take are exempted under this opinion.

**Effect of the Take**

The proposed action, as described, fits within the parameters of the level of take anticipated in the Programmatic Biological Opinion and the Service has determined that this level of anticipated take is not likely to result in jeopardy to the California red-legged frog.

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the San Francisco garter snake.

**Reasonable and Prudent Measures**

The Service has determined that the following reasonable and prudent measure is necessary and appropriate to minimize impacts of incidental take of the California red-legged frog and San Francisco garter snake:

> The Corps will minimize effects to the California red-legged frog and San Francisco garter snake and their habitat resulting from project related activities by following this biological opinion and the Programmatic Biological Opinion as modified by the terms and conditions below.

**Terms and Conditions**

In order to be exempt from the prohibitions of section 9 of the Act, the Corps shall ensure the permittee complies with the following Terms and Conditions, which implement the Reasonable and Prudent Measure described above. These Terms and Conditions are nondiscretionary.

The following Terms and Conditions implement the Reasonable and Prudent Measure:

1. The permittee, San Mateo RCD, shall fully implement all the Conservation Measures as described in this biological opinion and the Programmatic Biological Opinion.

2. The Corps and the San Mateo RCD shall comply with the reporting requirements as described in the Programmatic Biological Opinion.

## 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. The Service recommends the following actions:

1. To avoid transferring disease or pathogens while handling amphibians, the Corps should encourage all applicants to follow the Declining Amphibian Populations Task Force Fieldwork Code of Practice.

2. Sightings of any listed or sensitive animal species should be reported to CDFW's CNDDB. A copy of the reporting form and a topographic map clearly marked with the location the animals were observed should also be provided to the Service

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

## REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the Coastside County Water District Property Rural Roads Improvement Project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service where discretionary Federal agency involvement or control over the action has been retained or is authorized by law and:

(a) If the amount or extent of taking specified in the incidental take statement is exceeded;
(b) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
(c) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or
(d) If a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions regarding this biological opinion, please contact Leif Goude, Biologist, (leif_goude@fws.gov) or Ryan Olah, Division Chief (ryan_olah@fws.gov), at the letterhead address, (916-414-6659) or by e-mail.

Sincerely,

Jennifer M. Norris
Field Supervisor

cc:
Irina Kogan, San Mateo Resource Conservation District, Half Moon Bay, California