

# RECLAMATION

## *Managing Water in the West*

Environmental Assessment

### **Contra Costa Resource Conservation District Recovery Actions for California Red-legged Frog and California Tiger Salamander Project, Phase 2**

18-24-MP



U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region

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## **Mission Statements**

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# List of Abbreviations and Acronyms

BO	Biological Opinion
CCRCD	Contra Costa Resource Conservation District
CDFW	California Department of Fish and Wildlife
CRLF	California red-legged frog
CTS	California tiger salamander
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
EA	Environmental Assessment
HRP	Habitat Restoration Program
NRCS	Natural Resources Conservation Service
Reclamation	Bureau of Reclamation
USFWS	U.S. Fish and Wildlife Service

# Section 1 Introduction

In conformance with the National Environmental Policy Act of 1969, as amended, Council on Environmental Quality regulations (40 CFR 1500-1508), and Department of the Interior Regulations (43 CFR Part 46), the Bureau of Reclamation (Reclamation) prepared this Environmental Assessment (EA) to analyze the potential environmental effects associated with providing funding for Phase 2 of the *Recovery Actions for California Red-legged Frog and California Tiger Salamander in Contra Costa County* project. Reclamation proposes to provide funds to Contra Costa Resource Conservation District (CCRDC) to implement this second phase of the project and restore one additional livestock pond in Contra Costa County. In 2015, Reclamation awarded \$149,922 in grant funding from the Central Valley Project Improvement Act (CVPIA) Habitat Restoration Program (HRP) to the CCRDC to restore four livestock ponds.

In 2017, Reclamation issued CCRDC \$135,922 of the \$149,922 available through the CVPIA HRP grant to improve three of the four livestock ponds through a cooperative agreement between CCRDC and the landowners. At the time, a cooperative agreement between CCRDC and the participating landowner of the remaining livestock pond was not yet signed, so restoration activities could not be completed during the U.S. Fish and Wildlife Service (USFWS)-permitted construction period. An Environmental Assessment (15-27-MP) was prepared for the restoration of the three ponds (Phase 1) and a Finding of No Significant Impact was issued on October 11, 2017.

This EA evaluates and discloses any potential environmental impacts associated with issuing the remaining \$14,000 in CVPIA HRP funds for Phase 2 of the project to restore Bayberry pond, the final livestock pond. The Bayberry pond is located in the Lime Ridge Open Space, owned by the Walnut Creek Open Space Foundation (Figure 1). The project would increase the pond's annual duration of ponding to both support ongoing cattle operations and to enhance breeding habitats for the federally-listed as threatened California red-legged frog (*Rana draytonii*; CRLF) and California tiger salamander (*Ambystoma californiense*; CTS).

The CCRDC has partnered with the Natural Resources Conservation Service (NRCS) to implement the Alameda and Contra Costa County Wildlife-friendly Livestock Pond and Rangeland Health Initiative. Phase 2 project activities fall under the covered activities of the Alameda and Contra Costa County Wildlife-friendly Livestock Pond and Rangeland Health Initiative. NRCS would contribute funding to the project for planning, design, engineering, construction oversight and environmental compliance. As such, NRCS has been designated as the lead federal agency for formal consultation under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. NRCS has prepared a categorical exclusion under the National Environmental Policy Act for their action of issuing funding to CCRDC.

## 1.1 Background

Livestock ponds have become vital breeding habitat for the CRLF and CTS in California since much of the species' natural habitats have been altered or lost (Ford *et al.* 2013). The USFWS Recovery Plan for the CRLF states that for many populations, artificial ponds are now the

principal sources of young frogs that annually repopulate the system and give stability and predictability to habitats that would not otherwise be present (USFWS 2002). These ponds can be detrimental to the species if they become filled with sediment and are not maintained (USFWS 2002). The USFWS Recovery Plan for the Central California Distinct Population Segment of the CTS further states that “many livestock ponds have a lifespan of 30-50 years and will require spillway/berm repair and sediment or vegetation removal during this time span” and urges federal agencies and other responsible parties to “ensure that funding is secured for maintenance of CTS breeding ponds on protected habitat in perpetuity” as a Priority 1 action (Recovery Action 1.2.2) that must be taken to prevent extinction, or to prevent the species from declining irreversibly (USFWS 2017).



**Figure 1. Project Location**

In Contra Costa County, livestock ponds installed by private landowners 30 to 60 years ago are approaching failure due to deterioration of impoundment structures and embankments, inadequate spillway construction, or through accumulation of sediment from erosion of



surrounding uplands that reduces the capacity of the ponds to hold water. Restoration of the livestock ponds would enhance habitats for numerous wildlife species by reducing erosion and transport of sediment into the ponds. Reduced pond sedimentation would also lengthen the time during the summer and fall months when the ponds contain standing water which will provide a more reliable water source to support continued livestock grazing operations.

Upland habitats surrounding livestock ponds require stewardship to maximize benefits to CRLF and CTS inhabiting annual grassland-dominated uplands during the non-breeding period. Both species inhabit rodent burrows and other subterranean or cool sheltered upland sites during summer and fall when open water is no longer available. Improvement of the upland habitat around the livestock ponds, primarily through managed cattle grazing, would improve conditions for CRLF and CTS by reducing the height and density of vegetation that can impair access to and from the ponds for breeding adults and dispersing juveniles.

## **1.2 Need for the Proposed Action**

The CVPIA HRP was established by Reclamation and the U.S. Fish and Wildlife Service in Title 34, Section 3406 (b)(I) "other" of the CVPIA to ensure that the existing operation of the Central Valley Project (CVP) and renewal of CVP water service contracts would not jeopardize listed or proposed species or adversely affect designated or proposed critical habitat. Accordingly, the CVPIA HRP implements actions that will protect, restore, and enhance special-status species and their habitats affected by the CVP.

Reclamation's CVP has had significant impacts on CRLF and CTS through the delivery of water to CVP contractors that has facilitated the conversion of vernal pools and seasonal wetlands supporting the species to agricultural and other uses in the Central Valley. The USFWS has prioritized the maintenance and enhancement of livestock ponds in the Recovery Plans for both species, therefore the Proposed Action to assist with the recovery of listed species is in the public's interest. Reclamation funds for the Proposed Action would assist with removal of sediment from the pond bottom to increase its duration of ponding, thereby allowing the CCRCD and its partners to conduct a project to assist in the recovery of the CRLF and CTS.

## **Section 2 Alternatives Including Proposed Action**

This EA considers two possible actions: "No Action Alternative" and "Proposed Action". The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the environment.

### **2.1 No Action Alternative**

Under the No Action Alternative, Reclamation would not provide grant funding from the CVPIA HRP to CCRCD to restore the Bayberry Pond. For the purposes of this EA, the No Action Alternative considers that absent Reclamation funding the livestock pond would not be restored. It would continue to contain an amount of sediment that limits the ability of the pond to support flexible cattle grazing operations or to provide habitat for CTS and CRLF.

## 2.2 Proposed Action

Reclamation would provide \$14,000 from the CVPIA HRP to CCRCD to partially fund the restoration of Bayberry pond. Project activities would remove silt from the livestock pond, thereby increasing its annual ponding duration from 8 months (November through June, at present) to 9 months (November through July, after project implementation). The project designs would follow Contra Costa County Voluntary Local Program. The Voluntary Local Program identifies wildlife-friendly pond specifications for improving habitats for CTS and CRLF and management of upland habitat to benefit CTS and CRLF. CCRCD and the California Department of Fish and Wildlife (CDFW) have collaboratively developed the Voluntary Local Program to provide a permitting solution for impacts to species listed by CDFW under the California Endangered Species Act. The purpose of the Voluntary Local Program is to encourage farmers and ranchers engaged in agricultural activities to voluntarily enhance and maintain habitat for endangered and threatened species on their lands.

### 2.2.1 Livestock Pond Restoration Activities

At the 0.15-acre Bayberry Pond, approximately 485 cubic yards of sediment would be removed from the pond. No work would take place on the pond's impoundment structures or embankments, or within its spillway. Sediment removed from the pond would be placed in a predesignated on-site location situated to prevent new sediment from re-entering the pond during future precipitation runoff. The specific location of the disposal site would be determined by CCRCD staff overseeing the project and a USFWS/CDFW-approved biologist. The sediment would be placed over approximately 0.1 acres of upland currently supporting nonnative annual grassland. Disturbed areas would be seeded with a native grasses and forbs mixture to stabilize the soil and prevent future erosion. The seed mix that would be used is listed in Table 1.

**Table 1. Disturbed Area Seed Mix**

Species	Common Name	Pounds/acre
<i>Stipa pulchra</i>	Purple needlegrass	3
<i>Eschscholzia californica</i>	California poppy	3
<i>Bromus carinatus</i>	California brome	10
<i>Elymus glaucus</i>	Blue wild rye	8
<b>Total</b>		<b>24</b>

### Dewatering Plan

No standing water is expected to be present in the pond during project implementation because of the time of year construction would occur. However, if standing water is present, the pond would be surveyed for CTS and CRLF by a USFWS/CDFW-permitted biologist before project activities begin. If necessary, water would be removed from the livestock pond using screened and filtered pumps. USFWS/CDFW permitted biologists would be on-site during all dewatering activities. Any native species detected in the livestock pond would be moved to the nearest appropriate location as determined by the biologist, and in accordance with an approved USFWS Relocation Plan.



## **Upland Management**

Approximately 200 acres around Bayberry pond would be managed after the restoration activities are completed to improve conditions for CTS and CRLF. The CCRCD would enter into a management agreement with the Walnut Creek Open Space Foundation which would include the use of managed grazing to provide optimal conditions for amphibians in the areas around the pond. Grazing would be enhanced from current flash-grazing operations due to the extended duration of ponding at Bayberry pond.

### **2.2.2 Equipment and Staging, Borrow Area, and Access**

The pond is located within 10-20 feet of an existing access road, and no new roads or modifications to the existing road would be necessary for equipment to access the site, sediment deposition area, and the staging area. The staging area would be approximately 0.04 acres in size and would be located along the existing road adjacent to the pond. Equipment that may be used includes an excavator, loader, pump, dump truck, and tools for hand labor as needed. The area where the removed sediment would be deposited is located directly adjacent to the existing access road.

### **2.2.3 Construction Schedule**

Project work is planned to occur between August 31, 2019 and October 31, 2019, from Monday through Friday between 6 a.m. and 7 p.m. Any deviation from that schedule would only occur after coordination with CDFW and USFWS and receipt of all necessary Federal and State permits and authorizations.

### **2.2.4 Avoidance and Minimization Measures**

Numerous avoidance and minimization measures under the Contra Costa County Voluntary Local Program would be implemented during project activities to limit impacts to biological resources and water quality, detailed in Table 2. Environmental consequences for resource areas that follow assume the measures specified would be fully implemented, and that the project receives all permits and approvals required to proceed.

**Table 2. Environmental Protection Measures**

<b>Environmental Protection Measures</b>
<b>Biological Resources: General Measures</b>
The following general measures will be implemented: <ul style="list-style-type: none"><li>• A qualified biologist shall conduct preconstruction surveys immediately prior to ground disturbing activities. If at any point the ground disturbance ceases for more than five consecutive days, additional surveys shall be conducted prior to resuming management practices.</li><li>• A qualified biologist shall provide an education presentation for all persons employed or otherwise working on management practices before performing any work. The presentation shall include a discussion of the biology and general behavior of the listed species, information about the distribution and habitat needs of the listed species, sensitivity of the listed species to human activities, and its status pursuant to the Federal Endangered Species Act and California Endangered Species Act. The qualified biologist shall provide a fact sheet</li></ul>

containing this information for workers (in English and other languages as needed) to carry while performing management practices.

- Construction activities shall be conducted only during daylight hours.
- All steep-walled trenches and holes deeper than 6-inches shall be covered at night or an escape ramp shall be placed in them to facilitate escape by any wildlife that may fall into the excavated area. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle of no greater than 30 degrees. Trenches and holes shall be checked every morning prior to construction activity. If a listed species is present in the trench or hole, a qualified biologist shall be notified immediately, and no construction activity shall take place within 100 feet of the site until the animal is relocated.
- No plastic or monofilament erosion control material shall be used near riparian habitat, along the perimeter of ponds, or near other aquatic habitat.
- For any dewatering activities, water will be diverted by installation of a temporary barrier. All water above the barrier will be diverted downstream at an appropriate rate to maintain downstream flows during construction. A qualified biologist, with all necessary State and Federal permits shall relocate fish, amphibians and other native aquatic species within the project site. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Adequate water depth and channel width will be maintained at all times to allow for fish passage. When construction is completed, the barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance possible to the substrate.
- Rodent burrows shall be avoided to the maximum extent practicable when constructing beneficial activities that involve surface disturbance.

#### **Biological Resources: CTS and CRLF**

The following measures would also be implemented for the CTS and CRLF:

- Structural components repair at ponds shall take place between August 31 and October 31 (or the first rainfall of the season depositing more than 0.25 inch) when larval development of CTS and other amphibians is likely to be complete and ponds have less water present. Applying temporal limitations to when pond activities are occurring provides the best avoidance measure to limit impacts on in-pond and surrounding upland populations.
- A qualified biologist shall be present on site during all grading, dewatering, riparian or aquatic vegetation removal activities. The qualified biologist shall monitor implementation of the management practices for listed species. The qualified biologist shall be responsible for inspecting construction vehicles, equipment, materials/supplies, storage areas or otherwise suitable locations for listed species to hide each morning before construction begins. The qualified biologist shall inspect all dredged and excavated materials for listed species. If a CTS or CRLF is found, it shall be allowed to leave the Project Area on its own, or if it can be safely captured it shall be relocated by the qualified biologist to a suitable location outside of the Project Area. Construction shall not begin until the qualified biologist has reported the area clear of the listed species.
- Restoration activities shall take place between August 31 and October 31 (or the first rainfall of the season depositing more than 0.25 inch) when larval development of CTS and other amphibians is likely to be complete and ponds have less water present. Applying temporal limitations to when pond activities are occurring provides the best avoidance measure to limit impacts on in-pond and surrounding upland populations.

<ul style="list-style-type: none"> <li>• Sediment removal during pond maintenance/restoration shall be placed where it shall not pass into CTS breeding pools; nor shall it pass into any other waters of the state as per California Fish and Game Code section 5650.</li> <li>• Sediment shall not be placed over areas with ground squirrel burrows.</li> <li>• Excavation and grading shall only be conducted during dry weather.</li> </ul>
<b>Biological Resources: Alameda Whipsnake</b>
<p>The following measures would also be implemented for the Alameda whipsnake:</p> <ul style="list-style-type: none"> <li>• All rock outcroppings shall be avoided to minimize effects on Alameda whipsnake.</li> <li>• Disturbance in known or potential Alameda whipsnake habitat shall only take place between June 15 and October 31, when the Alameda whipsnake is more active and less likely to be impacted.</li> </ul>
<b>Biological Resources: San Joaquin kit fox</b>
<p>The following measure would also be implemented for the San Joaquin kit fox:</p> <ul style="list-style-type: none"> <li>• If preconstruction surveys determine that there is potential for San Joaquin kit foxes or their dens to be present within upland habitat at a project site, then the project will adhere to the current Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance.</li> </ul>
<b>Water Quality</b>
<p>The following measure would be implemented for water quality:</p> <ul style="list-style-type: none"> <li>• Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channels and avoiding areas of concentrated ground squirrel burrows suitable for use by listed species. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream or pond shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away from the stream prior to refueling or lubrication.</li> </ul>

## Section 3      Affected Environment

### 3.1      Biological Resources

The project area provides foraging and nesting habitats for resident and migratory songbirds, small mammals, amphibians, reptiles, and other wildlife. CTS and CRLF habitats occur in and around the Bayberry pond, but the livestock pond no longer has sufficient capacity to support the duration of ponding necessary to provide sufficient water for cattle in the summer season, nor to provide sufficient time for young CTS and CRLF to develop to adulthood before the pond dries out.

Coyote brush (*Baccharis pilularis*) and willows (*Salix spp.*) surround half of the livestock pond, providing cover for wildlife and moist habitats even after the pond dries. Upland vegetation surrounding the livestock pond is dominated by nonnative annual grasses, with oaks and other

trees present in the immediate vicinity of the pond. Annual grasslands surrounding the pond contains rodent burrows and cracks that can provide shelter. High intensity-short duration grazing by cattle is used for a few days most years on surrounding uplands, as needed, to reduce the amount of vegetative biomass and to maximize environmental benefits of the grasslands to wildlife. The grazing regime is limited to the hydroperiod of the Bayberry pond, which is generally November through June.

Reclamation obtained a listing of federally-listed endangered, threatened, proposed, and candidate species and critical habitat using USFWS's Information for Planning and Consultation tool and conducted a search of the California Natural Diversity Database on July 18, 2019 (USFWS 2019; CDFW 2019). Biological resources identified for further consideration are the CRFL, CTS, as well as federally- and state-listed as threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*), the federally-listed as endangered and state-listed as threatened San Joaquin kit fox (*Vulpes macrotis mutica*), and state-listed as threatened Swainson's hawk (*Buteo swainsoni*). The California Natural Diversity Database includes occurrences of CTS within one mile of the livestock pond.

State fully-protected species in the area include the golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Numerous state species of special concern are present in the area, including the California horned lizard (*Phrynosoma coronatum (frontale)*), western pond turtle (*Clemmys marmorata*), western spadefoot (*Spea hammondi*), American badger (*Taxidea taxus*), greater western mastiff bat (*Eumops perotis californicus*), pallid bat (*Antrozous pallidus*), silver-haired bat (*Lasionycteris noctivagans*), northern harrier (*Circus cyaneus*), tricolored blackbird (*Agelaius tricolor*), loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), and prairie falcon (*Falco mexicanus*).

### **3.2 Land Use and Agriculture**

Lime Ridge Open Space, where the Bayberry pond is located, is open to the public and provides multi-use trails for hiking and biking, and facilities for picnicking and nature study. The Bayberry pond is approximately 125 feet from the multi-use Cottonwood Trail at Lime Ridge Open Space.

The area around the Bayberry pond is grazed under a high-intensity, short-duration grazing regime. Cattle are present in the late spring or early summer each year to the extent the vegetation allows. Income derived from grazing the site contributes marginally to the local agricultural economy.

### **3.3 Water Resources**

Originally established in the 1990s to support cattle-grazing operations, the Bayberry pond (Figure 2) is approximately 0.15 acre in surface area. The pond is filled through rainfall runoff and is enclosed by a fence to control grazing in and around the pond. The Bayberry pond is the middle pond in a three-pond complex, with the two adjacent ponds on the property that may provide habitat for aquatic species.

The pond embankment and spillway are both in stable condition, but the pond is filled-in with sediment from decades of soil and other material flowing into the pond from surrounding uplands. The pond has become shallow and is approaching functional failure, from both a habitat and livestock grazing infrastructure standpoint, due to the sediment accumulation.



**Figure 2. Bayberry Pond**

## **Section 4      Environmental Consequences**

This section identifies the potentially affected environmental resources and the environmental consequences that could result from the No Action and Proposed Action Alternatives.

### **4.1      Required Resource Discussions**

Federal legislation, Department of the Interior regulations, Executive Orders, and Reclamation guidelines require a discussion of the following resources.

#### **4.1.1      Indian Trust Assets**

Indian Trust Assets are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. There are no Indian reservations, rancherias or allotments in the project area. The closest Indian Trust Asset is the Lytton Rancheria about 18 miles to the east of the project area. The Proposed Action would have no effect on Indian Trust Assets (Appendix A).

### **4.1.2 Indian Sacred Sites**

Executive Order 13007 (May 24, 1996) requires that federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. The Proposed Action would not be located on Federal lands and therefore would not affect access to or use of Indian sacred sites on federal lands.

### **4.1.3 Environmental Justice**

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. Reclamation has not identified adverse human health or environmental effects on any population resulting from implementation of the Proposed Action. Therefore, the Proposed Action would not have a significant or disproportionately negative impact on minority or low-income populations.

### **4.1.4 Cultural Resources**

Reclamation determined that the expenditure of Federal funds is an undertaking as defined in 36 CFR § 800.16(y) and involves the type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a). Pursuant to 36 CFR 800.2(a)(2) Reclamation designated the NRCS as lead Federal agency to fulfil the agencies' collective responsibilities under Section 106 of the National Historic Preservation Act. In an effort to identify historic properties in the APE, NRCS conducted a records search and pedestrian survey of the Area of Potential Effects. No cultural resources were identified. NRCS also received concurrence from the State Historic Preservation Officer by letter dated May 16, 2019, of a determination of no adverse effects to Historic Properties for the proposed project. Reclamation determined that the proposed action will not have significant impacts on properties listed or eligible for listing in the in the National Register of Historic Places (Appendix B).

## **4.2 Biological Resources**

### **4.2.1 No Action**

Under the No Action alternative, project activities would not be completed. Bayberry pond would continue to contain sediment that reduces its capacity to hold enough water for breeding amphibians and to support livestock grazing. The livestock pond's capacity to hold water sufficient to support livestock grazing may be reduced to the level that it no longer is economically or practically feasible for the Walnut Creek Open Space foundation to graze the site. That would reduce their ability to manage the vegetation at the site to enhance access to and from the pond for breeding adults and dispersing juvenile CTS and CRLF. Benefits to other wildlife species may be reduced as well.

### **4.2.2 Proposed Action**

Construction-related activities have the potential to affect a variety of wildlife species that use grassland habitats around the livestock pond. During construction, it is anticipated that most terrestrial wildlife species, including CRLF and CTS, would temporarily relocate to other areas due to increased disturbance and activity from project. The USFWS/CDFW-permitted biologists

would approve the location of sediment disposal site and staging area to ensure no estivating adult CTS and CRLF are present. Any displaced wildlife is expected to return to the area after project construction is completed.

The Proposed Action could result in short term impacts to CTS, CRLF, Alameda whipsnake, and San Joaquin kit fox. Implementation of avoidance and minimization measure discussed in Section 2.2.4, and implementation of the Conservation Measures in a programmatic biological opinion issued to NRCS by the USFWS, would minimize adverse effects, but some injury or mortality may still occur.

Migratory birds, including state-designated sensitive bird species, and their habitats are protected under the Migratory Bird Treaty Act, as amended (16 U.S.C 703 et seq.). The Proposed Action would occur outside the birds' nesting season (February 15 to August 30), and birds can readily flee the area if disturbed by construction activities. Due to the timing and short duration of pond restoration activities, construction is not expected to affect any bird species.

The project would provide long-term benefits to CTS and CRLF that would contribute toward recovery of the species' populations. Restoration of the livestock pond would improve CTS and CRLF breeding habitat through an increase in the period of ponding in a normal rainfall year. In addition, managed grazing in the project area would increase benefits to CTS, CRLF, and other wildlife by promoting more vigorous growth of vegetation post-grazing. Long-term benefits of the project would include improved CTS and CRLF breeding habitats, better management of upland habitats surrounding the livestock pond to support CTS and CRLF dispersal, and improved habitat connectivity between other ponds in the vicinity, allowing CTS and CRLF to more easily travel between the livestock ponds in the surrounding area.

## **4.3 Land Use and Agriculture**

### **4.3.1 No Action**

Under the No Action alternative, Reclamation would not provide funding for the livestock pond restoration, and land use at the project area would remain unchanged. The livestock pond would remain at risk of becoming non-functional and no longer supporting cattle grazing operations.

### **4.3.2 Proposed Action**

Project activities would not prohibit the use of the nearby Cottonwood Trail nor interfere with any other recreational activities. Project implementation is anticipated to occur when the livestock pond is dry and not being used by cattle. The project is therefore not expected to have any effect recreation or on livestock operations.

Upon completion of the project, the livestock pond would hold water for a longer period and would establish a more reliable water supply for cattle.



## **4.4 Water Resources**

### **4.4.1 No Action**

Under the No Action alternative, Reclamation would not provide funding for the project and no restoration activities would occur. The livestock ponds would continue to fill with sediment and be at risk of becoming non-functional and no longer able to support cattle grazing operations.

### **4.4.2 Proposed Action**

Site preparation for the project would include ground disturbing activities, including minor clearing and soil excavation, and removal of sediment from the pond bottom. The total area of disturbance would be 0.29 acres, including approximately 0.15 acre of pond area, 0.1 acre of upland area where the sediment would be deposited, and the 0.04 acre staging area. Construction activities have the potential to temporarily impair water quality if disturbed soil, petroleum products, or construction-related wastes are accidentally discharged into receiving waters or onto the ground where they can be carried into receiving waters. Under the terms of the Contra Costa Voluntary Local Program, dust control measures would be implemented to prevent dust from being generated during construction activities. Precautions would be followed to avoid erosion and movement of soils into drainage systems. Implementation of best management practices and permit requirements would reduce water quality impacts from construction.

NRCS would obtain a State Waste Discharge Requirement permit from the San Francisco Bay Water Quality Control Board for the activities at Bayberry pond. Implementation of mitigation measures listed above, and Waste Discharge Requirement permit requirements would reduce water quality impacts from construction.

Maintenance activities on livestock ponds are exempt from Section 404 of the Clean Water Act under Nationwide Permit 40 (Agricultural Activities). The proposed action is consistent with normal farming practice and would support ongoing cattle ranching operations. Cattle would continue to use the livestock ponds after implementation of the Proposed Action. Therefore, obtaining a Section 404 permit from the U.S. Army Corps of Engineers is not required as long as the action is in compliance with Regional Water Quality Control Board requirements, per Clean Water Act Section 401.

The Proposed Action would restore livestock pond functionality through removal of sediment that has accumulated in the decades since the livestock pond was constructed. The increased pond depth would improve water temperatures and water quality in the ponds.

## **4.5 Cumulative Effects**

According to Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act, a cumulative impact is defined as an impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

There are no adverse impacts associated with implementing the Proposed Action, and therefore there are no cumulative effects to consider.

## **Section 5 Consultation and Coordination**

### **5.1 Agencies and Persons Consulted**

Reclamation consulted with the Natural Resources Conservation Service and the Contra Costa Resource Conservation District in the preparation of this EA.

### **5.2 CVPIA HRP Technical Team**

CVPIA HRP managers are guided by a Technical Team of biologists and natural resource specialists from Reclamation, USFWS, and CDFW. The purpose of the Technical Team is to implement a collaborative and integrated multi-agency process to coordinate actions under state and federal laws to aid in recovery of CVP-impacted listed species. The Technical Team helps ensure the HRP is operated consistent with USFWS biological opinions (USFWS 2000) that guide implementation of the HRP to mitigate for past impacts to species from operation of the CVP. The Technical Team provides guidance and recommendations to HRP managers regarding program priorities and projects to be funded.

During the period of October 2014 through February 2015, members of the Technical Team reviewed and scored proposals submitted to Reclamation for consideration for funding. CCRDC's proposal to restore livestock ponds to enhance habitat for federally-listed species was recommended for funding by the Team. Reclamation and USFWS management subsequently approved the Technical Team's recommendation that the project be funded on March 5, 2015.

### **5.3 Endangered Species Act (16 USC § 1531 et seq.)**

A Programmatic Biological Opinion (BO) was issued to NRCS on August 11, 2015. NRCS' Biological Opinion covers funding assistance to private land owners and managers to implement projects that result in habitat improvements, vegetation management, erosion and drainage control, improved water quality, and conservation. Livestock pond improvement activities meet the criteria specified in the BO. NRCS submitted a request to USFWS to append the BO to include the Bayberry pond restoration activities and obtain take coverage. The request was submitted on June 27, 2019. USFWS issued the appended BO on September 5, 2019 (Appendix C).

Reclamation determined that providing funding to implement project activities would have no additional adverse effects beyond what is described in the appended BO. However, if new information is made available, the project description changes, appendments to NRCS' BO are not adequately established, or CCRDC and NRCS do not fully comply with the measures listed in this EA and prescribed in the appended BO, Reclamation would revisit its Endangered Species Act responsibility.

## Section 6      References

- California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database. Rarefind electronic database.  
<http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp>.  
Accessed July 18, 2019.
- Ford, L.D., P.A. Van Hoorn, D.R. Rao, N.J. Scott, P.C. Trenham, and J.W. Bartolome. 2013. Managing Rangelands to Benefit California Red-legged Frogs and California Tiger Salamanders. Livermore, California: Alameda County Resource Conservation District. Web. [http://www.rangelandconservation.com/Documents/ManagingRangelandsCRLF\\_CTS.pdf](http://www.rangelandconservation.com/Documents/ManagingRangelandsCRLF_CTS.pdf) Accessed. June 14, 2018.
- U.S. Fish & Wildlife Service (USFWS). 2000. Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP. Sacramento Fish and Wildlife Office. Sacramento, California.
- U.S. Fish and Wildlife Service (USFWS). 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon. 173 pp.
- U.S. Fish and Wildlife Service (USFWS). 2017. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Region 8, Sacramento, California. 75 pp.
- U.S. Fish and Wildlife Service (USFWS). 2019. Information for Planning and Conservation. Web. <http://ecos.fws.gov/ipac/project/UTA6HY33ZZEY7OIGDYCTUBPR4M/resources>  
Accessed July 18, 2019.

## **Appendix A**

### **Indian Trust Assets Compliance**

**Indian Trust Assets  
Request Form**

\*\*Please send your request to: Kevin Clancy, [kclancy@usbr.gov](mailto:kclancy@usbr.gov)

**Date:**

<b>Requested by</b>	Katie Flahive, x 5044
<b>Fund</b>	18XR0680A3
<b>WBS</b>	RX304249930250000
<b>Cost Center</b>	2015200
<b>Region # (if other than MP)</b>	MP
<b>Project Name</b>	Recovery Actions for California Red-legged Frog and California Tiger Salamander in Contra Costa County Phase 2
<b>CEC or EA Number</b>	
<b>Project Description</b>	Reclamation would provide funding from the Habitat Restoration Program to the Contra Costa Resource Conservation District to improve an existing livestock pond by removing sediment that has accumulated in the bottom of the pond.
<b>*Project Location (Township, Range, Section, e.g., T12 R5E S10, or XY cords)</b>	<b><u>Bayberry Pond (Walnut Creek Open Space Foundation) - 0.15 ac</u></b>  Quad: Walnut Creek/Clayton Township: 1 S Range: 1 E Section: 17  Longitude and Latitude: W -122.003549 N 37.933832

\*Please include map with request, if available.

**ITA Determination:**

The closest ITA to the proposed Recovery Actions for California Red-legged Frog and California Tiger Salamander in Contra Costa County Phase 2 project is Lytton Rancheria which is approximately 18 miles east of the project area. (See attached image).

Based on the nature of the planned work it **does not** appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the proposed action **will not** have any impacts on ITAs.

*K. Clancy*

Signature

Kevin Clancy

Printed name of approver

7/29/2019

Date

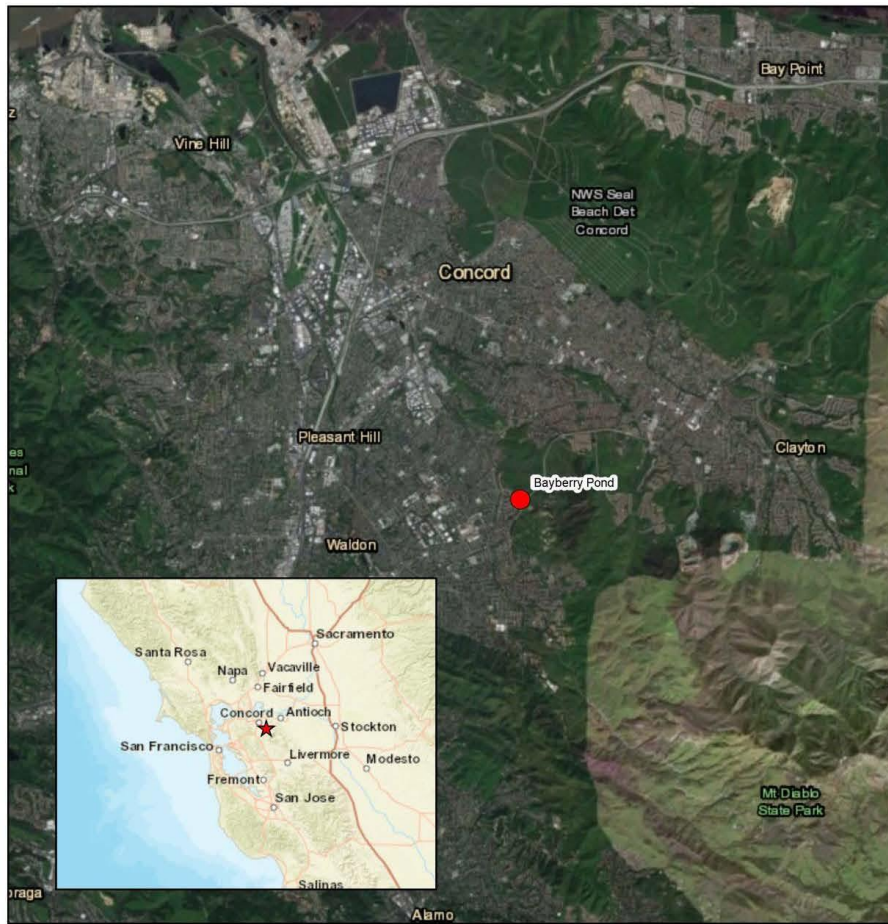
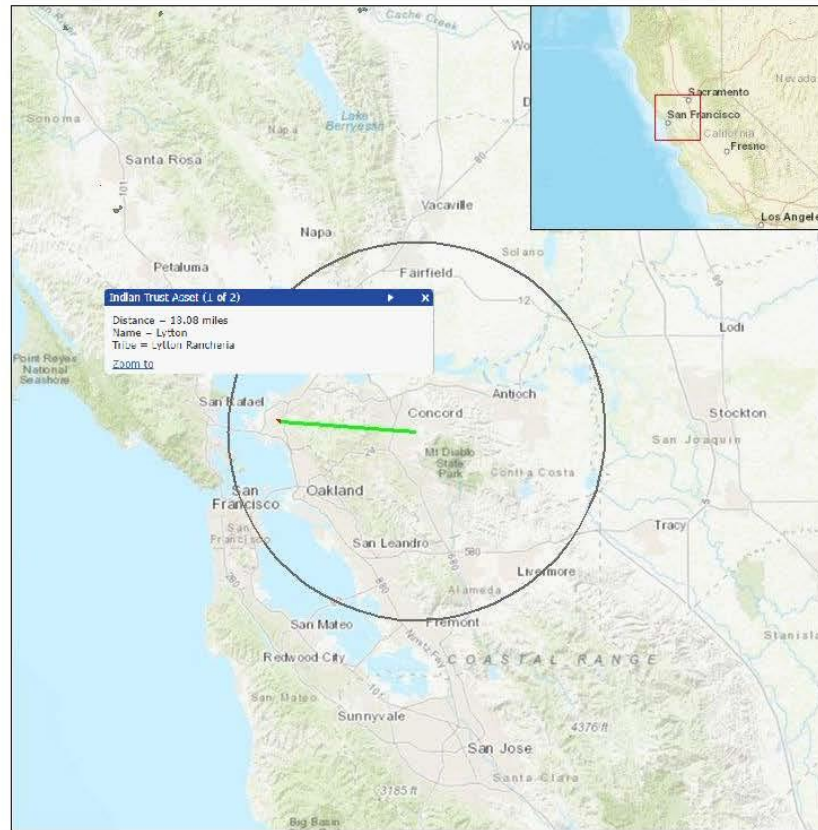


Figure 1. Location Map



# Recovery Actions for CRLF and CTS,

**RECLAMATION**  
Managing Water in the West



**Legend**  
Native American Lands FL  
PDA  
Rancheria

0 10 20  
Miles



DISCLAIMER: This map and data are provided as-is and are intended for general reference only. None of the parties involved in preparing this map or data contained herein warrant or represent information to be complete and accurate.

Author: Bureau of Reclamation  
Date: 7/25/2019

Figure 2. Tessel Results

# **Appendix B**

## **Cultural Resources Compliance**

**CULTURAL RESOURCE COMPLIANCE**  
**Mid-Pacific Region**  
**Division of Environmental Affairs**  
**Cultural Resources Branch**

**MP-153 Tracking Number:** 18-SCAO-080

**Project Name:** Contra Costa Resource Conservation District Recovery Actions for California Red-legged Frog and California Tiger Salamander Project, Phase 2

**NEPA Document:** EA 18-24-MP

**MP 153 Cultural Resources Reviewer:** Mark Carper

**NEPA Contact:** Kaitlin Flahive

**Determination:** No Historic Properties Affected

**Date:** August 1, 2019

---

Reclamation proposes to provide grant funding from the Central Valley Project Improvement Act (CVPIA) Habitat Restoration Program (HRP) to the Contra Costa Resource Conservation District (CCRDC) in coordination with the Natural Resources Conservation Service (NRCS) to conduct livestock pond rehabilitation at the Bayberry Pond located at Lime Ridge Open Space in Contra Costa County, California. Reclamation determined that the expenditure of Federal funds is an undertaking as defined in 36 CFR § 800.16(y) and involves the type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a).

Pursuant to 36 CFR 800.2(a)(2) Reclamation designated the NRCS as lead Federal agency to fulfil the agencies' collective responsibilities under Section 106 of the National Historic Preservation Act.

At the 0.15-acre Bayberry Pond, approximately 485 cubic yards of sediment would be removed from the pond to increase its duration of ponding. No work would take place on the pond's impoundment structures or embankments, or within its spillway.

Sediment removed from the pond would be placed in a predesignated on-site location situated to prevent new sediment from re-entering the pond during future precipitation runoff. The sediment would be placed over approximately 0.1 acres of upland currently supporting nonnative annual grassland. The spread sediment and disturbed areas resulting from equipment delivering and depositing the sediment would be seeded with a

**CULTURAL RESOURCE COMPLIANCE**  
**Mid-Pacific Region**  
**Division of Environmental Affairs**  
**Cultural Resources Branch**

mixture of native grasses and forbs to stabilize the soil and prevent future erosion through precipitation runoff.

In an effort to identify historic properties in the APE, NRCS conducted a records search and pedestrian survey of the APE. No cultural resources were identified.

Pursuant to the regulations at 36 CFR § 800.3(f)(2), NRCS identified the Lone Band of Miwok and Wilton Rancheria as Indian tribes who might attach religious and cultural significance to historic properties within the APE. NRCS sent letters to the tribes inviting their participation in the Section 106 process and requesting their assistance in the identification of sites of religious and cultural significance or historic properties that may be affected by the proposed undertaking pursuant to 36 CFR § 800.4(a)(4). To date there has been no responses specific to Bayberry Pond.

NRCS received concurrence from the State Historic Preservation Officer by letter dated May 16, 2019, of a determination of no adverse effects to Historic Properties for the proposed project.

After reviewing this EA I concur that this action would not have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places

This memorandum is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.

# **Appendix C**

## **Endangered Species Act Compliance**



## United States Department of the Interior

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



In Reply Refer to:  
08ESMF00-  
2019-F-2865

SEP 05 2019

Ms. Jackie Charbonneau  
Ecologist  
USDA Natural Resources Conservation Service  
3585 Greenville Road, Suite #2  
Livermore, California 94550

Subject: Appending the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects in Contra Costa County, California to the August 11, 2015 *Programmatic Formal Consultation on the Natural Resources Conservation Service's Conservation Practices in Contra Costa County, California*

Dear Ms. Charbonneau:

This letter is in response to the U.S. Department of Agriculture – Natural Resource Conservation Service's (NRCS) June 27, 2019, request for initiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects (Project) in Contra Costa, California. Your request was received by the Service on June 27, 2019. At issue are the Project's effects on the federally threatened California red-legged frog (*Rana draytonii*), Central California Distinct Population Segment (DPS) of the California tiger salamander (*Ambystoma californiense*; Central California tiger salamander), and Alameda whipsnake (*Masticophis lateralis euryxanthus*). There is no designated critical habitat for the California red-legged frog, the Central California tiger salamander, or the Alameda whipsnake within the action area. This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

The federal action on which we are consulting is the issuance of an Environmental Quality Incentives Program (EQIP) contract by NRCS to Mr. Paul Daysh (Cooperator) to improve the distribution, availability, and reliability of livestock and wildlife water, improve wildlife habitat, and the resiliency of the grazing operation on the city of Walnut Creek's Open Space Division's land. Pursuant to 50 CFR 402.12(j), NRCS submitted a biological assessment for the Service's review and requested concurrence with the findings presented therein. These findings conclude that the Project may affect, and is likely to adversely affect the California red-legged frog, Central California tiger salamander, and Alameda whipsnake.

Your letter requested that the Project be appended to the August 11, 2015, *Programmatic Formal Consultation on the Natural Resources Conservation Service's Conservation Practices in Contra Costa County, California* (Service File Number 08ESMF00-2015-F-0928; NRCS Contra Costa County Programmatic Biological Opinion). The Project is a Covered Activity (Livestock and Wildlife Water

Distribution), meets all other criteria specified in the NRCS Contra Costa County Programmatic Biological Opinion, and is within the geographic area analyzed in the NRCS Contra Costa County Programmatic Biological Opinion. This letter is an agreement by the Service to append the Project to the NRCS Contra Costa County Programmatic Biological Opinion and represents the Service's biological opinion on the effects of this action to the California red-legged frog, Central California tiger salamander, and Alameda whipsnake.

In considering your request, we based our evaluation on the following: (1) the NRCS letter requesting formal consultation dated June 27, 2019; (2) the Biological Assessment enclosed with the June 27, 2019, letter; (3) additional information exchanged on this Project between the NRCS and the Service; (4) the NRCS Contra Costa County Programmatic Biological Opinion dated August 11, 2015; and (5) other information available to the Service.

The remainder of this document provides our biological opinion on the effects of the Project on the California red-legged frog, Central California tiger salamander, and Alameda whipsnake.

### **Consultation History**

June 27, 2019	The Service received the consultation request from the NRCS.
July 23, 2019	The Service requested and received additional clarifying information from the NRCS.

## **BIOLOGICAL OPINION**

### **Description of the Action**

#### *Background*

The NRCS requested to append the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects to the NRCS Contra Costa County Programmatic Biological Opinion on behalf of the grazing tenant, Mr. Paul Daysh (Cooperator), who entered into an EQIP contract through NRCS. The Cooperator leases approximately 1,630 acres of the City of Walnut Creek's Open Space Division's rangeland, Lime Ridge Open Space Area (244 acres; Figure 1) and Shell Ridge Open Space Area (1,386 acres; Figure 2). The Cooperator uses a cow/calf operation as a management tool to reduce fine fuel loads and control thatch and weeds. Vegetation management components of the program include the protection of rangeland and reduced fuel loads, target weed control, livestock water availability, and the resiliency of the grazing operation.

#### *Lime Ridge Open Space Area*

The Cooperator leases 244 acres of Lime Ridge Open Space Area (Lime Ridge) west of Ygnacio Valley Road for grazing purposes. This Project's EQIP contract on Lime Ridge will restore one seasonal pond (Bayberry Pond) and reduce erosion and sediment transport to the pond by stabilizing an active gully in the uplands. The gully is a result of water runoff from the west side on Ygnacio Valley Road. An in-board ditch connects to an existing 30-foot long by 18-inch wide culvert with a small rock apron at the outlet. Active downcutting starts beyond the rock apron and continues for approximately 200 feet downslope. Work is aimed at stabilizing the gully by redirecting road runoff using additional culvert pipe, adding a plunge pool, and a rock check dam system at discrete locations to trap sediments and buttress the steep gully bank to control the velocity of the water. The Project will improve available water for wildlife and livestock and will ultimately improve overall rangeland health and prolong the functionality of the pond. Additional funding is being provided through a grant from the Bureau of Reclamation (BOR) that the Contra Costa Resource Conservation District has obtained.





Figure 1. Lime Ridge Open Space approximately 244 acres between Treat Boulevard, to the north, and Ygnacio Valley Road to the south in Walnut Creek, California.

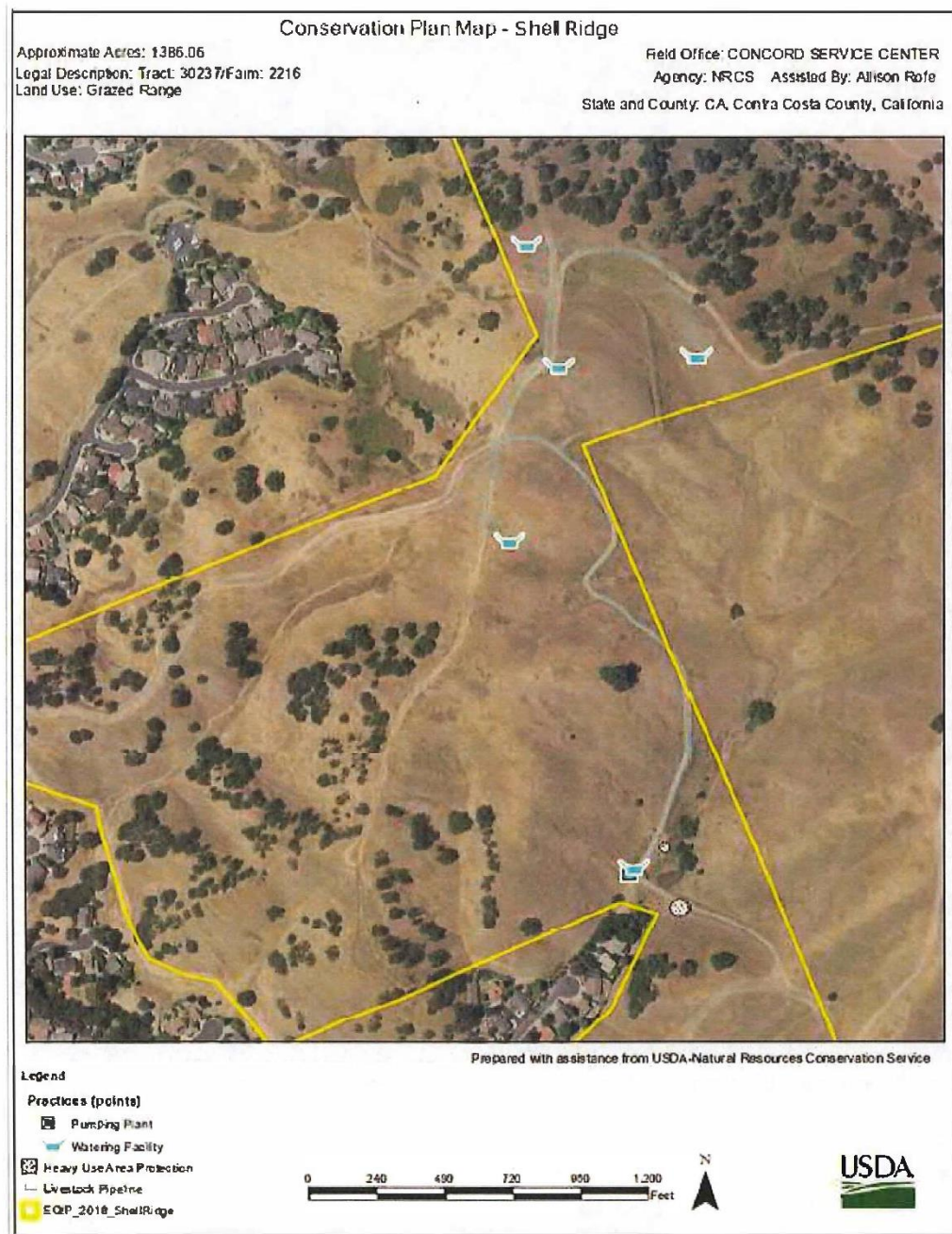


Figure 2. Shell Ridge Open Space Area Project area is south of Ygnacio Valley Road on the southwest side of this open space near Robb Road in the City of Walnut Creek.

Bayberry Pond work includes sediment removal to a maximum depth at 3 feet at pond center; no work will take place on the existing embankment or spillway. Standing water will most likely not be present in this pond during construction. If standing water is present, conservation measures



consistent with the NRCS Contra Costa County Programmatic Biological Opinion will be followed. Any native species detected will be moved to the nearest appropriate location as determined by the Service-approved biologist. The spoils will be moved to an area approximately 100 feet northwest of the pond site. All removed sediment will be spread and placed in a predesignated location (specified below), as determined by the Engineer and the Service-approved biologist, so it will not re-enter the pond or waterway. The equipment and material staging area will be located along an existing access road adjacent to Bayberry Pond. Equipment that will be used at the site includes an excavator, loader, pump, dump truck, and hand labor. Established fuel breaks and trails will be utilized for pond dredging and spoil placement activity. The placed spoils will be seeded with an appropriate grass/forb mix.

The gully repair work includes installation of a 210-foot culvert pipe that will be attached to the existing 30-foot culvert. A 13' x 9' rock-lined plunge pool will be installed at the outlet of the culvert extension and the extension will convey water to the base of the slope and be released to the plunge pool. A series of rock check dams will be installed below the plunge pool to trap sediment and reduce water velocity. The check dams will be roughly 2' (h) x 8.5' (l) x 3' (w). These improvements will help stabilize gully and soil movement by delivering road runoff to the base of the erodible slope and releasing it to a stable outlet. The plunge pool and check dam system will ensure water velocities remain gentle to prevent future/additional soil erosion and allow for natural recruitment of vegetation to help further stabilize the banks. A designated flat area nearby will be used for equipment and material staging. Equipment that will be used at the site includes an excavator, bulldozer, dump truck, loader, and hand labor. The existing trail and fire break lines will allow for access to the gully site. All disturbed areas will be seeded with an appropriate grass/forb mix.

#### *Shell Ridge Open Space Area*

The Cooperator leases 1,386 acres of Shell Ridge Open Space Area (Shell Ridge) in Contra Costa County for grazing purposes. This Project's EQIP contract on Shell Ridge includes a new livestock water system that will allow the southern portion of Shell Ridge to be properly grazed and reduce fire risk to adjacent neighborhoods of Walnut Creek.

The new water system plan includes connecting to a municipal water source. The municipal water source will feed into a 1,000 gallon below-ground storage tank. The underground tank will be outfitted with a 1 horsepower solar pump that will pump and deliver 5-gallons-per-minute of water approximately 213 feet in elevation to a 5,000 gallon above-ground storage tank and gravity fed to three 600-gallon cement troughs. Approximately 5,000 feet of buried 1.25" high density polyethylene (HDPE) pipeline will be installed to distribute the water. Roughly 3,415 feet of pipeline will be installed in existing ranch roads and 1,585 feet will be directly buried off-road, primarily in an annual grassland setting. All three new troughs and five existing troughs will be installed or outfitted with gravel pads to support a stable non-eroding surface.

All HDPE pipeline will be installed with a dozer that has a modified blade shank attachment. The dozer is outfitted with a spooling reel of HDPE pipeline with a three-foot long shank that will trench and bury pipeline all in one pass reducing the effects to the habitat. Trenches are typically 18 to 24" deep and 2 feet wide. Equipment includes a dozer, back hoe, hand labor, and a skid steer will also be used for delivery of materials. Access and staging will be along existing ranch roads.

#### *Conservation Measures*

The NRCS and the Cooperator will implement the Conservation Measures specified in the NRCS Contra Costa County Programmatic Biological Opinion (Reference Number: 08ESMF00-2015-F-0928, dated August 11, 2015). These measures will reduce sedimentation and erosion from

construction activities and minimize adverse effects to listed species and their habitats.

### 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 purpose of the effects analysis, the action area is consistent with that on page 11 of the NRCS Contra Costa County Programmatic Biological Opinion, which includes all of Contra Costa County, and occurs within the boundaries of the 244 acre grazing lease of Lime Ridge Open Space Area and 1,386 acres of Shell Ridge Open Space Area. However, this particular construction footprint will occur on 0.77 acre within these grazing lessees.

### Analytical Framework for the Jeopardy Determination

Section 7(a)(2) of the Endangered Species Act requires that federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. “Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion considers the effects of the proposed federal action, and any cumulative effects, on the rangewide survival and recovery of the listed species. It relies on four components: (1) the *Status of the Species*, which describes the rangewide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which analyzes the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (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 species; and (4) the *Cumulative Effects*, which evaluates the effects of future, non-federal activities in the action area on the species.

### Status of the Species

#### *California Red-legged Frog*

Refer to page 12 of the NRCS Contra Costa County Programmatic Biological Opinion for the analysis of the status of the species for the California red-legged frog.

#### *Central California tiger salamander*

Refer to page 16 of the NRCS Contra Costa County Programmatic BO for the analysis of the status of the species for the Central California tiger salamander and for the most recent comprehensive assessment of the species’ range-wide status, please refer to the *Recovery Plan for the Central California Distinct Population Segment of the Central California tiger salamander (Ambystoma californiense)* (Service 2017).

#### *Alameda Whipsnake*

Refer to page 16 of the NRCS Contra Costa County Programmatic Biological Opinion for the analysis of the status of the species for the Alameda whipsnake and for the most recent comprehensive assessment of the species’ range-wide status, please refer to the *Alameda Whipsnake (Masticophis lateralis euryxanthus) 5-Year Review: Summary and Evaluation* (Service 2011).

## Environmental Baseline

### *General*

Under this 2015 NRCS Contra Costa County Programmatic Biological Opinion there have been eight projects resulting in 8.67 total acres of habitat disturbance granting lethal incidental take for a total of eight California red-legged frogs, five Central California tiger salamanders, and no Alameda whipsnakes or San Joaquin kit foxes. These projects reported incidental take in the form of non-lethal harm via relocation to 13 California red-legged frogs and one Central California tiger salamander during construction activities; no other non-lethal harm or lethal incidental take has been reported to any other species that is part of this NRCS Contra Costa County Programmatic Biological Opinion.

### *Habitats within the Action Area*

Lime Ridge is located on the eastern edge of Walnut Creek on a main ridge leading to Mount Diablo, containing some of the last remaining chaparral in Walnut Creek. Portions of Lime Ridge are within the City of Concord, managed by the city of Walnut Creek and open to the public. Within Lime Ridge, Bayberry Pond was reportedly constructed in the early 1990's when Lime Ridge Open Space was first acquired. This pond is very shallow and typically goes dry in May/June. It is excluded from cattle grazing and only flash grazed occasionally as a vegetation management tool. There is little emergent vegetation present at this pond; the surrounding vegetation is predominantly coyote brush and annual grasses. Bullfrogs are known to occur in the Contra Costa Canal approximately 0.6 miles away.

Shell Ridge is located just a short distance from downtown Walnut Creek and continues to Mount Diablo. The surrounding landscapes are comprised of a mosaic of blue oak woodlands, annuals grasslands, riparian corridors, and California sagebrush scrub. This is the city's largest open space area and is made up a series of parallel ridges and valleys. Livestock water is a limiting factor at Shell Ridge. Currently, livestock have access to some seasonal ponds and only a few newly installed water troughs in the northern portion of the park.

### *California Red-legged Frog*

Lime Ridge and Shell Ridge are located within the East San Francisco Bay Recovery Unit.

California Natural Diversity Database (CNDDB) has multiple records within dispersal distance of Lime Ridge and Shell Ridge. There is a CNDDB known breeding habitat occurrence approximately 3 miles southeast of Lime Ridge. Shell Ridge has multiple CNDDB known breeding habitat occurrences approximately 0.2 miles to the south, approximately 0.55 miles to the east, approximately 1.72 miles to the east and approximately 1.54 miles to the southeast of the action area. Both Lime Ridge and Shell Ridge consists of annual grassland and ponds (and a gully on Lime Ridge) provides aquatic breeding and dispersal habitat for a California red-legged frog. Therefore, based on the known locations of the California red-legged frogs within dispersal distance of the action area, it is reasonable to conclude the California red-legged frog will utilize the action area as dispersal, foraging, and breeding habitat.

### *Central California Tiger Salamander*

The stressor of human development surrounding three sides of Lime Ridge has created a loss of habitat for the Central California tiger salamander. However, there are multiple CNDDB known breeding habitat occurrences approximately 2.5 miles east at Naval Weapons Station Seal Beach Detachment Concord, CA property. Shell Ridge has a few seasonal ponds that may be suitable breeding habitat. There have not been recent surveys conducted within the action area to provide further information. However, the action area consists of annual grassland acting as

movement corridors in dispersal habitat. Therefore, due to historical CNDDDB records within dispersal distance and based on the suitable habitat present for the Central California tiger salamander within the action area, it is reasonable to conclude the Central California tiger salamander will utilize the action area for dispersal, foraging, and breeding habitat.

#### *Alameda Whipsnake*

The nearest known CNDDDB occurrences are approximately 0.74 miles south and approximately 0.79 miles southeast of Lime Ridge, close to Mount Diablo. Shell Ridge also has several known CNDDDB occurrences within dispersal distance of the Alameda whipsnake approximately 1.0 miles southwest, approximately 1.36 miles east, and approximately 1.97 miles east of the action area. The action area provides suitable foraging and dispersal habitat in the form of annual grassland with scrub nearby. Male Alameda whipsnakes may utilize the grasslands during spring mating season, while the females may occupy the grassland areas after mating for egg-laying sites. Therefore, based on the known locations of the Alameda whipsnake surrounding the action area it is reasonable to conclude the Alameda whipsnake will utilize the action area as foraging and dispersal habitat.

### **Effects of the Action**

#### *General*

The Lime Ridge aspect of this Project will result in approximately 0.54 acres of ground disturbance. Of that, approximately 0.10 acres will be in the form of temporary disturbance to the pond's surface, approximately 0.15 acres will be in the form of temporary disturbance to grassland from the dredging/spoil placement area, approximately 0.14 acres will be in the form of temporary disturbance to grassland from graded areas (cut) for the check dams and approximately 0.15 acres will be in the form of permanent disturbance to grassland from the installation of rock check dams. The Shell Ridge aspect of the Project will result in an additional approximately 0.26 acres of ground disturbance. Of that approximately 0.07 acres will be in the form of temporary disturbance to grassland from the pipeline installation, approximately 0.16 acres will be in the form of temporary disturbance to the existing ranch road from the pipeline installation, and approximately 0.03 acres will be in the form of permanent disturbance to grassland from the installation of gravel pads, tanks, and trough. Overall, the Project will result in approximately 0.80 acres of total direct disturbance; in total, approximately 0.62 acres will be in the form of temporary disturbance and approximately 0.18 acres will be in the form of permanent disturbance.

This livestock water distribution Project will improve the distribution and availability of livestock and wildlife water, prolong the hydroperiod through de-sedimentation of the pond and gully repair, and improve the resiliency of the grazing operation on the two properties. The plunge pool and rock check dams will be installed to trap sediment, reduce water velocity, and allow the banks to stabilize through revegetation. Providing water in troughs may also help reduce livestock impacts to nearby livestock ponds by extending the hydroperiod of these ponds for native wildlife. The planned troughs will also help the Cooperator manage the cattle to improve forage use, helping with undesired vegetation/weed management, plant diversity, and productivity. This Project will provide benefits to wildlife and livestock through these livestock water distribution practices.

#### *California Red-legged Frog and Central California Tiger Salamander*

Project construction could result in the injury or mortality to California red-legged frogs and/or Central California tiger salamanders from being crushed by earth moving equipment and construction debris resulting in injury or death during the construction of pipelines and placement of tanks and troughs. Different and variable noise and vibration levels may result in the displacement of California red-legged frogs and/or Central California tiger salamanders, increasing the potential for predation and/or desiccation as they vacate the action area. The placement and installation of the

troughs, tanks, pump, and well and the removal of sediment from the pond and gully repair work have the potential to disrupt the dispersal, foraging, and aquatic breeding habitat for California red-legged frogs and/or Central California tiger salamanders. These actions may benefit the California red-legged frog and/or Central California tiger salamander reducing the amount of time livestock spend in the drainage areas and improving the water quality in the stream and ponds, reducing sedimentation from streambank erosion, increasing the distribution of livestock within the grazing unit, and improving the stream and pond habitat quality. The small, approximately 0.80 acres, of effects to the species over the known range of the species will create minimal effects, and in short intensity and duration, to the species. In addition, the conservation minimization measures outlined in the NRCS Contra Costa County Programmatic Biological Opinion will further reduce effects to the California red-legged frog and/or Central California tiger salamander. To minimize injury or mortality, California red-legged frogs and/or Central California tiger salamanders found within the action area will be relocated outside of the Project action area by a Service approved biologist. The capture and handling of California red-legged frogs and/or Central California tiger salamanders to move them from the action area involves non-lethal take. Mortality may occur as a result of improper handling, containment, or transport of individuals; although, this will be reduced or prevented by use of a Service-approved biologist.

#### *Alameda Whipsnake*

During the Project's construction, there will be temporary and permanent habitat disturbance in the action area by the construction and placement of pipelines, tanks, troughs, sediment removal from the pond, and gully repair work. Temporary disturbance to foraging and dispersal habitat could also displace Alameda whipsnakes into adjacent areas due to increased levels of noise and vibration levels, human disturbance, and vehicle and construction equipment. The small, approximately 0.80 acres, of effects to the species over the known range of the species will create minimal effects, and in short intensity and duration, to the species. In addition, following the minimization measures outlined in the NRCS Contra Costa County Programmatic Biological Opinion will reduce these temporary construction effects. Displaced individuals could have increased potential for predation and reduce their ability to find necessary resources such as food and shelter. Alameda whipsnakes in the action area could become impaired and displaced during Project construction. However, following the minimization measures outlined in the NRCS Contra Costa County Programmatic Biological Opinion will reduce these effects.

#### **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 Project.

#### **Conclusion**

After reviewing the current status of California red-legged frog, Central California tiger salamander, and Alameda whipsnake, the environmental baseline for the action area, the effects of the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects, and the cumulative effects, it is the Service's biological opinion that the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects, as proposed, is not likely to jeopardize the continued existence of the California red-legged frog, Central California tiger salamander, and Alameda whipsnake. The Service reached this conclusion because the Project-related effects to the species, when added to the environmental



baseline and analyzed in consideration of all potential cumulative effects, will not rise to the level of precluding recovery or reducing the likelihood of survival of the species based on the following: (1) successful implementation of the conservation measures described in the NRCS Contra Costa County Programmatic Biological Opinion will minimize the adverse effects on individual California red-legged frog, Central California tiger salamander, and Alameda whipsnake; (2) installation of the livestock water distribution project should improve the distribution of the livestock on the grazing lease, improving the dispersal, foraging, refugia, and aquatic habitats for the California red-legged frog, Central California tiger salamander, and the foraging and dispersal habitat for the Alameda whipsnake within the action area; and (3) the short duration and intensity of the Project and the small acres of disturbance to the species over the known range of the species will create minimal effects.

### 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 Service 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 NRCS 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 NRCS has a continuing duty to regulate the activity covered by this incidental take statement. If the NRCS (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 NRCS 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

##### *California Red-legged Frog*

The Service anticipates that incidental take of the California red-legged frog will be difficult to detect due to its life history and ecology. Specifically, when California red-legged frogs are not in their breeding ponds, they may be difficult to locate due to their cryptic appearance, and finding a dead or injured individual is unlikely due to their relatively small body size, rapid carcass deterioration, and likelihood that the remains will be removed by a scavenger or indistinguishable amongst the disturbed soil and debris. 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 by capture and relocation. The Service anticipates that no more than one

(1) California red-legged frog will be subject to incidental take in the form of lethal harm or injured as a result of Project-related activities and would be detected by biological monitors.

Upon implementation of the following *Reasonable and Prudent Measures*, incidental take of California red-legged frog associated with the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects in the amount outlined above will become exempt from the prohibitions described in Section 9 of the Act. No other forms of take are exempted under this opinion.

*Central California Tiger Salamander*

The Service anticipates that incidental take of the Central California tiger salamanders will be difficult to detect due to its life history and ecology. Specifically, when Central California tiger salamanders are not in their breeding ponds, they may be difficult to locate due to their cryptic appearance, and finding a dead or injured individual is unlikely due to their relatively small body size, rapid carcass deterioration, and likelihood that the remains will be removed by a scavenger or indistinguishable amongst the disturbed soil and debris. Losses of Central California tiger salamanders 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, e.g., increased human activity or noise/vibration displacement due to project construction. Therefore, the Service anticipates that all Central California tiger salamanders within the action area will be subject to incidental take in the form of non-lethal harm by capture and relocation. The Service anticipates that no more than one (1) Central California tiger salamanders would be will be subject to incidental take in the form of lethal harm or injured as a result of Project-related activities and would be detected by biological monitors.

Upon implementation of the following *Reasonable and Prudent Measures*, incidental take of Central California tiger salamander associated with the City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects in the amount outlined above will become exempt from the prohibitions described in Section 9 of the Act. No other forms of take are exempted under this opinion.

*Alameda Whipsnake*

The Service anticipated that incidental take of the Alameda whipsnake will be difficult to detect due to its life history and ecology. Specifically, Alameda whipsnakes can be difficult to locate because they may range over a large territory and the finding of an injured or dead individual is unlikely because of their relatively small body size, rapid carcass deterioration, and likelihood that the remains will be removed by a scavenger or indistinguishable amongst the disturbed soil and debris. Therefore, the Service anticipates that all Alameda whipsnakes within the action area will be subject to incidental take in the form of non-lethal harm.

Upon implementation of the following *Reasonable and Prudent Measures*, incidental take of Alameda whipsnake associated with City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects in the amount outlined above will become exempt from the prohibitions described in Section 9 of the Act. No other forms of take are exempted under this opinion.

*Programmatic Biological Opinion Overall Amount or Extent of Take*

Under this 2015 NRCS Contra Costa County Programmatic Biological Opinion, including this Project, there have been nine projects resulting in 9.44 total acres of habitat disturbance granting incidental take for a total of nine California red-legged frogs, six Central California tiger salamanders, and no Alameda whipsnakes or San Joaquin kit foxes. These projects reported incidental take in the form of non-lethal harm via relocation to 13 California red-legged frogs and one Central California tiger salamander during construction activities; no other non-lethal harm or lethal incidental take has

been reported to any other species that is part of this NRCS Contra Costa County Programmatic Biological Opinion.

### **Effect of the Take**

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

### **Reasonable and Prudent Measures**

All necessary and appropriate measures to avoid or minimize effects on the California red-legged frog, Central California tiger salamander, and Alameda whipsnake resulting from implementation of this Project have been incorporated into the Project's proposed conservation measures. Therefore, the Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take of these three species:

1. All conservation measures, as described in the biological assessment and restated here in the Project Description section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the terms and conditions below.

### **Terms and Conditions**

In order to be exempt from the prohibitions of Section 9 of the Act, the NRCS must ensure compliance 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 NRCS shall include full implementation and adherence to the conservation measures as a condition of any permit or contract issued for the Project;
2. The NRCS shall require that all personnel associated with the Project are made aware of the Conservation Measures and the responsibility to implement them fully;
3. If requested, the applicant shall ensure the Service or their authorized agents can examine the action area for compliance with the Project Description, Programmatic Biological Opinion Conservation Measures, and Terms and Conditions before, during, or after Project completion.

### **Reporting Requirements:**

1. For those components of the action that may result in direct encounters between listed species and Project personnel, and their equipment, whereby incidental take in the form of harassment, harm, injury, or death is anticipated, the NRCS shall immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6623 to report direct encounters between listed species and Project personnel and their equipment whereby incidental take in the form of harassment, harm, injury, or death occurs. If the encounter occurs after normal working hours, the NRCS shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed

species are found, the NRCS shall follow the steps outlined in the Salvage and Disposition of Individuals section below.

2. For those components of the action that will require the capture and relocation of any listed species, the NRCS shall immediately contact the Service's SFWO at (916) 414-6623 to report the action. If capture and relocation need to occur after normal working hours, the NRCS shall contact the SFWO at the earliest possible opportunity the next working day.

### **Salvage and Disposition of Individuals**

Injured listed species must be cared for by a licensed veterinarian or other qualified person(s), such as the Service-approved biologist. Dead individuals must be sealed in a resealable plastic bag containing a paper with the date and time when the animal was found, the location where it was found, and the name of the person who found it, and the bag containing the specimen frozen in a freezer located in a secure site, until instructions are received from the Service regarding the disposition of the dead specimen. The SFWO Service contact person is the Coast Bay Division Chief of the Endangered Species Program at (916) 414-6623.

### **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. The NRCS should assist in the recovery goals outlined in the recovery plans for the California red-legged frog, Central California tiger salamander, and/or Alameda whipsnake.

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 City of Walnut Creek Open Space Division 2019 Daysh NRCS Projects. 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.

Ms. Jackie Charbonneau

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If you have any questions regarding this biological opinion, please contact Fish and Wildlife Biologist, Valerie Hentges, [Valerie\\_Hentges@fws.gov](mailto:Valerie_Hentges@fws.gov), (916) 414-6737 or the Coast Bay Division Chief, Ryan Olah, [Ryan\\_Olah@fws.gov](mailto:Ryan_Olah@fws.gov), (916) 414-6623 or at the letterhead address.

Sincerely,

  
6/ Jennifer M. Norris, Ph.D.  
Field Supervisor

### **Literature Cited**

- U.S. Fish and Wildlife Service. 2017. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. v + 69pp.
- \_\_\_\_\_. 2011. Alameda Whipsnake (*Masticophis lateralis euryxanthus*) 5-Year Review: Summary and Evaluation. Sacramento, California.