

Staff Recommendation
February 6, 2020

WATER FOR WILDLIFE, EAST BAY RANGELAND POND AND TROUGH ENHANCEMENT PROJECT

Project No. 19-037-01
Project Manager: Avra Heller

RECOMMENDED ACTION: Authorization to disburse up to \$485,993, to the Alameda County Resource Conservation District to implement the Water for Wildlife, East Bay Rangeland Pond and Trough Enhancement Project in Alameda and Contra Costa Counties, and adoption of findings under the California Environmental Quality Act.

LOCATION: Alameda and Contra Costa County Rangelands

PROGRAM CATEGORY: San Francisco Bay Area Conservancy Program

EXHIBITS

- Exhibit 1: [Project Location Map](#)
- Exhibit 2: [Project Design and Photos](#)
- Exhibit 3: [Final Mitigated Negative Declaration for The Alameda County Voluntary Local Program and associated Mitigation Monitoring and Reporting Program](#)
- Exhibit 4: [Final Mitigated Negative Declaration for The Contra Costa County Voluntary Local Program and associated Mitigation Monitoring and Reporting Program](#)
- Exhibit 5: [Project Letters](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160–31165 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed four hundred eighty five thousand nine hundred ninety three dollars (\$485,993) to the Alameda County Resource Conservation District (“the grantee”) to implement the Water for Wildlife, East Bay Rangeland Pond and Trough Enhancement Project in Alameda and Contra Costa Counties.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.
3. A plan for acknowledgement of Conservancy funding, and Proposition 1 as the source of that funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement, operate, and maintain the project.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 4.5 of Division 21 of the Public Resources Code, regarding the San Francisco Bay Area Conservancy Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The Conservancy has independently reviewed and considered the information contained in the following documents pursuant to the California Environmental Quality Act (“CEQA”) and attached to this staff recommendation as Exhibits 3 and 4, and finds that the proposed project as designed and mitigated avoids, reduces, or mitigates the potentially-significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382:
 - Final Mitigated Negative Declaration for The Alameda County Voluntary Local Program and associated Mitigation Monitoring and Reporting Program, adopted by the Alameda County Resource Conservation District on August 20, ^[REDACTED]2012;
 - Final Mitigated Negative Declaration for The Contra Costa County Voluntary Local Program and associated Mitigation Monitoring and Reporting Program, adopted by the Contra Costa Resource Conservation District on February 9, 2015.”

PROJECT SUMMARY:

Staff recommends that the Conservancy disburse up to \$485,993 to the Alameda County Resource Conservation District to carry out the Water for Wildlife, East Bay Rangeland Pond and Trough Enhancement Project (project). The project consists of the implementation of Best Management Practices for livestock watering facilities, which will support and enhance riparian ecosystems, improve habitat for listed species (with a focus on listed amphibians), and continue to support viable grazing on certain properties in Alameda and Contra Costa Counties. Through partnerships with local land managers, grazing lessees, and the Natural Resources Conservation Service (NRCS)'s Environmental Quality Incentives Program (EQIP), this project will restore six ponds and develop six livestock water systems across Alameda and Contra Costa counties.

Grazing comprises approximately 90% of all agricultural lands in Alameda County and 50% in Contra Costa County. Local water districts own significant acreage of rangeland to protect water resources, and over half of protected parklands in these counties are also grazed. In the arid west, livestock water resources are critical infrastructure that support cattle grazing, which provides multiple ecosystem services and other benefits to numerous wildlife species. Grazing encourages wildflower diversity, benefits sensitive grassland-associated species, and is an important vegetation management tool to reduce wildfire risk. Water distribution is key to managing excess forage on rangeland, thereby reducing wildfire danger while promoting native plant diversity. Rangelands in Alameda and Contra Costa counties support a number of special-status species, including California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), Alameda whipsnake (*Masticophis lateralis*), and Callippe silverspot butterfly (*Speyeria callippe callippe*). Ponds and troughs are also hubs for wildlife, including western pond turtle, mountain lion, black-tailed deer, bobcat, numerous butterfly species (for the mud), and a variety of birds. Aquatic invertebrates, such as dragonfly and damselfly larvae, depend on pond wetlands for part of their life cycle. Pond restoration projects and livestock water systems help move cattle out of waterways and prevent the release of accumulated sediment into the watershed. Sedimentation is a common natural resource issue for creeks in Alameda and Contra Costa counties that flow into the San Francisco Bay.

Livestock ponds are limited to locations where they can collect water from the watershed or from a spring. Troughs, however, can be situated more widely in the landscape because water can be piped to them from other sources such as municipal water, wells, and springs. Because cattle distribution is constrained by water availability, water developments can help optimize grazing patterns. When cattle are not able to graze due to lack of water, forage is underutilized allowing thatch to build up. In the Bay Area, grazing is used as a vegetation management tool to reduce the risk of catastrophic wildfire.

To address these linked issues and to create more resilient livestock watering facilities, improve riparian habitats, and water quality, and manage potential fuel loads, the Alameda and Contra Costa Resource Conservation Districts (RCDs) have partnered with the Natural Resources Conservation Service (NRCS) to develop the Wildlife-Friendly Livestock Ponds Program and Rangeland Resilience Initiative. These programs streamline the permitting process while also

providing financial incentives to ranchers to improve their resource management by enhancing livestock water options on their ranches.

Specific project objectives are to:

A. Enhance aquatic habitat for wildlife species

Desedimentation, spillway and embankment repair can extend the hydroperiod of ponds, which prolongs their functionality as breeding habitat and maintains critical refugia for listed and non-listed amphibians and other aquatic invertebrates. Ponds also provide water to numerous mammals, insects, and birds species. The project will restore functionality of degraded ponds to accomplish this objective.

B. Improve water supply for cattle

Increased water availability in ponds and troughs improves livestock health by providing clean watering sources. Adequate water also protects sensitive habitats by discouraging livestock from using riparian habitat areas and stagnant water sources during dry periods. In addition, pastures can be more optimally utilized during droughts and the dry season and surplus forage can be sufficiently grazed in high rainfall years (which typically increases plant productivity). The project will accomplish this objective by restoring ponds and developing new trough systems.

C. Improve livestock distribution

The project will improve water distribution, which in turn impacts cattle distribution, through the development of watering systems. Installing troughs in multiple locations will promote animal movement and encourage better forage utilization thereby reducing wildfire risk as well as reduce grazing pressure on the specially-listed species breeding ponds.

D. Coordinate local partners and ranchers to discuss and test strategies for erosion control

The grantee will work extensively with key partners, including water and park districts that manage vast amounts of grasslands in the two counties. The project includes convening a workgroup to focus on erosion reduction in riparian areas through relocation of watering infrastructure (which have historically been placed in or near streams and springs). The project includes the evaluation/testing of various physical and vegetative methods to reduce erosion from pond embankments following reconstruction.

Alameda County RCD will be the lead grantee on the project, and they expect to implement the improvements in the summers of 2020 through 2022. The Alameda County RCD will partner with the Contra Costa County RCD to restore a total of six ponds and to develop a total of six livestock watering systems across Alameda and Contra Costa counties through the Wildlife-Friendly Livestock Ponds and Rangeland Resilience programs, with support from NRCS' Environmental Quality Incentives Program (EQIP).

Both RCDs have received sustained interest from ranchers and regional land management agencies in both pond restoration and livestock water facilities development. Numerous projects are already in planning stages. All projects will go through a comprehensive planning and design process in collaboration with NRCS, the grazing lessee and landowner (if different), in which they are screened and ranked using NRCS' project ranking criteria.

To develop new projects and bring in new partners, RCD staff will conduct outreach through emails, flyers, and attendance of meetings of rancher groups (e.g., Cattlemen's Association). RCD staff will also coordinate workgroups with key partners that manage rangelands in the two counties, including the East Bay Regional Park District (EBRPD), San Francisco Public Utility Commission (SFPUC), and other potential partners including the Contra Costa Water District and the Agricultural and Natural Resources Trust (ANRT). The treatments generated will be tested and monitored on the proposed project sites.

Site Description: Several pond and trough projects are already in the planning phase in both counties. In Contra Costa county, these include public land in EBRPD's Morgan Territory Preserve. In Alameda County, the projects are located in EBRPD's Pleasanton Ridge Regional Park near Sunol. Morgan Territory contains diverse assemblages of blue oak, bay laurel, coast live oak, coastal scrub and grasslands. The Pleasanton Ridge project areas are a mixture of annual grassland and live oak woodland. All sites are managed with livestock grazing.

All project sites are known to support breeding habitat for California tiger salamander (CTS) and/or California red-legged frog (CRLF). The grazing lands are contiguous with surrounding private rangelands and open space, maintaining critical metapopulation conditions for these sensitive species. The Crockett and Pleasanton Ridge sites also contain Alameda whipsnake habitat (*Masticophis lateralis*). California newts (*Taricha torosa*) also depend on existing livestock ponds throughout these properties for breeding purposes.

Additional partners and locations will be selected through a rigorous RCD and EQIP selection process that will be clearly laid out in the grant's work program. Subgrantees will for the most part be grazing leasees managing cattle on public properties. Landowners where these improvements will occur include the East Bay Regional Park District, the East Bay Municipal Utility District, the Agricultural Natural Resources Trust, and the San Francisco Public Utilities Commission.

Grantee Qualifications: The Alameda and Contra Costa County RCDs are uniquely situated to effectively implement the proposed project. Both RCDs' existing relationships with NRCS and local landowners, as well as their streamlined permitting processes and engineering design support are invaluable for rangeland managers in both Counties. Alameda RCD has also been consistently successfully managing Conservancy grants related to this type of resource management work since 2012 (see Project History).

Project History: The Coastal Conservancy has consistently supported development of the Wildlife-Friendly Livestock Ponds and Rangeland Resilience Initiatives. In 2003, the Coastal Conservancy provided program/planning support, in collaboration with a consultant, Sustainable Conservation, to support the development of the Alameda RCD’s streamlined permitting process. Since 2006, the Coastal Conservancy has supported several livestock pond restoration and rangeland resilience and enhancement projects. Recent support has been via the Climate Ready program.

This new project seeks to expand the geographic scope of these successful projects into Contra Costa County, and the Alameda County RCD will work in partnership with Contra Costa RCD and the Contra Costa NRCS office. This project will provide increased coordination among key partners to strengthen the Wildlife-Friendly Livestock Pond and Rangeland Resilience programs.

PROJECT FINANCING

Coastal Conservancy	\$485,993
National Resource Conservation Service	\$90,000
Landowners (min. 10% of construction costs)	\$60,000
Project Total	\$653,993

The expected source of funding for this authorization is a fiscal year 19/20 appropriation to the Conservancy from the “Water Quality, Supply, and Infrastructure Improvement Act of 2014” (Proposition 1, Division 26.7 of the Water Code, § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with Section 79730) and may be used “for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state” (Section 79731). Section 79732(a) identifies the specific purposes of Chapter 6, of which the following pertain to this project: subsection (a)(4): protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors; subsection (a)(9): protect and restore urban watershed health to improve watershed storage capacity, protection of life and property, storm water resource management and greenhouse gas reduction; subsection (a)(11): protect or restore natural system functions that contribute to water supply, water quality, or flood management; and finally, assist in the recovery of endangered species by improving watershed health and in stream flows (subsection (a)(12)).

As required by Proposition 1, the proposed project provides multiple benefits. As described above, this project will support and enhance riparian ecosystems, improve habitat for listed species (with a focus on listed amphibians), and improve infrastructure to sustain to support viable grazing operations in Alameda and Contra Costa Counties.

The proposed project was selected through the 11th round competitive grant process under the Conservancy's Proposition 1 Grant Program Guidelines adopted in June 2015 (see § 79706(a)). The proposed project meets each of the evaluation criteria in the Proposition 1 Guidelines as described in the "Project Summary" and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" sections of this report.

Natural Resource Conservation Service's Environmental Quality Incentives Program funding will be applied for each sub-project. Overall it is expected that that program will provide an additional \$90,000 towards the implementation of the overall project. Landowners identified for these projects will provide at minimum 10% of the value of the construction project(s) on their properties representing a total contribution of \$60,000 to the overall project.

A total of \$116,753 in kind staff services from NRCS (\$104,753 - NRCS staff time to identify, plan, screen, develop engineering plans and facilitate the EQIP application process. NRCS staff will also participate in construction oversight, project sign-off and monitoring), ACRCDC (\$7,000), and CCRCDC (\$5,000) has been committed to this project.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project is undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resource Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area. Section 31162 of the Public Resources Code authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area, including Alameda and Contra Costa Counties, that achieve the goals of the San Francisco Bay Area Conservancy Program. All of the proposed project areas will be within Alameda and Contra Costa Counties.

The proposed project will serve to achieve the objectives described in Section 31162(b), which authorizes the Conservancy to protect, restore, and enhance natural habitats, connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The proposed project will assist in the enhancement of natural habitat for a variety of listed species in the San Francisco Bay Area. This project will also improve local water quality in a variety of riparian systems on the project properties, and overall improve water quality and the watershed's overall systemic health by reducing the sediment loads flowing through creeks in Alameda and Contra Costa Counties into the San Francisco Bay.

The proposed project is also consistent with Section 31163(c), which mandates that the Conservancy use specific criteria to develop priority projects within the San Francisco Bay Area Conservancy Program. The project meets the selection criteria under 31163(c), in that it: 1) is supported by and is consistent with adopted regional plans including the East Contra Costa County HCP/NCCP, and the East Alameda County Conservation Strategy; 2) serves a regional constituency by reducing impacts of cattle grazing on riparian systems, while increasing distribution of livestock water troughs and ponds which also provide critical habitat for special status species. Improved livestock grazing patterns also helps to manage fuel loads, and will help to protect Contra Costa and Alameda County rangeland communities from future wildfires;

3) can be implemented in a timely manner; 4) provides the opportunity to implement this multi-benefit project that would be lost or have to be significantly scaled down if the project cannot be implemented in the near future; and 5) will include significant matching funds from the National Resources Conservation Service and the Agricultural Natural Resources Trust as well as grazing lessees investments.

CONSISTENCY WITH CONSERVANCY'S [2018-2022 STRATEGIC PLAN](#) GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 12, Objective F**, of the Conservancy's 2018-2022 Strategic Plan, the proposed project will enhance riparian habitats and other watershed functions and process for the benefit of wildlife.

Consistent with **Goal 14, Objective B** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will implement projects that assist farmers and ranchers to steward the natural resources on their lands.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:**

California @ 50 Million: The Environmental Goals and Policy Report

The RCDs approach project selection from a landscape scale to determine water facility priorities and how they integrate with species and grazing priorities. These actions allow the grazing operators to vary the timing and intensity of grazing based on habitat or management objectives. The RCDs' streamlined permitting program to help to implement the proposed projects, supporting goals 1, 2 and 6 of the EGPR's "Steward and Protect Natural and Working Landscapes" section.

CA Climate Adaptation Strategy/Safeguarding California: Reducing Climate Risk Plan

This project helps further biodiversity objectives that include management of watersheds, habitat, vulnerable species, reduction of wildfire risk and protection of ecosystem services by implementation of restoration projects on working lands (Biodiversity 2d). It also supports agricultural water conservation adaptation strategies (Agriculture 1a) by

rehabilitating existing water resources and promoting development of additional water sources that can minimize the effects of drought.

CA Wildlife Action Plan

The project will implement water resource development projects that help achieve best grazing management practices through enhanced distribution of livestock (Oak Woodlands Conservation Strategy 3). It will also help reduce fire risks by engaging ranchers and landowners (Grassland Conservation Strategy 7). Species of interest, CTS, CRLF, and western pond turtle (*Actinemys marmorata*), will also benefit from the water distribution projects.

California Aquatic Invasive Species Management Plan

Bullfrog (*Rana catesbeiana*) and sunfish (*Lepomis cyanellus*) are both aquatic invasive species (AIS) that can be present in perennial ponds and other waterbodies in Alameda and Contra Costa counties. Both are predators of CTS and CRLF. If they are present in ponds identified to be part of identified projects, ponds are drained during construction to help eliminate their populations (the invaders require water year-round). Generally, the RCDs work to avoid projects where these invasive species are present, and do not seek to create conditions that would contribute to their expansion, helping to meet the goal of controlling populations of AIS.

State and Federal Species Recovery Plans

This project will further objectives outlined in the CRLF and CTS Recovery Plans by restoring breeding habitat and allowing for enhanced grazing of upland habitat that the species move through during dispersal. Further, CTS rely on ground squirrel burrows during the dry season and ground squirrels only occupy areas with short grass heights, which is facilitated by grazing, to avoid predation.

Habitat Conservation Plans/Natural Community Conservation Plans

East Alameda County Conservation Strategy

The proposed project helps meet Objective 4.4, Conservation Action GRA-6. by assisting ranchers to steward natural resources through livestock grazing. It also achieves Objective 9.3. by ensuring ponds persist in the region, sustaining the species they support. The streamlined permitting program achieves Conservation Action WP-6 because it facilitates permitting of ponds to enable management activities that are necessary to maintaining ponds. It also allows for implementation of key maintenance activities including dredging and repair of dams, inlets, and spillways.

For species conservation, it achieves Objectives 13.3 and 14.3, aimed at enhancing suitable habitat for CRLF and CTS on public and private lands.

East Contra Costa County HCP/NCCP

The projects address the vegetation management goals listed in Conservation Measure 1.2, Prepare and Implement Preserve Management Plans for Natural Habitat Lands by using livestock grazing to reduce the abundance and distribution of exotic grasses and reducing fuel loads to weaken the risk to biological resources from catastrophic fire. Furthermore, the pond restoration projects accomplish the goals of Conservation Measure 2.2, by repairing stockponds to maintain and support salamander and frog populations. Most importantly, these plans support livestock grazing systems to enhance grassland biodiversity and habitat heterogeneity, as stated in Conservation Measure 2.4, Managing Grasslands.

4. **Support of the public:** The project has wide support including from the Agricultural Natural Resources Trust, the Alameda/Contra Costa Cattlemen's Association, California Department of Fish and Wildlife, the California Rangeland Conservation Coalition, Contra Costa Water District, John Muir Land Trust, the Natural Resources Conservation Service, Partners for US Fish and Wildlife, the San Francisco Bay Regional Water Quality Control Board, the University of California Cooperative Extension, and the US Fish and Wildlife Service. Specific letters of support (Exhibit 5) were received from Assemblymember Rebecca Bauer-Kahan, Assemblymember Timothy Grayson, Alameda County Supervisor Scott Haggerty, Contra Costa County Supervisor Diane Burgis, the East Bay Regional Park District, and the San Francisco Public Utilities Commission.
5. **Location:** Sub-projects will be implemented in Contra Costa and Alameda Counties, which are within the jurisdiction of the San Francisco Bay Area Conservancy Program.
6. **Need:** Pond restoration costs \$50,000 on average per project, though the total varies based on project complexity and location. Although NRCS provides cost-share through the Farm Bill's Environmental Quality Incentives Program (EQIP), very often these funds only cover less than half of total costs. Enrollment in EQIP is voluntary and runs through the agricultural operator or landowner. On public lands, ranchers are not the landowners and their leases are often short-term. Alameda County RCD has determined that additional grant funds further help defray costs from the ranchers, who often contribute time and financial resources to the projects. Alameda County RCD and Contra Costa RCD administer Voluntary Local Programs in their respective counties; they are responsible for all state permits while NRCS is the federal nexus. Without Conservancy funds, RCD staff would be unable to complete permitting requirements for these projects which would undermine the streamlined permitting process. While some agencies have engaged the RCDs in fee-for-service contracts to assist with permitting, often these additional costs are another barrier preventing restoration of viable pond habitat and development of additional water resources. Overall, pond projects are costly to implement and require detailed planning because of their sensitivity to species habitat and limited construction window yet provide multiple benefits to the local watershed, wildlife and to special status species. Trough projects can also pose a significant cost, but the benefit in terms of reduced wildfire risk is increasingly important, especially in areas with extensive urban-wildland interfaces such as

the East Bay. Coastal Conservancy funding is essential to support the RCD's continued ability to offer services and cost-share to ranchers to help maintain and expand critical livestock water resources.

7. **Greater-than-local interest:** Local water districts and public agencies own significant acreage of rangeland in Alameda and Contra counties, over half of which are actively grazed. Livestock water resources are critical infrastructure that support cattle grazing, which in turn provides multiple ecosystem services and other benefits to numerous wildlife species. Grazing encourages wildflower diversity, benefits sensitive grassland-associated species, and is an important vegetation management tool to reduce wildfire risk. Pond restoration projects and livestock water systems help move cattle out of waterways and prevent the release of accumulated sediment into the watershed. Reducing sedimentation in creeks in Alameda and Contra Costa counties provides water quality benefits for the wider San Francisco Bay.
8. **Sea level rise vulnerability:** Not applicable due to the distances of the project site locations from the shoreline.

Additional Criteria

9. **Urgency:** It is critical for the project to begin coordinating with the various land managers as soon as possible to be able to begin planning in Spring of 2020 in order to construct and implement a variety of water infrastructure improvement projects by fall 2020.
10. **Resolution of more than one issue:** This project will reduce impacts of cattle grazing on riparian systems, while increasing distribution of livestock water troughs and ponds which also serve as critical habitat for special status species. Improved livestock grazing patterns also helps to manage fuel loads, and will help to protect Contra Costa and Alameda County rangeland communities from wildfires.
11. **Leverage:** See the "Project Financing" section above.
12. **Innovation:** Depending on the project, the RCDs pilot new materials with willing cooperators. Current examples include running sections of HDPE pipeline along the soil surface in sensitive areas instead of burying pipeline, avoiding unnecessary ground disturbance and avoid impacts to culturally sensitive sites. All practices are implemented according to NRCS practice standards and certified by NRCS engineers. Embankments are typically widened to prevent the likelihood of failure. Rock riprap is installed where appropriate to prevent erosion, including at inlets or spillways and culvert outfalls. Livestock water is typically delivered via buried or above ground pipeline to a storage tank and trough system. Installation of a simple gravity-fed system, or, in more complex landscapes, solar-powered pumps, allow water to be piped to areas that would previously not have been able to support livestock water options. Troughs are typically made of concrete and either buried or installed on gravel pads to help reduce animal impacts and ponding. All troughs are

outfitted with floats and wildlife escape ramps to prevent animals accessing water from getting trapped while also maintaining a clean drinking source for cattle.

13. **Readiness:** Staff at Alameda County RCD are in regular coordination with Contra Costa RCD staff and the NRCS staff housed at both offices. Some project sites have been identified, and project partners are in the planning phase for the water infrastructure projects at those sites.
14. **Realization of prior Conservancy goals:** “See “Project History” above.”
15. **Return to Conservancy:** See the “Project Financing” section above.
16. **Cooperation:** NRCS developed programmatic Biological Opinions (BO) for Alameda and Contra Costa Counties that describe potential impacts to federally listed species potentially found in project sites during voluntary conservation activities on agricultural lands. The BOs also lists best management practices for avoidance/ minimization of these impacts. NRCS appends projects to the BOs annually, which provides incidental take coverage. NRCS serves as the Federal Nexus for all the proposed projects. Alameda County RCD developed a Voluntary Local Program (VLP) with the California Department of Fish and Wildlife in 2012, the first in the state. Alameda County RCD then worked with Contra Costa RCD to duplicate the program in Contra Costa County. The VLP allows for incidental take of Alameda whipsnake and California tiger salamander. NRCS and the RCDs worked together to get an exemption from county grading requirements. They also developed a General Order Waste Discharge Requirement with the San Francisco Bay Regional Water Board. The RCDs apply for individual Lake and Streambed Alteration Permit for each project. At the completion of pond restoration projects, they assist landowners in applying for Water Rights through the State Water Board. Developing this permit process involved going through NEPA and CEQA, and projects are covered under Mitigated Negative Declarations. NRCS conducts a cultural resources assessment for each project site. Because the process is streamlined, the RCDs are able to apply for and receive all permits in the year the project is planned.

Agricultural producers that partner with the Conservation Partnership to engage in ongoing routine agricultural activities for voluntary conservation are covered by these permits if they enroll in the VLP.

17. **Vulnerability from climate change impacts other than sea level rise:** Cal-Adapt climate models for the project area (using a scenario in which emissions peak in 2040, then decline) projects that extreme heat days will increase from 5 to 18-25 days on average per year. Average maximum and minimum temperatures are expected to rise 4-6 degrees, and average precipitation is likely to remain highly variable, though increasing in wet years. A warmer, wetter scenario will lead to increased fuel loads on grasslands, highlighting the fire-fuel load reducing importance of well-distributed grazing on East Bay rangeland landscapes. Intervening drought years could reduce available water for cattle and species, potentially impacting the availability of breeding sites for CTS and CRLF. The projects’ proposed de-

sedimentation can deepen ponds, helping them capture more water and prolonging the availability of water for both livestock and wildlife. During the most recent drought, numerous ranchers reported stockponds drying up too early for CTS or CRLF to complete their metamorphosis (an observation confirmed using Google Earth imagery). Pond resources may also become increasingly valuable to wildlife as other aquatic resources, such as streams and springs, may be affected by reduced water availability due to climate change.

18. **Minimization of greenhouse gas emissions:** Water development projects utilize heavy equipment to facilitate de-sedimentation and earthwork activities. Whenever possible the RCDs will work on adjacent projects in sequence so that equipment only needs to be mobilized to a given location once. Project planning includes identification of the shortest route to each project site, and staging areas will be situated as close as is practicable. The individual pond and trough projects on average take 1 week to complete, however additional maintenance is not anticipated for 20-years (the anticipated lifespan of the practices that will be implemented). NRCS and RCD staff carpool to sites whenever possible. NRCS and RCD staff stage a field vehicle closer to field sites during the construction period (August 31 and October 31), to reduce impacts from driving and form to the offices respectively in Livermore and Martinez before and after going to the field.

When existing troughs are removed from drainages and placed elsewhere on the landscape, vegetation has the chance to recover from the pressure of cattle grazing. Natural revegetation of woody and herbaceous plant species will help sequester additional carbon on some project sites. NRCS and RCD staff revegetate areas disturbed by construction activities using native plant seed mixes. Implementing watering infrastructure in Bay Area rangelands will support the longevity of these ranches and public lands, allow them to maintain their ecological functions, and act as a long-term carbon sinks in the landscape. Because carbon sequestration is a secondary benefit and may not be applicable to all projects, it will not be monitored.

CEQA COMPLIANCE:

Conservancy staff has reviewed the Final Mitigated Negative Declaration for the Alameda County Voluntary Local Program (MND) and associated Mitigation Monitoring and Reporting Program (MMRP) adopted by the Alameda County Resource Conservation District Board of Supervisors on August 20, 2012 (**Exhibit 3**), as well as the Final Mitigated Negative Declaration for the Contra Costa County Voluntary Local Program and associated MMRP (**Exhibit 4**) adopted by the Contra Costa Resource Conservation District on February 9, 2015.

A Voluntary Local Program (VLP or Program) is a locally designed voluntary program that encourages the enhancement and maintenance of habitat for candidate, threatened and endangered species and other wildlife in ways compatible with routine and ongoing agricultural activities on farms and ranches. The covered management practices, when successful, will

increase the number of individuals of candidate, threatened and endangered species in proximity to farms and ranches in Alameda County. The purpose of the Program is to encourage farmers and ranchers engaged in agricultural activities to establish locally designed programs to voluntarily enhance and maintain habitat for endangered and threatened species. The Program provides take authorization for routine and ongoing agricultural activities conducted in accordance with Cooperative Agreements entered into pursuant to the Program, streamlining permitting processes for individual land managers. Without the protection afforded through the Program, people may not choose to improve their properties, losing opportunities to enhance habitat conditions for state listed species. The VLPs cover public and private lands that are managed as agricultural lands within Alameda and Contra Costa Counties.

Both MNDs programmatically cover all VLP Best Management Practices, including those in the proposed sub-projects (which focus on the installation, improvement, and/or reconstruction of livestock watering facilities that would create a functioning network of water resources to allow the lessee and landowners to apply climate- resilient management strategies). Each landowner will enter into an agreement with their respective RCD, which will enroll/include their project in the County VLP and provide take compliance with the California Endangered Species Act and CEQA. Therefore, project-by-project CEQA review is not required.

The MNDs address the impacts of the activities described in the Alameda and Contra Costa County VLPs, including pond restoration and livestock and wildlife water distribution. **Both MNDs indicate that the only potentially significant effects from implementation of the pond restoration activities and the improvements to other livestock watering facilities proposed in this authorization are in the area of Biological Resources.** Mitigation measures are identified in the MNDs to avoid, reduce or mitigate all of the potentially significant environmental effects on biological resources. The mitigation measures include: limiting construction hours; minimizing vegetation disturbance; avoiding plastic mono-filament matting; avoiding animal burrows; managing removed sediment; capping pipes, culverts and similar structures; using escape ramps; using native trees/shrubs; conducting cavity/tree nesting bird surveys and ground nesting bird surveys; conducting bat surveys; limiting in-stream restoration seasonally; appropriately locating and managing equipment staging and storage; dewatering activities; avoiding rock outcroppings; limiting use of herbicides; avoiding special-status plants; and complying with all applicable permit conditions. The mitigation measures also include particular measures for protecting several special-status species and their habitats (California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, Longhorn fairy shrimp and Vernal pool fairy shrimp, Callipe silverspot butterfly, and San Francisco dusky footed woodrat).

Staff has independently reviewed both MNDs and has determined that the proposed sub projects are within the scope of both the Alameda and Contra Costa County VLPs, and are adequately described in the MND, and that there is no substantial evidence that the project(s), as mitigated, may have a significant effect on the environment.

Staff will file a Notice of Determination upon approval of the project.

