



Pond Management and Enhancement Project

Habitat Mitigation and Monitoring Plan

prepared for

Santa Clara Valley Open Space Authority

33 Las Colinas Lane
San Jose, California 95119
Contact: Galli Basson

prepared by

Rincon Consultants, Inc.

2511 Garden Road, Suite C-250
Monterey, California 93940

Revised September 2022

Pond Management and Enhancement Project

Habitat Mitigation and Monitoring Plan

prepared for

Santa Clara Valley Open Space Authority

33 Las Colinas Lane
San Jose, California 95119
Contact: Galli Basson

prepared by

Rincon Consultants, Inc.

2511 Garden Road, Suite C-250
Monterey, California 93940

Revised September 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

This report prepared on 50% recycled paper with 50% post-consumer content.

Table of Contents

1	Introduction	1
1.1	Project Overview	1
1.2	Responsible Party	9
2	Project Background and Description	10
3	Impact Analysis	12
3.1	Special Status Species	12
3.2	Jurisdictional Waters and Wetlands	12
4	Mitigation and Monitoring Plans	19
4.1	Mitigation of Impacts to Special Status Species and Aquatic Resources	19
4.1.1	Project Design Features and Habitat Plan Conditions	21
4.1.2	Reduced Impact Scheduling	25
4.2	Special Status Species Habitat Enhancement Management	25
4.2.1	Hydrologic Targets	25
4.2.2	Vegetation Management	26
4.2.3	Aquatic Predator Management	27
4.2.4	Native Vegetation Management	27
5	Ecological Performance Standards	30
6	Reporting Program	32
6.1	Qualitative Monitoring Memoranda	32
6.2	Annual Mitigation Status Reports	32
7	Guidelines for Long-Term Operations and Maintenance of Project Site	33
8	References	34

Tables

Table 1	Permanent and Temporary Impacts RC-01	13
Table 2	Permanent and Temporary Impacts RC-07	13
Table 3	Permanent and Temporary Impact RC-10	14
Table 4	Project Mitigation Quantities for Temporary Impacts for RC-01	19
Table 5	Project Mitigation Quantity for Temporary Impacts for RC-07	19
Table 6	Project Mitigation Quantities for Temporary Impacts for RC-10	20
Table 7	Project Mitigation Quantity for Permanent Physical Loss of Area	20
Table 8	Upland Native Seed Mix	28
Table 9	Suggested Wetland Plant Palette and Specific Pond Installation	28

Figures

Figure 1	Regional Location.....	2
Figure 2a	Vegetation Communities and Land Cover Types.....	3
Figure 2b	Biological Resources.....	4
Figure 2c	Biological Resources.....	5
Figure 2d	Biological Resources.....	6
Figure 2e	Biological Resources.....	7
Figure 2f	Biological Resources.....	8
Figure 3a	Project Impacts	16
Figure 3b	Project Impacts	17
Figure 3c	Project Impacts	18

1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared the following Habitat Mitigation and Monitoring Plan (HMMP) for the Santa Clara Valley Open Space Authority (SCVOSA) Pond Management and Enhancement Project (project) at Rancho Canada Del Oro Open Space Preserve located in Santa Clara County, California. The SCVOSA aims to preserve and enhance habitat for native and special status species within its open spaces as well as provide recreational use and connect people with the outdoors. This HMMP was prepared to support the permitting process for impacts to resources subject to the Santa Clara Valley Habitat Agency (SCVHA) authority. The project has the potential to impact special status species and jurisdictional waters and wetlands of the United States during pond restoration activities. The Biological Resources Assessment (BRA) (Rincon 2021) completed for the project includes a description of resources that may be impacted by project activities and summary of potential impacts to those resources. This HMMP describes activities to be undertaken to mitigate the impacts of project activities, including on-site restoration and habitat enhancement for special status animal species, monitoring, reporting, and adaptive management.

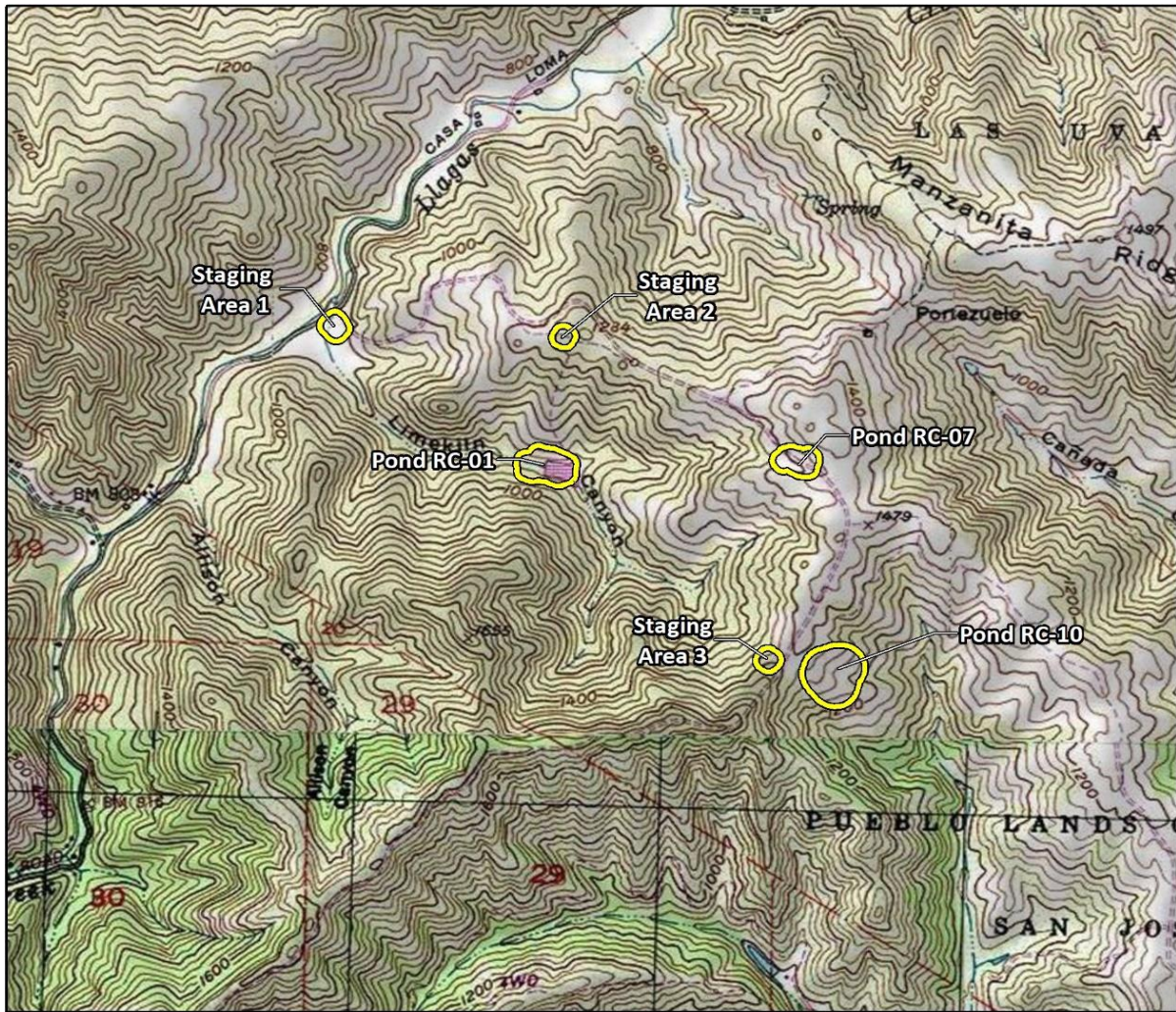
1.1 Project Overview

The project is in unincorporated Santa Clara County along the eastern foothills of the Santa Cruz Mountains. The project is within protected open space that was historically used as ranch lands and is not yet open to the public. The property is situated west of the southern end of the Santa Clara Valley and the City of Morgan Hill (Figure 1). The project includes three ponds created in part as habitat for California red-legged frog (CRLF; *Rana draytonii*), western pond turtle (WPT; *Actinemys marmorata*), and California tiger salamander (*Ambystoma californiense*) as well as three staging areas; collectively referred to as the “Study Area.” Analysis indicates the ponds may be failing to provide adequate habitat and the SCVOSA Pond Management and Enhancement Project was proposed.

The Study Area is comprised of eight terrestrial vegetation communities and other land cover types (Rincon 2021). The mapping is presented in a map atlas (Figure 2a through 2f) and approximates the types and acreages of the vegetation communities and land cover types that occur within the Study Area (Rincon 2021). The vegetation community classification followed those in A Manual of California Vegetation, Second Edition (MCV2; Sawyer et al. 2009) but have been modified to accurately reflect the existing site conditions. More information on the vegetation communities and land cover types can be found in the BRA (Rincon 2021).

During field surveys conducted by SCVOSA, California red-legged frogs were observed at two ponds (RC-01 and RC-07), and a third pond was identified as a potential breeding site (RC-10). However, each of these ponds would require some enhancements to provide continued habitat for California red-legged frog, western pond turtle (present at RC-01), and eventually California tiger salamander (potential range expansion). A detailed project description is provided in Section 2.

Figure 1 Regional Location



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Santa Teresa Hills Quadrangle. T09S R02E S20,2128,29. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

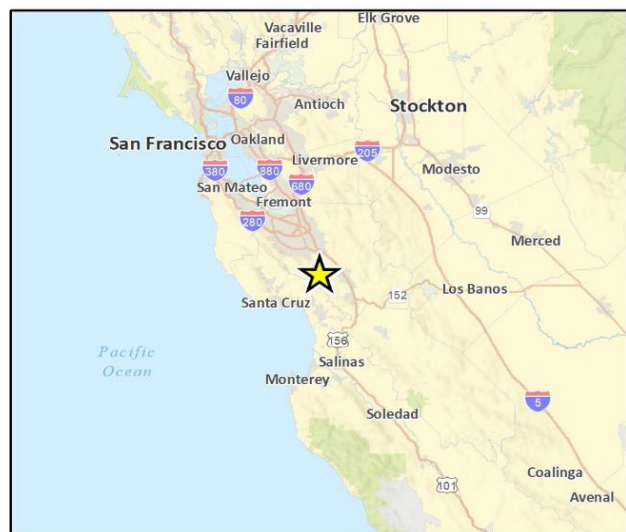
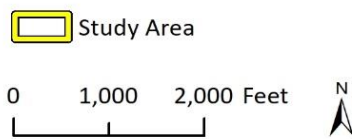


Fig 1 Regional Location

Figure 2a Vegetation Communities and Land Cover Types

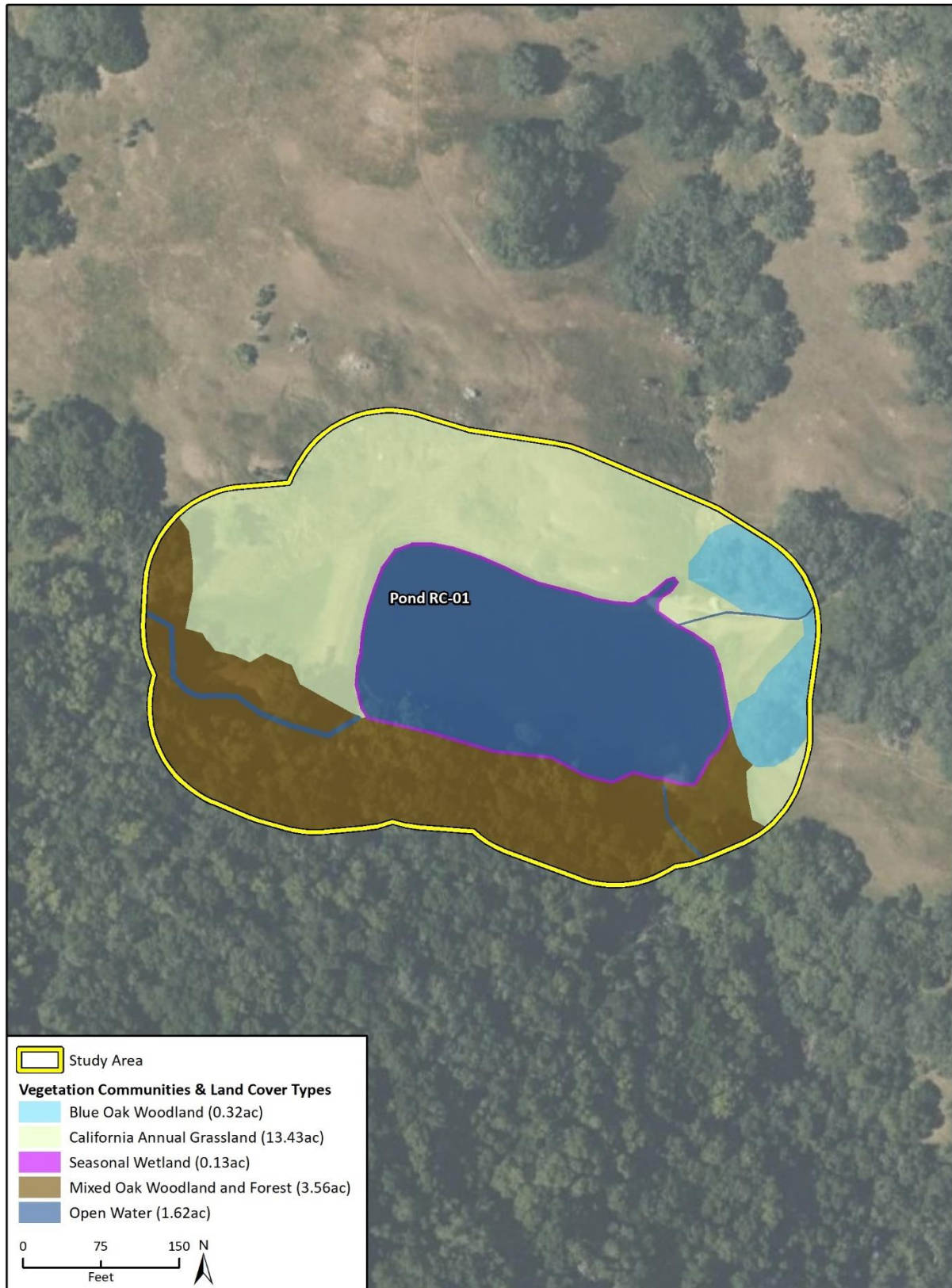
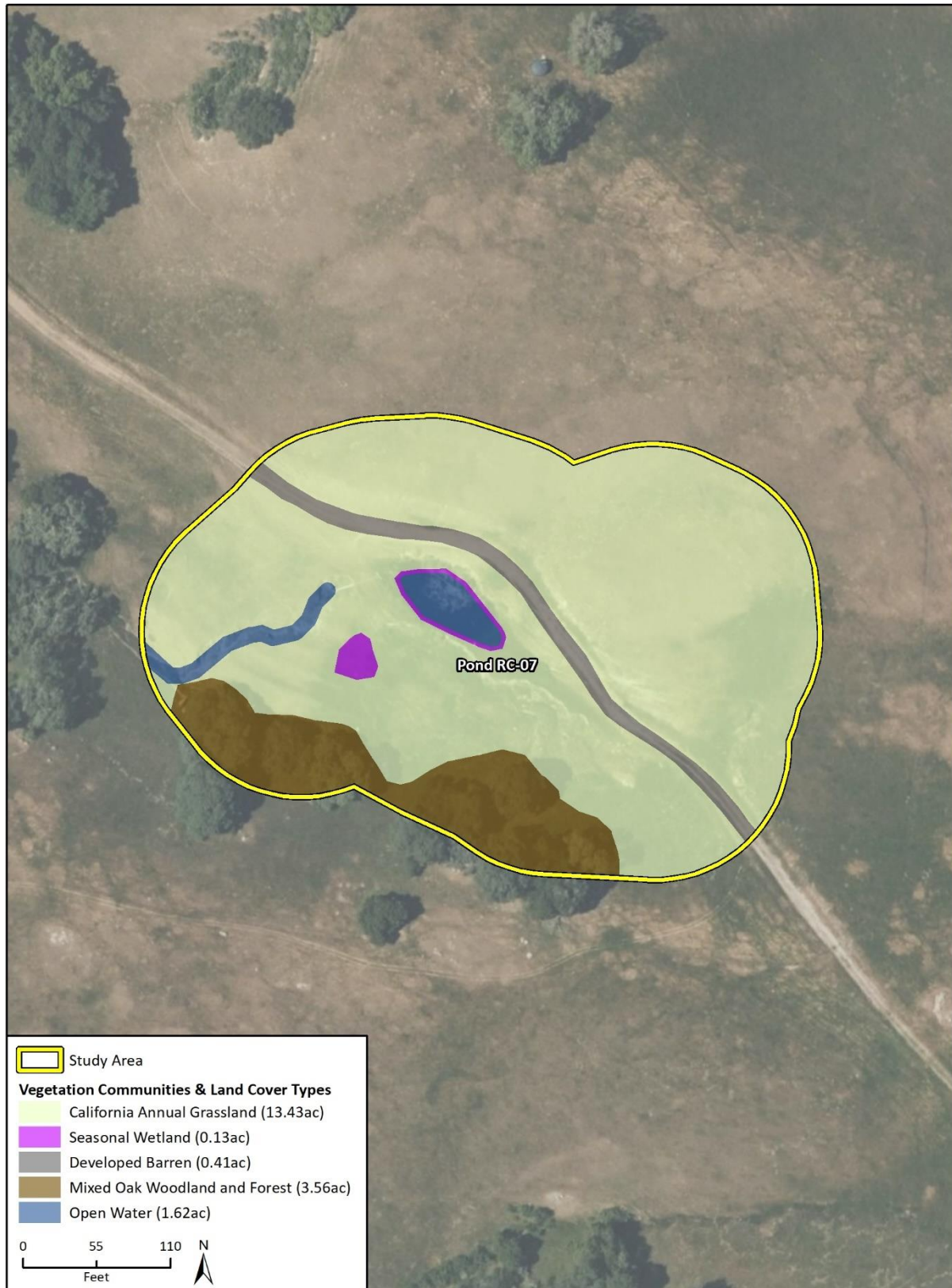


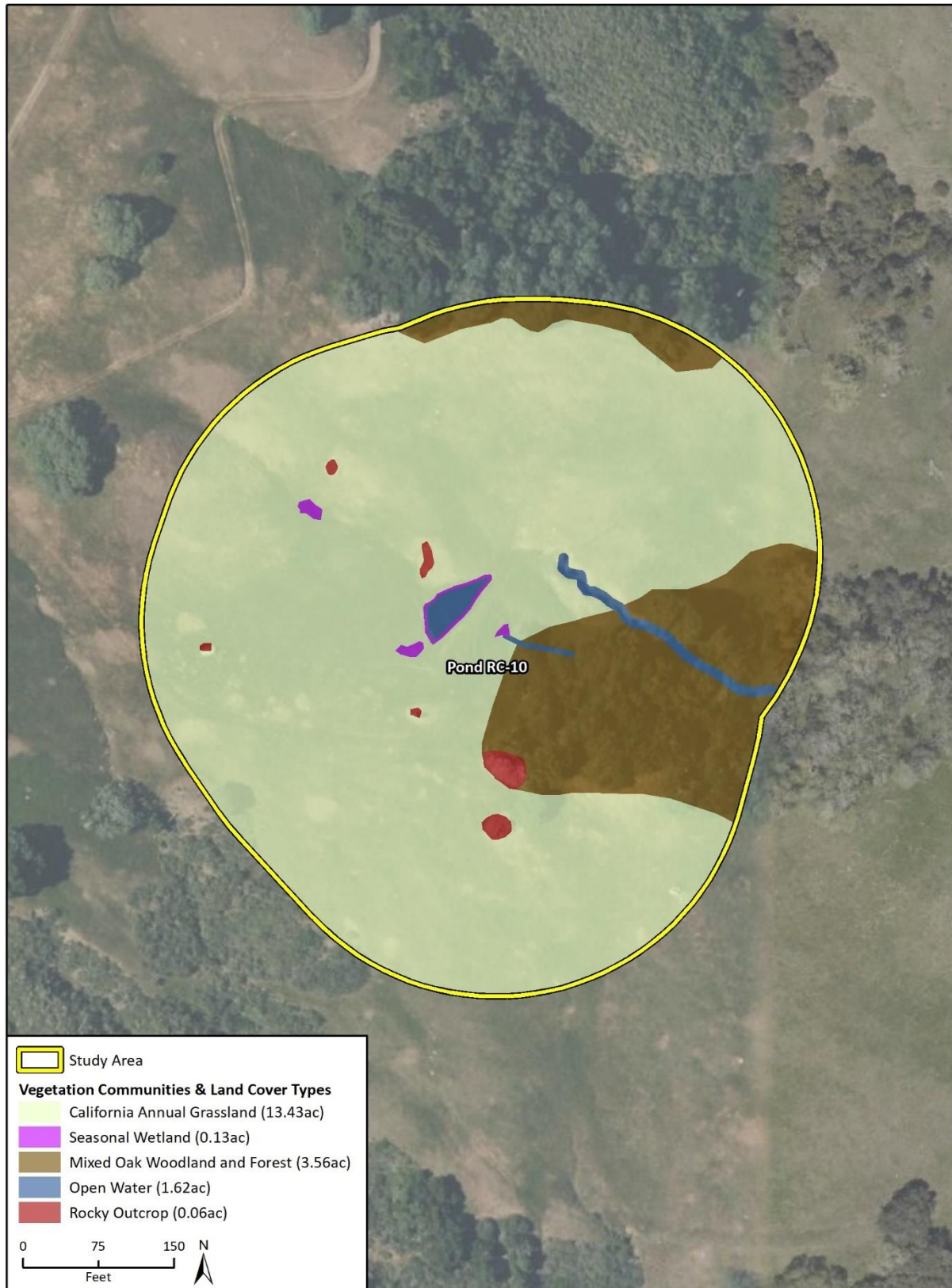
Figure 2b Biological Resources



Imagery provided by Microsoft Bing and its licensors © 2020.

BRA Fig. 3 Vegetation Communities and Land Cover

Figure 2c Biological Resources



Imagery provided by Microsoft Bing and its licensors © 2020.

BRA Fig. 3. Vegetation Communities and Land Cover

Figure 2d Biological Resources



Imagery provided by Microsoft Bing and its licensors © 2020.

©2020 by the Vegetation Communities and Land Cover

Figure 2e Biological Resources



Imagery provided by Microsoft Bing and its licensors © 2020.

BRATig. 3 Vegetation Communities and Land Cover

Figure 2f Biological Resources



1.2 Responsible Party

All funding for planning, implementation, maintenance, and monitoring of this mitigation and monitoring program required to compensate for impacts associated with the project shall be the responsibility of SCVOSA. The Responsible Party also retains the legal responsibility for implementing, maintaining, and monitoring the mitigation onsite as described in this plan, and shall be responsible for meeting the conditions of the agency permits to obtain final approval of the mitigation by the SCVHA.

The contact information for the Responsible Party is as follows:

Galli Basson,
Resource Management Program Manager
Santa Clara Valley Open Space Authority
33 Las Colinas Ln.
San Jose, California 95119
gbasson@openspaceauthority.org
Phone : 408.224.7476

2 Project Background and Description

The project is intended to enhance habitat for California red-legged frog, western pond turtle, and California tiger salamander by restoring the three ponds, including repairing the earthen embankment at Pond RC-07, lining the berm at Pond RC-01, adding or improving overflow spillways in RC-01 and RC-10, and deepening RC-10 to increase ponding duration. The ponds are located with the Upper Llagas Creek watershed (Hydrologic Unit Code #180600020302). All ponds are located in the upper portion of the aforementioned watershed and were cut into natural drainages to create cattle ponds. Pond RC-01 has become habitat for American bullfrogs and fish. Pond RC-07 has significant downslope stability concerns potentially resulting from seepage through the earthen embankment. Pond RC-10 has limited vegetation and needs enhancement to create better habitat for target species. The poor conditions of the berms of ponds RC-07 and RC-10 are contributing excess sediment to the downstream receiving waters. The specific goals of the project include the following:

- Enhance habitat for California red-legged frog, California tiger salamander and western pond turtle and other species in ponds RC-01, RC-07 and RC-10
- Enlarge and deepen Pond RC-10 to increase ponding duration
- Re-enforce the berm of Pond RC-07 to maintain California red-legged frog breeding habitat
- Work done on Pond RC-07 is a short-term measure for the purpose of extending the life of pond until California red-legged frog can establish breeding habitat in surrounding ponds
- Increase wetland vegetation to enhance California red-legged frog habitat and protect with partial cattle exclusion fencing
- Reduce non-native fish and bullfrog populations at pond RC-01
- Reduce berm seepage in RC-01

Herpetofauna surveys were conducted by Vollmar Natural Lands Consulting (Vollmar) in 2016 over six properties owned by the SCVOSA, totaling 4,400-acres. At Rancho Canada Del Oro Open Space Preserve, the study evaluated 10 ponds and one failed pond for their ability to support special status species, including California red-legged frog, California tiger salamander, and western pond turtle. This evaluation included a combination of habitat assessments, daytime surveys, nighttime surveys, and aquatic sampling. During these surveys, California red-legged frog were only observed at three ponds, including RC-01 and RC-07, which were the only ponds where breeding was confirmed (egg masses or larvae) (Vollmar 2016). Western pond turtle was observed during surveys at several ponds, including RC-01, but no California tiger salamanders were observed at any of the ponds on the Preserve (Vollmar 2016).

Although California red-legged frog breeding was confirmed at RC-01 (egg mass) and RC-07 (larvae), Pond RC-01 was identified as a population sink due to the presence of non-native predatory fish and American bullfrog. Additionally, the berm at RC-07 is likely to fail, and will fail soon without reinforcement, which will drain the pond and eliminate breeding habitat. The distance between these ponds and known observations of California red-legged frog are over 1.2 miles away, farther than this species is known to travel (approximately 0.3 miles). Therefore, restoration of RC-01 and RC-07 is vital to the continued existence of California red-legged frog on the Rancho Canada Del Oro Open Space Preserve. Given the inevitable failure of Pond RC-07, restoration at Pond RC-10 is also

critical to the continued existence of this population. RC-01, RC-07, and RC-10 are within 0.45 miles of each other which is within dispersal range.

The study evaluated habitat suitability for California tiger salamander and identified potential habitat at several, including RC-07 and RC-10. However, all known occurrences are over 1.2 miles away, farther than this species is known to travel from breeding ponds (approximately 800 m). Therefore, restoration of potentially suitable habitat for California tiger salamander is a long-term goal to allow for range expansion onto the Rancho Canada Del Oro Open Space Preserve.

The overall impact of this project is to increase habitat and climate resiliency for California red-legged frogs and for western pond turtles. Project activities proposed to achieve the project goals include the following:

Pond RC-01

To improve habitat at Pond RC-01, the SCVOSA proposes to reinforce the berm and periodically drain the pond. To install a berm liner, the pond will be drained with a portable pump, positioned on the berm on the north side of the overflow channel, and an intake hose with a floating strainer will be placed into the pond. The discharge hose will extend down the existing overflow channel (intermittent stream) and discharge where the channel bed is exposed bedrock, eliminating the need for a dissipater. Once the pond is drained, a bentonite clay liner will be installed to reduce/limit seepage and increase the lifespan of the berm. Additionally, basking ramps will be installed for western pond turtle, in coordination with the SCVOSA in the field. The pond will be periodically drained with the portable pump to control bullfrog populations. Partial fencing will be installed to protect part of the pond from cattle impacts.

Pond RC-07

With significant downslope stability concerns potentially resulting from seepage through the existing earthen embankment, approximately 24 cubic yards of compacted soil fill will be placed along the western side of the berm, widening it to a minimum of 6 feet. Prior to improving the berm, Pond RC-07 will be temporarily dewatered to allow for excavation to increase the depth of the pond. Additional improvements to the outfall spillway of Pond RC-07 will also occur. The existing outlet pipe will be plugged, and a vertical 18-inch standpipe outfall will be placed 2 feet below the existing overflow pipe. A new rock energy dissipater will be installed at the pond inlet to limit further erosion.

Pond RC-10

To increase the ponds inundation duration, Pond RC-10 will be enlarged, deepened, and enhanced. The pond will be enhanced with the conversion of an upland area to a wetland. The adjacent 0.013 acres of upland habitat to the pond will be graded to accommodate the new wetland enhancement area. An exclusion fence will be installed to protect the wetland from grazing cattle. An 18-inch overflow pipe will be installed that will direct flow to a rock energy dissipator southeast of the pond. Additionally, basking ramps will be installed for western pond turtle, in coordination with the SCVOSA in the field. No temporary dewatering is anticipated as the pond naturally dries out by summer. Partial fencing will be installed to protect part of the pond from cattle impacts.

3 Impact Analysis

A resource impact analysis was conducted as part of the BRA for this project (Rincon 2021).

A resource was considered significantly impacted if he proposed project would:

Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

The impact analysis indicated that some special status wildlife and jurisdictional water and wetlands would potentially be impacted by project activities, such as installation of a berm liner RC-01, and grading (further described in Section 2). Impacts to other resources (e.g., plants, wildlife movement, local policies and ordinance, habitat conservation plans) would be reduced to less than significant without mitigation by design features incorporated into the project.

3.1 Special Status Species

Special status species potentially impacted by the project include Bay checkerspot butterfly (*Euphydryas editha bayensis*), foothill yellow-legged frog (FYLF; *Rana boylei*), California red-legged frog, California tiger salamander, coast range newt (*Taricha torosa torosa*), western pond turtle, tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), American badger (*Taxidea taxus*), and nesting birds. Potential impacts for each species with potential to occur on-site are discussed in the BRA (Rincon 2021). Mitigation efforts to offset the project impacts to special status species are discussed in Section 4. No special status plant species were detected within the Study Area and therefore, impacts to such resources are not expected to occur from project activities.

3.2 Jurisdictional Waters and Wetlands

The purpose of the proposed project is to enhance habitat functions and values of the ponds and increase the function of wetlands; therefore, positive impacts to these features would occur as a result of the project. However, the project will result in temporary adverse impacts from pond restoration. Restoration of these ponds includes repairing the earthen embankments, adding or improving overflow spillways to ponds RC-01 (Figure 3a), RC-07 (Figure 3b), and RC-10 (Figure 3c), and deepening Pond RC-10 (Figure 3c) to increase ponding duration. The proposed project would result in approximately 0.08 acre of permanent impacts to non-wetland waters of the State and approximately <0.001 acre of permanent impacts to wetland waters of the State (**Error! Reference source not found.**, Table 2, and Table 3; Figure 3a through Figure 3c). Additional impacts from the project may occur if construction equipment, workers, debris, or spills inadvertently enter the ponds or riparian areas. Mitigation to offset the impacts to jurisdictional waters and wetlands through project design features is discussed in Section 4. Design features (described in Section 4) are intended to avoid and minimize project impacts to special status species and improve habitat restoration success.

Table 1 Permanent and Temporary Impacts RC-01

Aquatic Resource Type	Permanent Impact								
	Temporary Impact			Physical Loss of Area			Degradation of Ecological Condition		
	Acres	Cubic Yards	Liner Feet	Acres	Cubic Yards	Liner Feet	Acres	Cubic Yards	Liner Feet
CDFW Lakebed	0.35	0	85	0	0	0	0	0	0
Wetland Waters of the U.S./State	0.02	0	5	0	0	0	0	0	0
Non-Wetland Waters of the U.S./State	0.32	0	95	0	0	0	0	0	0

Table 2 Permanent and Temporary Impacts RC-07

Aquatic Resource Type	Permanent Impact								
	Temporary Impact			Physical Loss of Area			Degradation of Ecological Condition		
	Acres	Cubic Yards	Liner Feet	Acres	Cubic Yards	Liner Feet	Acres	Cubic Yards	Liner Feet
CDFW Lakebed/ Non-Wetland Waters of the State	0.63	0	96	0.001	217	14	0	0	0
Wetland Waters of the State	0.014	0	96	0	0	0	<0.001	1	7
Non-Wetland Waters of the U.S.	0	0	0	0	0	0	0	0	0

Table 3 Permanent and Temporary Impact RC-10

Aquatic Resource Type	Permanent Impact								
	Temporary Impact			Physical Loss of Area			Degradation of Ecological Condition		
	Acres	Cubic Yards	Liner Feet	Acres	Cubic Yards	Liner Feet	Acres	Cubic Yards	Liner Feet
CDFW Lakebed/ Non-Wetland Waters of the State	0.049	0	93	<0.001	23	20	0	0	0
Wetland Waters of the State	0.014	0	89	<0.001	2	5	0	0	0
Non-Wetland Waters of the U.S.	0	0	0	0	0	0	0	0	0

Pond RC-01

The temporary impacts to Pond RC-01 (0.32 acres/85 liner feet) and associated perimeter wetland of the U.S./State (0.02 acres/ 5 linear feet) will occur from grading prior to the placement of the clay-based pond liner adjacent to the existing earthen berm. Approximately 270 cubic yards to native soils will be cut from the bottom of the pond and mixed with 4 pounds of clay per cubic foot of native soil. The native soil/clay mixture will be added to line the berm of the pond at a minimum of 12 inches thick. No impacts to CDFW jurisdictional riparian habitat will occur.

Pond RC-07

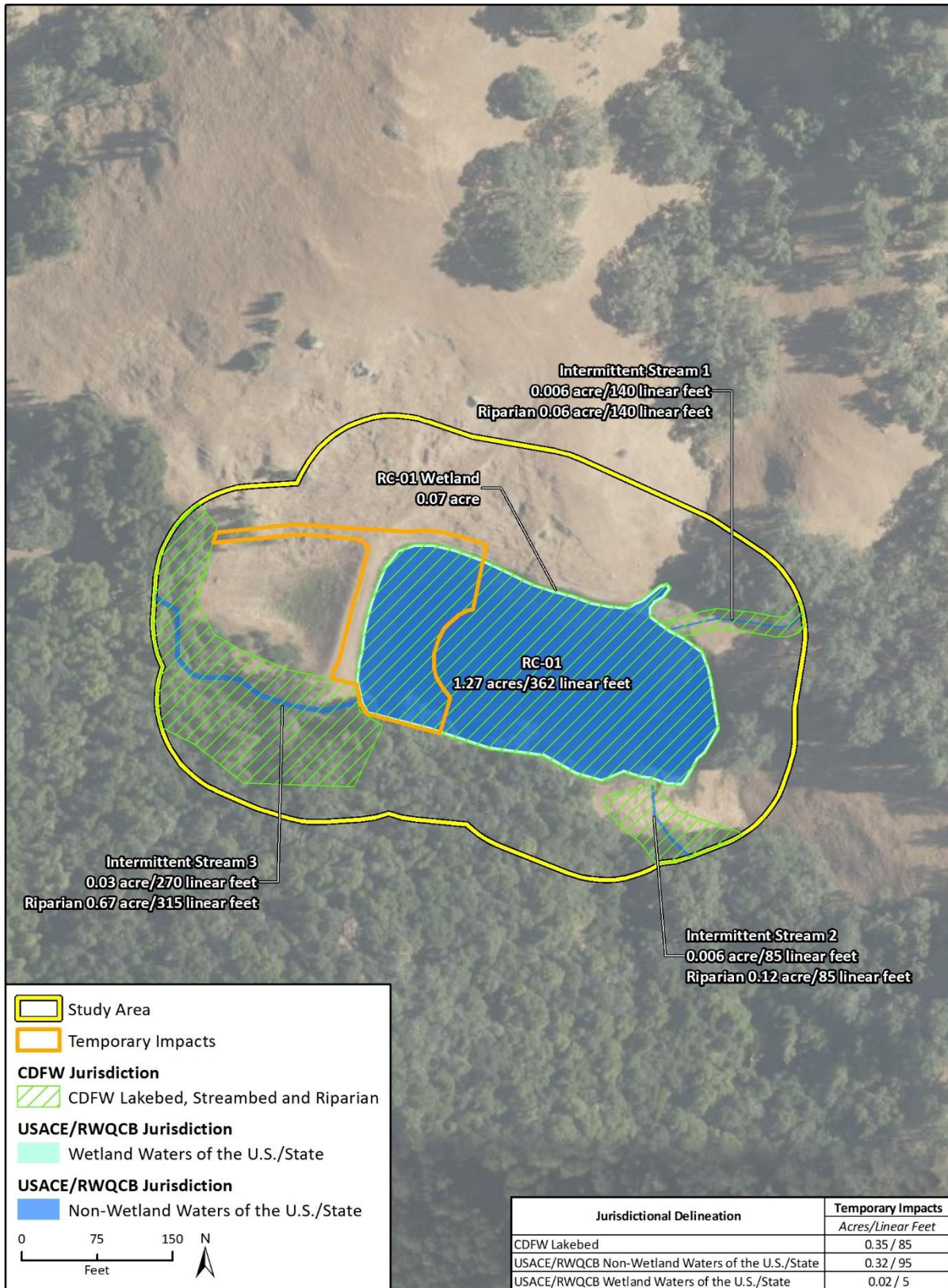
The permanent impacts to Pond RC-07 will occur from the installation of rock slope protection system surrounding the extension of 18-inch corrugated metal pipe inlet. Approximately 24 cubic yards of rock slope protection will be placed within the pond and along its banks, impacting 0.001 acres (43 square feet)/14 linear feet of RC-07 and less than 0.001 acres (43 square feet)/7 linear feet associated perimeter wetland. The temporary impacts to Pond RC-07 will occur from the excavating and regrading of the pond. The pond’s depth will be increased by approximately 5 feet from excavation. Approximately 218 cubic yards of native soil will be excavated from the bottom of the pond. The 12 cubic yards of excavated native soils will be mixed with six inches of topsoil and used to repair the berm after grading. No impacts to the Ephemeral Drainage 1 or Isolated Wetland 1 will occur.

Pond RC-10

The permanent impacts to Pond RC-10 will occur from the placement of the pipe inlet in the pond. Approximately two feet of the new 18-inch corrugated metal pipe will be placed in the bank of the

pond impacting <0.001 acre (43 square feet)/20 linear feet of RC-10 and <0.001 acres/5 linear feet of associated perimeter wetland. The entire pond, including 0.049 acres/93 linear feet of RC-10 and 0.014 acres/89 linear feet of associated perimeter wetland, will be temporarily impacted by the grading of the pond to accommodate for the establishment of 0.013 acres of wetland habitat. Of the 30 cubic yards of native soils excavated in the pond and in adjacent uplands, approximately 5 cubic yards of excavated native soil will be used in the regrading of the pond. No impacts to Ephemeral Drainages 1 and 2 or Isolated Wetlands 2, 3, and 4 will occur.

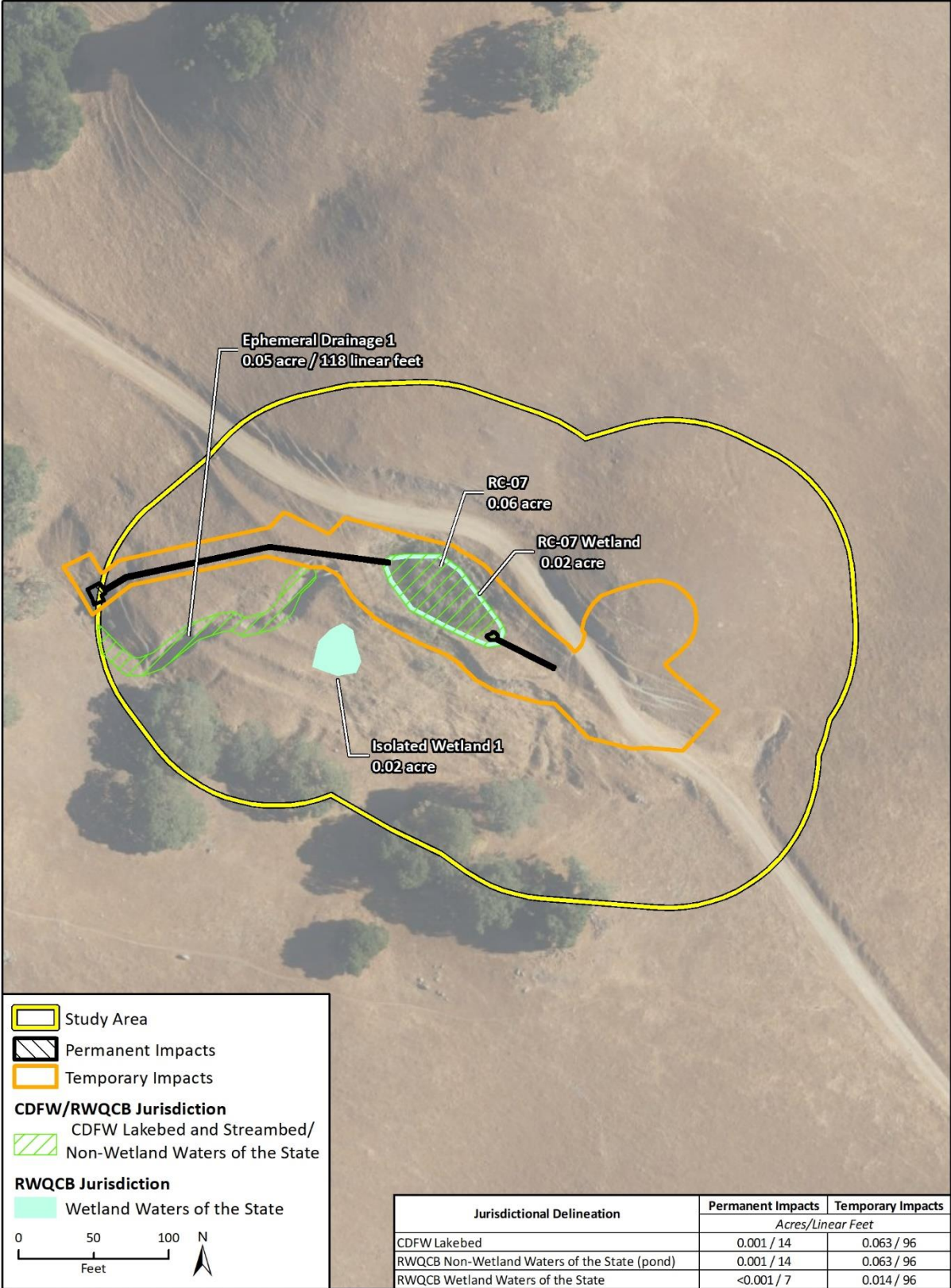
Figure 3a Project Impacts



Imagery provided by Microsoft Bing and its licensors © 2022.

BRAFig 4 Impacts Map_Dewatering_a

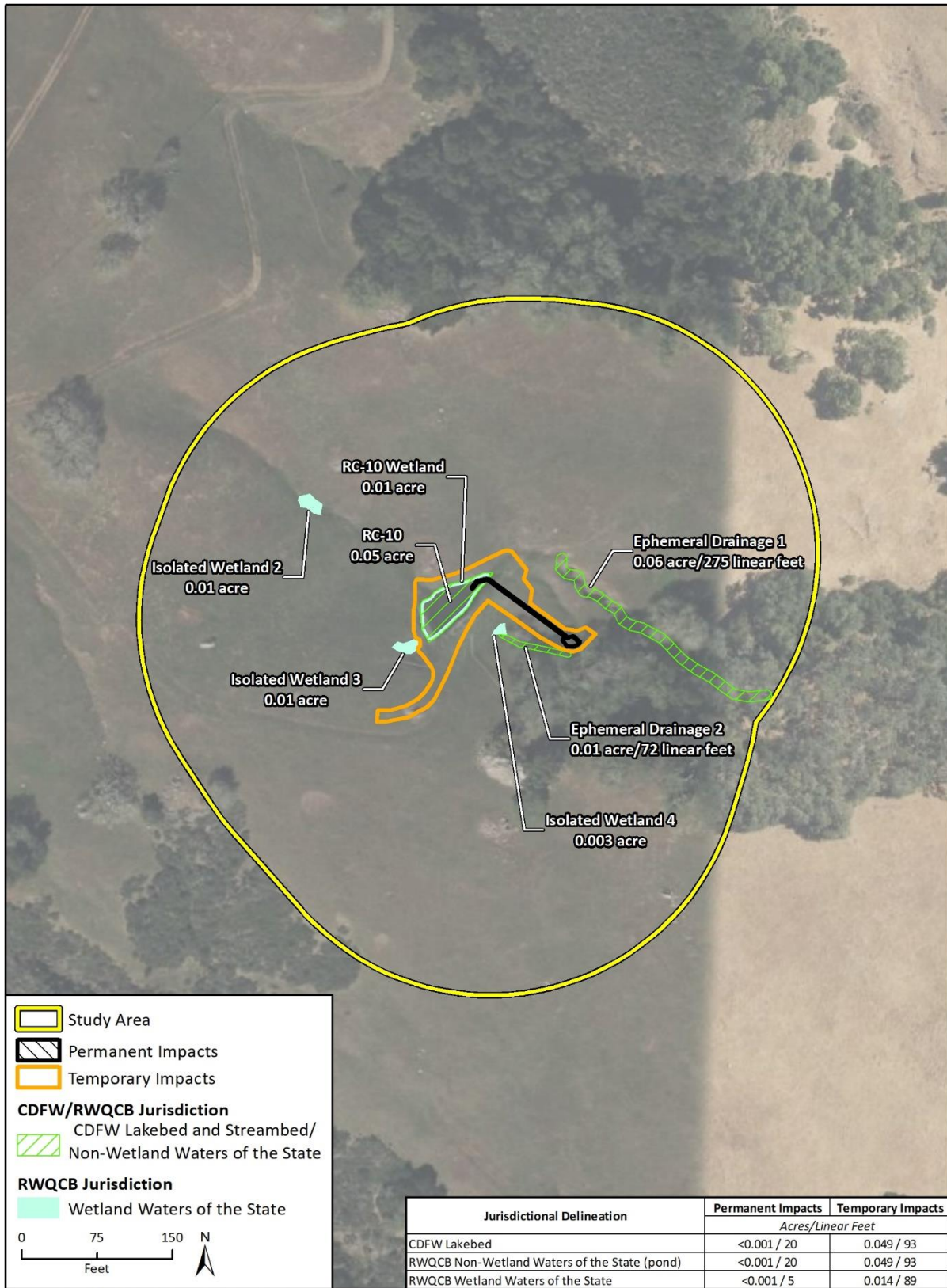
Figure 3b Project Impacts



Imagery provided by Microsoft Bing and its licensors © 2022.

BRAFig 4 Impacts Map_Dewatering_b

Figure 3c Project Impacts



Imagery provided by Microsoft Bing and its licensors © 2022.

BRAFig 4 Impacts Map_Dewatering_c

4 Mitigation and Monitoring Plans

4.1 Mitigation of Impacts to Special Status Species and Aquatic Resources

Project mitigation for temporary impacts will include re-establishment and enhancement of aquatic resources. All temporary impacts for RC-01 will be re-establishment of aquatic resources including non-wetland waters of the U.S./State and wetland waters of the U.S./State (Table 4). Temporary impacts for RC-07 will include 0.063 acres/ 96 linear feet of re-establishment and 0.014 acres/ 96 linear feet of enhancement (

Table 5). Temporary impacts for RC-10 will include 0.049 acres/ 93 linear feet of re-establishment and 0.014 acres/ 89 linear feet of enhancement (

establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.)

Table 6).

Table 4 Project Mitigation Quantities for Temporary Impacts for RC-01

Aquatic Resource Type	Units	Method				
		Est.	Re-est.	Reh.	Enh.	Pres.
CDFW Lakebed/Non-Wetland Waters of the U.S/State	Acres		0.35			
	Linear Feet		95			
Wetland Waters of the U.S/State	Acres		0.02			
	Linear Feet		5			

establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.)

Table 5 Project Mitigation Quantity for Temporary Impacts for RC-07

Aquatic Resource Type	Units	Method				
		Est.	Re-est.	Reh.	Enh.	Pres.
CDFW Lakebed/Non-Wetland Waters of the State	Acres		0.063			
	Linear Feet		96			
Wetland Waters of the State	Acres				0.014	
	Linear Feet				96	

establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.)

Table 6 Project Mitigation Quantities for Temporary Impacts for RC-10

Aquatic Resource Type	Units	Method				
		Est.	Re-est.	Reh.	Enh.	Pres.
Lakebed/Non-Wetland Waters of the State	Acres		0.049			
	Linear Feet		93			
Wetland Waters of the State	Acres				0.014	
	Linear Feet				89	

establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.)

Project compensatory mitigation for permanent physical loss of area will include the establishment of wetland habitat (Table 7). At RC-10, 0.013 acres/ 95 linear feet of upland will be graded for the establishment of wetland habitat and will compensate for the 0.004 acres of permanently impacted other waters from the placement of permanent outfall pipe in RC-07 and overflow pipe at RC-10.

Table 7 Project Mitigation Quantity for Permanent Physical Loss of Area

Aquatic Resource Type	Units	Method				
		Est.	Re-est.	Reh.	Enh.	Pres.
	Acres	0.013				

Wetland	Linear Feet	95
Waters of the State		

establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.)

4.1.1 Project Design Features and Habitat Plan Conditions

Design features have been incorporated into the project description to avoid impacts to biological resources and will be incorporated into the project to reduce temporary impacts and “take” of or otherwise adverse impacts to special status species. Proposed design features to re-establish and enhance habitat are described in detail below.

Condition 1 Avoid Direct Impacts on Legally Protected Plant and Wildlife Species

This permit condition applies to all covered actives and requires avoidance of Contra Costa goldfields (*Lasthenia conjugens*), a federally endangered species not included for coverage under the HCP; and species that are fully protected by CFGC (Sections 3511 and 4700), the MBTA, and Bald and Golden Eagle Protection Act. These species including but not limited to:

- Golden eagle
- Bald eagle
- American peregrine falcon
- Southern bald eagle
- White-tailed kite
- California condor
- Ring-tailed cat
- Migratory birds (including western burrowing owl, least Bell’s vireo, and tricolored blackbird)

California red-legged frog (federally threatened) are known to breed in Pond RC-07, and have been observed in Pond RC-01. Nesting birds protected under MBTA, CFGC, and the Bald and Golden Eagle Protection Act, have potential to breed and forage throughout the study area and vicinity. Active nests could be disturbed by construction activity and could result in nest destruction or abandonment. The project will comply with Condition 1 by conducting pre-construction surveys and mitigation measures as described below:

- The project itself would improve habitat and result in an overall benefit to the local CRLF population. In addition to obtaining incidental take permits for construction, adherence to mitigation measure BIO 1(a) and BIO 1(c) would mitigate impacts to CRLF sufficiently mitigate impacts to CRLF.
- Adherence to mitigation measure BIO 1(g) would mitigate impacts to Nesting birds protected under MBTA, CFGC, and the Bald and Golden Eagle Protection Act.

Habitat Plan Condition 3 Maintain Hydrologic Conditions and Project Water Quality

This condition applies to all covered activities and requires compliance with regulations under National Pollutant Discharge Elimination System (NPDES) permit requirements. The Central Coast Regional Board administers the NPDES program for the Pajaro Watershed which includes the Llagas Creek subbasin

NPDES compliance will be assured and the following will be implemented to protect watershed health and reduce stormwater discharge and pollutant runoff:

- To the extent possible, restore the hydrograph to more closely resemble predevelopment conditions.
- Invasive plant species removed during maintenance will be handled and disposed of in such a manner as to prevent further spread of the invasive species.
- When possible, maintain a vegetated buffer strip between staging/excavation areas and receiving waters.
- Use existing roads for access and disturbed area for staging as site constraints allow. Off-road travel will avoid sensitive communities such as wetlands to the maximum extent possible.
- Only clear/prepare land which will be actively under construction in the near term.
- When possible, avoid wet season construction.
- Fiber rolls used for erosion control will be certified as free of noxious weed seed.
- Filter fences and mesh will be of material that will not entrap reptiles and amphibians.
- Seed mixtures applied for erosion control will not contain invasive nonnative species and will be composed of native species or sterile nonnative species. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives.
- Topsoil removed during soil excavation will be preserved and used as topsoil during revegetation when it is necessary to conserve the natural seed bank and aid in revegetation of the site.
- To the extent feasible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas.
- The potential for traffic impacts on terrestrial animal species will be minimized by adopting traffic speed limits.
- All trash will be removed from the site daily to avoid attracting potential predators to the site. Personnel will clean the work site before leaving each day by removing all litter and construction-related materials.
- To prevent inadvertent entrapment of animals during excavation, all excavated, steep-walled holes or trenches more than 2-feet deep will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks.
- All disturbed soils will be revegetated with native plants and/or grasses or sterile nonnative species suitable for the altered soil conditions upon completion of construction. Local watershed native plants will be used if available. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. All disturbed

areas that have been compacted should be de-compacted prior to planting or seeding. Cut-and-fill slopes will be planted with local native or non-invasive plants suitable for the altered soil conditions.

- All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods will be thoroughly inspected for wildlife by properly trained construction personnel before the pipe is subsequently buried, capped, or otherwise used or moved in anyway.

Habitat Plan Condition 7 Rural Development Design and Construction Requirements

This condition largely addresses residential and transportation development, but also includes capital project outside the urban service area. Condition 7 requires low impact design and construction best management practices (limiting disturbance foot print, stream setbacks and buffers, invasive species avoidance, etc.) to avoid and minimize impacts to sensitive communities (including wetlands and hydrology) and covered species. The following measures will be implemented to lessen the impacts of rural development:

- At project sites that are adjacent to any drainage, natural or manmade, exposed soils will be stabilized or otherwise contained on site to prevent excessive sediment from entering a waterway.
- Ground-disturbing activities should be timed to occur during dry weather months to reduce the possibility of landslides or other sediment being transported to local streams during wet weather.
- If construction extends into wet weather, appropriate erosion control materials will be implemented to prevent loss of soil and sediment.
- Construction on steep slopes will be timed for dry weather months to reduce the potential for landslides.
- All temporarily disturbed soils will be revegetated with native plants and/or grasses to provide long-term erosion control and slow colonization by invasive nonnatives. All disturbed areas that have been compacted should be de-compacted prior to planting or seeding.
- All temporarily disturbed areas, such as staging areas, will be returned to pre- project or ecologically improved conditions within 1 year of completing construction or the impact will be considered permanent.
- No plants identified by the California Invasive Plant Council as invasive will be planted on the project site.

Habitat Plan Condition 12 Wetland and Pond Avoidance and Minimization

This condition requires minimization of direct and indirect impacts to wetlands and ponds and in some cases, avoidance of direct and indirect impacts to high quality wetlands and ponds, and includes a wetland fee for impacts. This condition also requires low impact design and construction BMPs for the protection of wetlands and ponds

Impacts to wetlands and ponds will be minimized through implementation of Restoration following construction. The proposed project aims to restore and improve habitat quality at each of the ponds, however, the following measures should be implemented as feasible, to minimize additional negative impacts:

- Personnel conducting ground-disturbing activities in or adjacent to wetlands and ponds will attend the worker environmental awareness training conducted by a qualified biologist so that they will understand appropriate avoidance and minimization measures necessary to reduce impacts to sensitive wetland and pond habitat which may support protected wildlife species.
- The limits of work should be clearly defined in the field with high visibility fencing where practical to avoid encroachment and unnecessary impacts.
- Silt fencing will be erected around the project site to reduce erosion where necessary.
- In addition to silt fencing, appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into wetlands, ponds, streams, or riparian woodlands. Filter fences and mesh will be of material that will not trap reptiles and amphibians. Erosion control blankets will be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
- Erosion-control measures will be placed at the outer edge of the project site.
- Fiber rolls used for erosion control will be certified as free of noxious weed seed.
- Seed mixtures applied for erosion control will not contain invasive nonnative species and should be composed of native species appropriate for the site or sterile, nonnative species. If sterile, nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives.
- No construction or maintenance vehicles will be refueled within 200 feet of avoided wetlands and ponds unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill.
- Where appropriate to control serious invasive plants, herbicides that have been approved by the U.S. Environmental Protection Agency for use in or adjacent to aquatic habitats may be used as long as label instructions are followed, and applications avoid or minimize impacts on covered species and their habitats. In wetland environments, appropriate herbicides may be applied during the dry season to control nonnative invasive species (e.g.: yellow star-thistle). Herbicide drift will be minimized by applying the herbicide as close to the target area as possible. Herbicides will only be applied by certified personnel in accordance with label instructions.
- All equipment brought into the site should be clean and free of contaminated sediments and weeds. All organic matter should be removed from boots, vehicle tires, construction equipment, and all other surfaces that have come into contact with ponds, wetlands, or potentially contaminated sediments. Equipment should be rinsed with clean water before leaving the project site.
- Measures will be implemented to minimize the spread of disease (such as Phytophthora and chytrid fungus) and nonnative species based on current wildlife agency protocols and other best available science.
 - Wetland plants will come from nurseries that practice phytophthora Best Management Practices.

Habitat Plan Condition 14 Valley Oak and Blue Oak Woodland Avoidance and Minimization

This condition applies to all covered activities and requires avoidance and minimization measures for stands of valley oak and blue oak, including protection of root zones and pruning under the direction of a certified arborist.

- Temporary project access points will be constructed as close as possible to the work area to minimize necessity for tree removal.
- Roads and pathways will be aligned outside of the tree's root protection zone whenever possible.
- Roads and pathways designed beneath or within 25 feet of the dripline of oak trees will be graded using hand-held equipment and will use permeable surfacing (e.g., grass pavers that allow runoff to infiltrate the ground).
- Alteration of natural grade through fill or other means within the root protection zone of oak trees will be minimized.
- Trenching for utility lines and other purposes will be minimized within root protection zones. Utilities may be installed in these areas by boring below the root zone.
- If extensive pruning of blue oaks and valley oaks is necessary, pruning will be conducted during the winter dormant period for these species and under the supervision of an arborist certified to International Society of Arboriculture or similar standards.

Habitat Plan Condition 17 Tricolored Blackbird

In areas mapped as suitable habitat (freshwater marsh with cattails, tule, etc.) in the Habitat Plan or identified during the project specific evaluation, preconstruction surveys are required 2 days prior to on-site disturbance for work within 250 feet. A 250-foot avoidance buffer is required for active tricolored blackbird colonies, and the SCVHA must be notified immediately. A biological monitor will also be required to ensure the buffer is enforced and is sufficient to prevent disturbance

- Adherence to design feature 7 would avoid impacts to Nesting birds protected under MBTA, CFGC, and the Bald and Golden Eagle Protection Act

4.1.2 Reduced Impact Scheduling

To reduce the likelihood of impacts to special status species, construction activities including draining the ponds, excavation, fill, vegetation removal, or other ground-disturbing activities within or immediately adjacent to CRLF and FYLF potential breeding habitat shall be confined to the dry season (June 15th to October 31st). To the extent possible, construction activities shall not occur during the wet season (November to June).

4.2 Special Status Species Habitat Enhancement Management

4.2.1 Hydrologic Targets

Hydrologic targets were determined by assessing special species biological requirements and site conditions. Sherwood Design Engineers (Sherwood; 2022) provided detailed information on how

ponding depth and will be achieved given expected evaporation, drainage and flow. A summary of ponding depth management is provided below.

Pond RC-01

Embankment seepage will be addressed through the addition of a new clay liner and clay cut off wall along the inboard toe of the earthen dam that will reduce and minimize seepage. The existing earthen spillway will be monitored for debris and sediment accumulation and will be cleaned out periodically. Additional observation should include the new landslide on the hillside above the spillway. Based on hydrological evaluations (Sherwood 2022) Pond RC-01 should be drained in August- September, allowing the target species, the California red legged frog, to fully metamorphose and leave the pond, thus controlling only the bull frog and non-native fish populations. Per the water balance, in the month of October (on an average rainfall year) the pond receives an estimated 424,703 cubic feet of water volume through precipitation and overland flow, which fills the Pond to its original maximum water level. The pond may return to its maximum capacity later in the rainy season due to rainfall variability.

Pond RC-07

The goal for Pond RC-07 is to provide temporary measures to stabilize a failure in the berm so the pond can continue to function as California red-legged frog breeding habitat for as long as possible. To ensure that the proposed pond design will continue to provide habitat for the target species, Sherwood completed a water balance for the current conditions and after implementation of the temporary stabilization measures (Sherwood 2022). The water balance calculations for Pond RC-07 indicate that the existing pond remains wet from October through April in an average rainfall year. The pond will be completely full in November and be completely dry in the month of May. Per the water balance calculations, the proposed pond retains water from October – May, therefore, slightly increasing the hydrologic period of the pond. The increased hydrologic period is the result of the proposed pond geometry being deeper, with smaller pond surface area. This new geometry leads to less losses of water through evaporation and infiltration. Our results indicate that although the proposed pond volume is 8 percent less, the ponding duration will extend into August during an average rainfall year.

Pond RC-10

The proposed improvements and grading will result in a 30 percent reduction in pond volume. Similar to Pond RC-07, the updated geometry will deepen the pond and reduce the pond surface area. As a result, the proposed pond's hydrologic period matches the existing conditions. The results indicate that the proposed design at RC-10 will continue to provide suitable habitat for the target species.

4.2.2 Vegetation Management

Vegetation in the Study Area will be annually managed for at least five years to improve habitat quality for the three special status species targeted by the SCVOSA: California red-legged frog, western pond turtle, and California tiger salamander. Habitat suitability for a target species increases when plant species composition and vegetation structure meet target thresholds.

Nonnative, invasive plant species will be targeted for control in the study site if they are ranked as moderate or high threat by the California Invasive Plant Council (Cal-IPC). Invasive plant species

which may be controlled at the project site include Himalayan blackberry (*Rubus armeniacus*), yellow star-thistle (*Centaurea solstitialis*), and black mustard (*Brassica nigra*). Invasive plant species control will consist primarily of physical removal. Herbicides will not be used to control vegetation at the project site to the extent feasible, and if required will be at least 50 feet from waters or wetlands. Invasive plant species control will be conducted in a manner so to not disturb nesting birds. If invasive plant species control is planned during nesting bird season (February 1 – August 31), a nesting bird survey will be conducted prior to the control activity. The cover of invasive plant species will be assessed during annual monitoring of the ecological performance standards and periodic maintenance visits.

Some areas are designated to provide open water pond habitat and bare ground habitat for California tiger salamander. These areas will not be included in cattle exclusion fencing, allowing cattle use will naturally thin vegetation in these areas.

4.2.3 Aquatic Predator Management

The abundance of aquatic predators will be assessed during annual monitoring of the ecological performance standards and three annual maintenance visits (see Section 5).

Physical removal of adult and juvenile American bullfrogs will be conducted according to the methods accepted methodology. Adults can typically be captured by hand or with the use of Hawaiian slings (gigs). Tadpoles will be captured via seine netting in June or July. If present, bullfrog egg masses will also be removed. Physical removal of adult and juvenile nonnative fishes will similarly be accomplished via seine netting in June or July. All captured individuals will be humanely killed.

4.2.4 Native Vegetation Management

Native wetland vegetation is expected to re-establish rapidly in the ponds following construction activities.

Source of Seeds/Plants

All propagules (seeds, divisions, or cuttings) will be collected from Santa Clara County when feasible to ensure that the plant material is adapted to the climatic conditions of the project site. Plant propagules will be derived from as close to the site as feasible from locations with similar hydrology and soils. If adequate propagules are unavailable from Santa Clara County, then they will originate from a location that exhibits similar environmental conditions to those found at the site, such as neighboring San Francisco Bay Area counties. A nursery contract will be established in sufficient time to collect propagules and ensure they have enough growing time as container stock in the nursery before they are installed at the site. Bare root divisions may also be collected for use as direct transplants to supplement nursery container stock; these root divisions will be collected from as close to the site as feasible, irrigated while in storage and stored for no longer than 48 hours, and directly transplanted into the designated planting areas.

Planting Methods

A seed mix of native herbaceous species will be applied to all temporarily disturbed areas outside of delineated ponds, following construction activities. Seeds will be broadcast by hand, and lightly raked into the spoil at a depth of 0.25 inch. The area will immediately be irrigated. This will reduce soil erosion and to reduce competitive pressure by nonnative herbaceous species. Table 8 provides

the preliminary upland native seed mix that will be applied, but the plant palette may be adjusted based on seed cost and/or availability to be determined by a qualified botanist and/or restoration specialist.

Table 8 Upland Native Seed Mix

Common Name ¹	Scientific Name ¹	Application Rate (pounds PLS/1,000 square feet) ²
Narrow-leaf milkweed	<i>Asclepias fascicularis</i>	0.6
Blue wild rye	<i>Elymus glaucus</i>	0.3
California poppy	<i>Eschscholzia californica</i>	0.02
Six weeks grass	<i>Festuca microstachys</i>	0.1
Meadow barley	<i>Hordeum brachyantherum</i>	0.3
California plantain	<i>Plantago erecta</i>	0.02
Blue eyed grass	<i>Sisyrinchium bellum</i>	0.02
Purple needlegrass	<i>Stipa pulchra</i>	0.1
Total		1.46

¹ Names derived from the Jepson Manual, Second Edition (Baldwin et al. 2012).

² PLS (pure live seed) = the proportion of total seed that is pure and viable. To find the total weight of raw seed needed to achieve the application rate in the table, find %PLS as follows: [(% purity of seed lot) (% germination rate of species)/100]. Then, divide the application rate in the table (pounds) by the %PLS (expressed as a decimal) to find total weight of raw seed applied per acre for each species.

Container stock and/or direct transplants of wetland plants will be installed to supplement existing vegetation in areas designed to support wetland vegetation (Table 9). Short statured emergent wetland species will be installed in areas expected to be subject to greater depth and longer duration of inundation. Drought tolerant seasonal wetland species will be installed in areas where inundation and soil saturation is expected to be of lesser depth and shorter duration, such as around the elevation of the maximum water level. Table 3 provides the wetland native seed mix and container stock that will be applied but the plant palette may be adjusted based on seed and container stock cost and/or availability to be determined by a qualified botanist and/or restoration specialist.

Container plantings will be installed between when rainfall has saturated the soils (October – December). Excavated planting holes will be two times the width and equal to the depth of the root volume of the planting. Planting holes will be backfilled with site soil. All plantings will be irrigated immediately following installation, but further irrigation is not expected to be required.

Table 9 Suggested Wetland Plant Palette and Specific Pond Installation

Common Name ¹	Scientific Name ¹	Pond	Container Type
Coast carex	<i>Carex nudata</i>	RC-07	1 Gallon
Needle spikerush	<i>Eleocharis macrostachya</i>	RC-07	D-40
Panicled bulrush	<i>Scirpus microcarpus</i>	RC-07	1 Gallon
Broadfruit bur reed	<i>Sparganium eurycarpum</i>	RC-07	1 Gallon
Clustered field sedge	<i>Carex praegracilis</i>	RC-01, RC-10	D-16
Needle spikerush	<i>Eleocharis macrostachya</i>	RC-01, RC-10	D-40
Beardless wild rye	<i>Elymus triticoides</i>	RC-01, RC-10	D-40

Iris leaved rush	<i>Juncus xiphioides</i>	RC-01, RC-10	D-40
------------------	--------------------------	--------------	------

¹ Names derived from the Jepson Manual, Second Edition (Baldwin et al. 2012).

5 Ecological Performance Standards

Ecological performance standards were generated to qualify achievement of project objectives outlined in Section 2. The standards incorporate the USACE South Pacific Division uniform performance standards to the extent practicable and are consistent with performance standards in place for other pond restoration efforts under the authority of SCVHA.

A combination of site-specific physical and target species-specific ecological performance standards will be used to assess achievement of project objectives. The performance standards will be used to assess if the project site is moving towards functional ecological habitat and hydrologic targets desirable to maintain or enhance populations of special status species.

The ecological performance standards will be assessed during annual monitoring visits (three per year) by a qualified biologist and hydrologist for a minimum five-year monitoring period. These experts will document findings in an annual report, described in Section 6.

1. Target Hydrologic Regime. The ponds RC-01, RC-07 and RC-10 will achieve a target hydrologic regime that supports the California red-legged frog and California tiger salamander breeding by having a portion of the pond inundated by at least 0.5 feet of water through August 31 of each monitoring year that exhibits average or above average precipitation. Gauges will be installed to accurately measure pond inundation.

2. Sedimentation and Geomorphic Stability. The ponds RC-01, RC-07 and RC-10 will demonstrate minimal sedimentation as determined by topographic cross-section surveys and review of the hydrologic regime and California red-legged frog, California tiger salamander and western pond turtle survey results. Minimal sedimentation is defined as a surface area/volume of sedimentation that does not compromise attainment of the other ecological performance standards (e.g., target hydrologic regime, wetland vegetation cover criteria, surface area of restored, jurisdictional pond and wetland habitat).

The ponds RC-01, RC-07 and RC-10, will remain geomorphically stable, as assessed by a qualified hydrologist. The ponds will be considered geomorphically stable if the soil movement does not compromise attainment of the other ecological performance standards.

3. California Red-legged Frog/California Tiger Salamander/Western Pond Turtle. The California red-legged frog will continue to occur at RC-01 and RC-07. Western pond turtle will continue to occur at the RC-10 pond.

4. Aquatic Predator Presence/Absence. Bullfrog abundance at RC-01 will be managed at levels below current conditions. Bullfrogs will not colonize RC-07 or RC-10. If annual monitoring determines that the numbers of bullfrogs in the ponds have increased since the previous year, the ponds will be drained in mid-September of the current year and allowed to dry completely until winter rains refill the pond (i.e., in most years, in December or January).

5. Wetland Vegetation Percent Cover. Average percent cover of wetland vegetation will exhibit an increasing temporal trend across monitoring years at the ponds RC-01 and RC-07. Percent cover will be determined by species; at least three wetland species will be observed at each site during each monitoring year. At the Pond RC-10 site, vegetation cover will not exceed 50% in the open water pond habitat during any monitoring year to encourage of breeding habitat for the California red-legged frog and California tiger salamander.

6. Invasive Plant Cover. The average percent cover of nonnative, invasive plant species at the pond sites will be less than 25% in each monitoring year. All species with a Cal-IPC rating of moderate or high will be considered nonnative, invasive plant species.

6 Reporting Program

To adaptively manage the ponds for conditions suitable for special status species, a qualified biologist and hydrologist will monitor the ponds, as described in Section 5. Their findings will be documented in annual reports for assessment by oversight agencies. Review of these reports will enable implantation of adaptive management strategies, should further management of these ponds be required to maintain populations of target special status species.

6.1 Qualitative Monitoring Memoranda

The qualified biologist shall prepare and provide a brief memorandum (memo) to the Responsible Party within two weeks following each qualitative monitoring visit (three per year). The memo shall include date, time, and weather conditions; a discussion of general site conditions; and recommendations for remedial actions as needed to facilitate progress toward mitigation success. Selected photos taken during qualitative monitoring visits shall be included with each memo. All qualitative monitoring reports shall be submitted in digital format.

6.2 Annual Mitigation Status Reports

The Responsible Party shall prepare an Annual Mitigation Status Report and Mitigation Accounting Form to submit to SCVHA by April 1 of each year of the five-year mitigation and maintenance period or until restoration success criteria have been met. The annual report shall include, at a minimum, documentation of the following:

- Location and extent of mitigation area, including a Geographic Information System-based map of the project site
- Restoration installation methods
- An overview of the maintenance activities performed during the year, including replacement planting, weed control, and any erosion control/stabilization efforts
- A summary of remedial actions taken during the year (if any) and a discussion of any adaptive management strategies that have been implemented
- Monitoring methodology
- Percentage cover of native and nonnative species by vegetation community
- Photographs from established photo points
- Summary of success criteria
- A discussion of the monitoring results in relation to success criteria
- Summary of significant issues that may affect mitigation success, and pertinent recommendations/remedial actions required to meet success criteria

Additional information and data collected during qualitative monitoring visits, as outlined in Section 4.2, may be included to provide greater detail. All annual mitigation status reports shall be submitted by April 1 of each year to SCVHA in digital format.

7 Guidelines for Long-Term Operations and Maintenance of Project Site

The goal of SCVOSA is to foster the long-term viability of the site's special status species and waters of the United States and State of California. Routine monitoring and minor maintenance tasks are intended to assure the viability of the site in perpetuity. Long-term management and monitoring activities will focus on the natural communities in the ponds and the plant and wildlife species that occur there.

Annual site monitoring of selected characteristics to determine stability and functional recovery trends of the ponds and special status species are recommended. Annual monitoring will assess the property's conduction, degree of erosion, assessment of nonnative plant species abundance and aquatic predator abundance, water quality, fire hazard, and/or other aspects that may warrant management actions.

Adaptive management and contingency measures will be employed to respond to unforeseen circumstances and adjust mitigation strategies as needed. Specific time-sensitive maintenance and project management activities may be identified based on the results of each monitoring visit. As part of each annual monitoring report, maintenance and management activities implemented during the previous year will be described and the results will be evaluated under the framework of adaptive management. If management and maintenance methods are not successful in addressing negative environmental stressors identified in monitoring memos and/or annual monitoring reports, the methods will be examined and altered to increase the potential for success based on the qualified biologist's best professional judgment and management methods that are shown to be successful based on scientific research. In some cases, the effectiveness of management and maintenance activities may not be evident over the course of only one year. This will be accounted for in annual monitoring reports through evaluation of whether or not management actions are contributing to progress towards the success criteria. In some cases, it may be necessary to wait for two years or more before altering methods as part of an adaptive management strategy.

There can be unforeseen effects on a mitigation project in the event that a disaster such as fire, flood, drought, or vandalism should have a significantly negative impact on the mitigation area during the maintenance period. The qualified biologist will coordinate with the Responsible Party in the event of any such unforeseen event, and contingency measures will be developed in coordination with the USACE, RWQCB, and/or CDFW. Modifications to this HMMP may be required and additional remedial actions may need to be implemented.

At the end of three years of maintenance and monitoring, if the qualified biologist determines that the mitigation area will not meet success criteria at the end of the five-year maintenance and monitoring period using the maintenance methods outlined in Section 4, corrective actions will be undertaken. Corrective actions may consist of re-seeding consistent with the baseline native plant palette and/or installation of locally sourced container plants, draining of ponds for predator control or elevated predator capture, depending on site conditions. Detailed methods of the proposed corrective actions will be provided in the Year Three Annual Report, and agency concurrence with these methods will be sought prior to implementation.

8 References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press. Berkeley, California.
- Rincon Consultants, Inc. 2020. Pond Management and Enhancement Project, Jurisdictional Waters and Wetlands Delineation. Prepared for the Santa Clara Valley Open Space Authority.
- _____. 2021. Pond Management and Enhancement Project, Biological Resource Assessment. Prepared for the Santa Clara Valley Open Space Authority.
- Santa Clara Valley Habitat Agency. 2020. Santa Clara Valley Habitat Agency Geobrowser. Available at: <http://www.hcpmaps.com/habitat/> (Accessed June 2020).
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society. Sacramento, California.
- Sherwood Design Engineers. 2022. Basis of Design for 95% Design Plans Habitat Enhancement and Pond Restoration Rancho Canada Del Oro Open Space. Prepared for the Santa Clara Valley Open Space Authority.
- Trenham, P.C., and H.B. Shaffer. 2005. Amphibian upland habitat use and its consequences for population viability. *Ecological Applications* 15:1158–1168.
- United States Fish and Wildlife Service. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog, Appendix B.
- _____. 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). Region 1, U.S. Fish and Wildlife Service. Portland, Oregon.
- United States Geological Survey. 2020. Santa Teresa Hills, California 7.5-minute topographic quadrangle. Accessed July 2020 via The National Map. <https://viewer.nationalmap.gov/advanced-viewer/>.
- Vollmar Natural Lands Consulting. 2016. Rancho Cañada del Oro Open Space Preserve. Herpetofauna Survey Report and Management Recommendations.

This page intentionally left blank.