NEGRANTI GREEN VALLEY RANCH
AG RESERVOIR PROJECT
SAN LUIS OBISPO COUNTY, CALIFORNIA

BIOLOGICAL RESOURCES ASSESSMENT

Prepared for:

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July 19, 2019

AUTHENTICITY AND SIGNATURE PAGE

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of Santa Barbara Department of Planning and Development and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visit associated with this report.

_____ 7/19/19

Kevin Merk — Date

Principal Biologist

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY ii

1.0 INTRODUCTION 1
1.1 Project Description 1
1.2. Regulatory Overview 1

2.0 METHODS 6

3.0 RESULTS 8
3.1 Existing Conditions 8
3.2 Soils 8
3.3 Habitat Types 10
3.4 Hydrologic Features and Wetlands 12
3.5 Special-status Biological Resources 13

4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION 20
4.1 Direct and Indirect Effects 22
4.2 Cumulative Effects 28

5.0 CONCLUSION 28

6.0 REFERENCES 29

LIST OF FIGURES

Figure 1 – Site Location Map 2
Figure 2 – Aerial Overview Map 3
Figure 3 – Soils Map 9
Figure 4 – Habitat Map 11
Figure 5 – CNDDB Plant Occurrences Map 14
Figure 6 – CNDDB Animal Occurrences Map 15
Figure 7 – Designated Critical Habitat Map 21

LIST OF TABLES

Table 1 – Additional Species for Native Erosion Control Seed Mix 27

APPENDICES

Appendix A – Site Plans
Appendix B - List of Plants and Animals Observed Onsite During the Site Visit
Appendix C – Photo Plate
Appendix D – Special-status Biological Resources Summary

EXECUTIVE SUMMARY

Kevin Merk Associates, LLC (KMA) conducted a biological resources assessment (BRA) for the Negranti Green Valley Ranch's proposed agricultural reservoir project at 6425 Green Valley Road, Cambria, San Luis Obispo County, California (APN 046-012-001). The proposed project involves the construction of a 7.1 million gallon (MG) (21.8 acre-foot) reservoir for water storage to be used to irrigate avocado orchards on the property. The entire project footprint would be approximately 2.65 acres. The proposed reservoir site is located in the saddle of a minor ridgeline in an area of rolling grasslands. Perry Creek is located to the south of the site, and a portion of the upper limits extend into the study area developed for the project. An existing agricultural road provides access to the proposed project site. Existing wells on the property would be used to pump water up to the reservoir. Outlet pipes to a valve system will provide irrigation water through a gravity distribution system.

The purpose of this assessment is to assist Negranti Green Valley Ranch, LLC with the County of San Luis Obispo's (County) compliance review under the California Environmental Quality Act (CEQA). This report evaluates the potential for the project site to support special-status biological resources, and evaluates whether these resources could be adversely affected by the project. The project site is within the Coastal Zone, and this BRA also evaluated potential project impacts to environmentally sensitive habitat areas (ESHA) as defined in the California Coastal Act. The study area for this assessment included the proposed project impact area, plus a 100-foot buffer. KMA's Principal Biologist Kevin Merk and Senior Biologist Susan Christopher conducted a field survey of the study area on May 29, 2019.

Five plant communities or habitat types were determined to occur within the study area: 1) Annual Grassland; 2) Native Perennial Grassland; 3) Rock Outcrop; 4) Ephemeral Drainage; and 5) Wetland. The Native Perennial Grassland is small in size and dominated by purple needlegrass, a common species in the area. It has a State Rarity Rank of S4 and was determined to not meet the sensitive natural community criterion. A small area of Wetland habitat was present in Perry Creek off site but within the study area. While this habitat type also has a State Rarity Rank of S4, it was determined to be a sensitive natural community since it is associated with a stream and would be regulated under the Clean Water Act, Porter-Cologne Water Quality Act and California Fish and Game Code. No permitting would be needed from regulatory agencies because the work would remain outside of their respective jurisdictional areas. Prominent Rock Outcrops are also present in the western part of the study area, and are considered to be a Sensitive Resource Area (SRA) pursuant to the *Coastal Land Use Ordinance*. Several smaller rock outcrops were also identified in the eastern part of the study area but are too small in size and not visible from offsite areas to be considered an SRA. The project will not affect the two prominent Rock Outcrops. Additionally, the project site plans have incorporated erosion and sediment control measures, and Best Management Practices to be implemented during construction. Additional measures are provided herein as mitigation to ensure potential indirect effects to Wetland habitat do not occur during construction.

The spring survey confirmed no special status plants are present in the study area, and none would be affected by the proposed project. The evaluation identified 16 special-status animal species that are known to occur in the site vicinity and have the potential to occur in the study area on a periodic basis. Many of the special-status animal species with potential to occur onsite are mobile species that would only use the site periodically while foraging or moving through the site, without using the area for breeding or other key life history traits. Species considered to be mobile include monarch butterfly, birds (adults, non-nesting) and bats. Individuals of these mobile species are expected to move away from any temporary disturbance during construction activities, and would

not be directly affected. Individuals of less mobile species (amphibians, reptiles, and badger dens) could potentially be affected by construction activities if the work period coincided with the time of year that these species may be in impact areas. Timing the initiation of construction activities to minimize the chance of effects is problematic because there is no one season when all species with potential to occur would be restricted to areas away from these habitats. However, if construction were to occur during the winter when the Blainville's horned lizard, southwestern pond turtle eggs and two-striped gartersnake could be underground and would not be detectable during preconstruction visual surveys, impacts on these species could occur. Avoidance measures prescribed herein include timing the initiation of construction, involving vegetation removal and initial excavation of topsoil areas, to take place between May 1 and September 30. Additionally, minimization measures involving pre-activity surveys by a qualified biologist prior to initial ground disturbance are required because avoidance by timing is not possible for each of these species with potential to occur. These surveys shall involve visual searches for amphibians and reptiles within project impact areas, nesting bird surveys, and searches for American badger dens. If any potential dens are found, additional mitigation to ensure the dens are not occupied at the time of construction would be required. If any active bird nests are detected and appropriate buffer areas established around those nests cannot be avoided during construction, work shall be delayed until a qualified biologist determines that the young have left the nest.

There would be no measurable negative effect on wildlife habitat as a result of construction of the agricultural reservoir because a minimal amount of a common habitat type would be converted to water source, which may have a positive overall effect on wildlife habitat. The proposed project seeks to place an agricultural reservoir on a ridge above other ranch infrastructure, which could have a net positive effect on wildlife habitat by placing a water source in an undeveloped area where wildlife occurs. Many of the special-status animal species with potential to occur on the site are amphibian and reptile species that are associated with aquatic habitats. Individuals of these species undergo movements between aquatic habitats, crossing through dry upland habitats. The proposed agricultural pond could provide a suitable stopover point during overland movements between other habitats in the area. In particular, the project could positively affect designated critical habitat for the California red-legged frog, which occurs throughout the project area.

In summary, potential negative impacts on biological resources resulting from implementation of the project would mostly likely be limited to construction activities that could directly affect individuals of special-status wildlife species if present in impact areas, or shortly thereafter should any erosion or water quality effects occur. There would be no negative impacts on habitat quality, wildlife corridors, or other long-term impacts of the project, and in fact the reservoir could positively affect wildlife habitat. Mitigation measures to minimize the chance for project effects on these resources are described herein, and would reduce project-related effects below a level of significance as defined under CEQA.

1.0 INTRODUCTION

Kevin Merk Associates, LLC (KMA) conducted this biological resources assessment (BRA) for a proposed agricultural reservoir on the Negranti Green Valley Ranch located at 6425 Green Valley Road, near the unincorporated community of Cambria, San Luis Obispo County, California. The reservoir would be located on an approximately 776-acre property identified by Assessor's Parcel Number (APN) 046-012-001. The property is located to the south of Highway 46/Green Valley Road and approximately four (4) miles east of the junction of Highway 46 and Highway 1, at the southeast end of South Green Valley Road (Figures 1 and 2). It is on the U. S. Geological Survey (USGS) Cypress Mountain 7.5-minute topographic quadrangle (T 28 S, R 9 E, Section 2; 35.533331 N, -120.971193 W). The study area, which is the portion of the property where the reservoir would be located as described below, is surrounded by undeveloped ranch land, avocado orchards, and dispersed rural residential land uses (Figure 2).

The purpose of this assessment was to assist Negranti Green Valley Ranch, LLC with technical biological resources information to support the County of San Luis Obispo's (County) environmental review process pursuant to the California Environmental Quality Act (CEQA) for construction of the agricultural reservoir. This report evaluates the potential for the project site to support special-status biological resources (plants, animals, sensitive natural communities, and designated critical habitat), and evaluates the site's existing environmental conditions to determine whether special-status biological resources are present onsite and could be adversely affected by the project. The project site is located within the coastal zone, and this BRA also assesses the potential presence of environmentally sensitive habitat areas (ESHA) as defined in the California Coastal Act of 1976.

1.1 Project Description

As we understand, the proposed project involves the construction of a 7.1 million gallon (MG) (21.8 acre-foot) reservoir for water storage to be used to irrigate avocado orchards on the property. The entire project footprint would be approximately 2.65 acres. The site is located on a hilltop, and a basin would be excavated to a length (across the top elevations) of approximately 422 feet. With the construction of a 25-foot tall berm on the south side, the width would be 207 feet across the top, and 25 feet deep with 2-foot freeboard (see site plans in Appendix A). The inside and outside slopes of the basin would be 2:1. Approximately 48,812 cubic yards of soil would be excavated, and 11,211 cubic yards would be used as fill to create the berm. Excess material will be spread as non-structural fill adjacent to the reservoir. A vegetated interceptor channel and rip rap field would capture any surface runoff from the hill to the east and divert it around the reservoir perimeter. An 18-inch PVC pipe would daylight on a rip rap pad to provide a means for emergency overflow. An existing agricultural ranch road would be used to access the site during construction and operation of the reservoir, and wells on the property would be used to pump water up to the reservoir through pipes that are apparently already in the ground. These pipes are routed to a valve system that will provide irrigation water to the orchard through a gravity distribution system.

1.2 Regulatory Overview

For the purpose of this report, special-status species are those plants and animals listed, or Candidates for listing, as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (FESA); those listed as Threatened or Endangered under the California Endangered Species Act (CESA); and, animals designated as "Species of Special

KEVIN MERK ASSOCIATES

N W E S

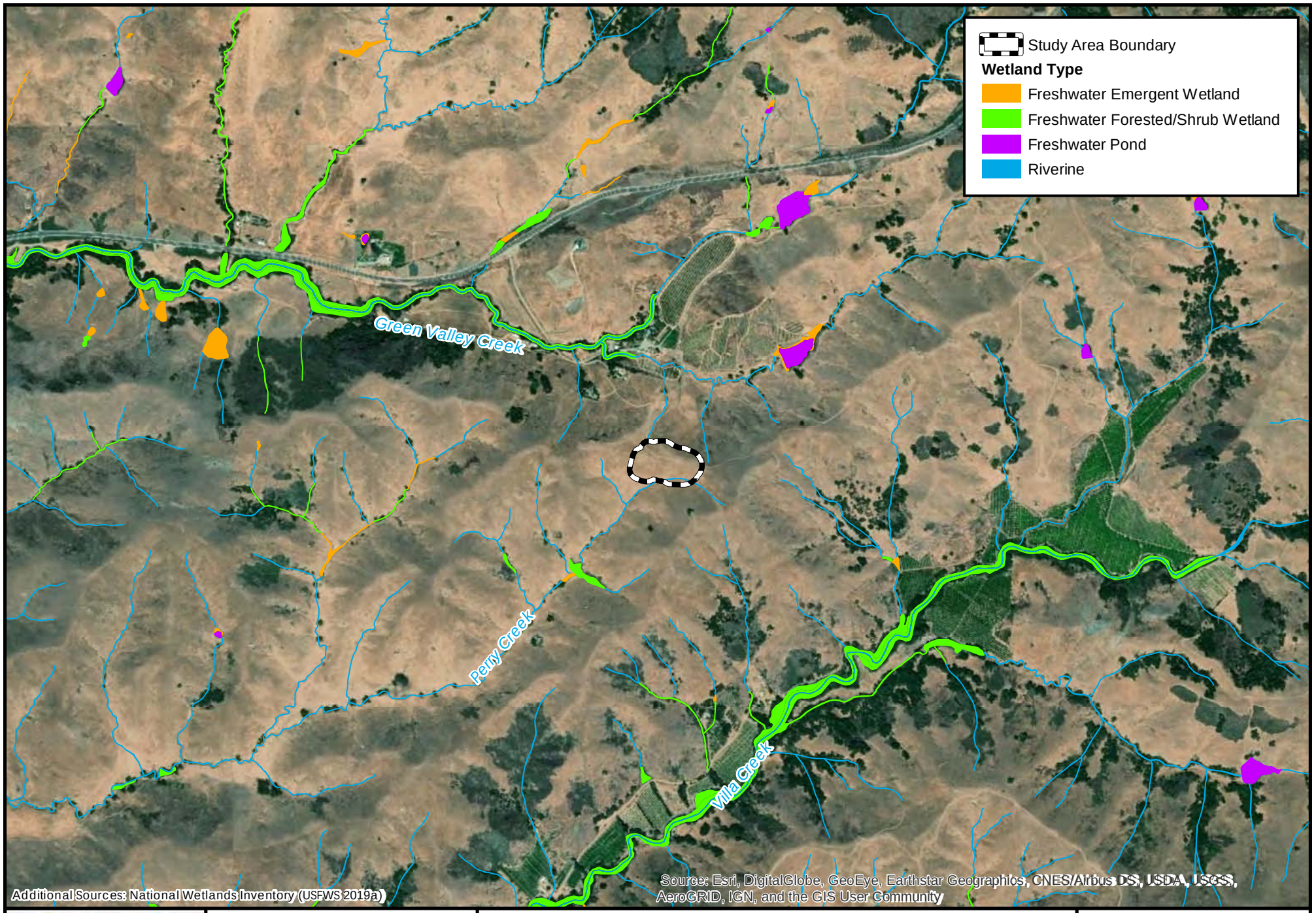
1 in = 2 miles

Negranti Green Valley Ranch
AG Reservoir

Negranti Green Valley Ranch LLC

Figure 1

Site Location



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N W E S

1 inch = 1,500 feet

Negranti Green Valley Ranch Ag. Reservoir

Negranti Green Valley Ranch LLC

Figure 2

Aerial Overview

Concern," "Fully Protected," or "Watch List" by the California Department of Fish and Wildlife (CDFW; 2018a).

FESA provisions protect federally listed species and their habitats from unlawful take, which is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." Under these regulations, "harm" may include significant habitat modification or degradation that kills or injures wildlife. Candidate species are not afforded legal protection under FESA; however, Candidate species typically receive special attention during the CEQA environmental review process. CESA provides for the protection and preservation of native species of plants and animals that are experiencing a significant decline which if not halted would lead to a threatened or endangered designation. Habitat degradation or modification is not expressly included in the definition of take under CESA.

CDFW maintains a list of Species of Special Concern for those species in which declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as special concern is to halt or reverse their decline early enough to secure their long-term viability. Species of Special Concern may receive special attention during environmental review, but do not have statutory protection. FESA and CESA emphasize early consultation to avoid impacts on Threatened and Endangered species. As part of the consultation process, project proponents are directed to develop appropriate mitigation plans to offset project effects on listed species and their habitats.

Critical habitat is designated for species listed under FESA, and are areas that contain the physical or biological features which are essential to the conservation of those species and may need special management or protection. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Activities by private landowners are not affected if there is no federal nexus.

Rare plants are those defined as occurring on California Rare Plant Rank (CRPR) 1, 2, 3 and 4 developed by the CDFW working in concert with the California Native Plant Society (CNPS; CDFW 2018b). Rank 4 species are a watch list, and typically do not meet CEQA's rarity definition (Section 15380), but are included here because they may be of local concern. The CRPR definitions are as follows:

- *Rank 1A = Presumed extirpated in California and either rare or extinct elsewhere;*
- *Rank 1B.1 = Rare or endangered in California and elsewhere; seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);*
- *Rank 1B.2 = Rare or endangered in California and elsewhere; moderately threatened in California (20-80% occurrences threatened);*
- *Rank 1B.3 = Rare or endangered in California and elsewhere, not very threatened in California (<20% of occurrences threatened or no current threats known);*
- *Rank 2A = Presumed extirpated in California, but more common elsewhere;*
- *Rank 2B = Rare or endangered in California, but more common elsewhere;*
- *Rank 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA); and*
- *Rank 4.2 = Plants of limited distribution (watch list), fairly threatened in California (20-80% occurrences threatened).*

- *Rank 4.3= Plants of limited distribution (watch list), not very threatened in California.*

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state regulations. Birds of prey are protected in California under the California Fish and Game Code Section 3503.5. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by CDFW. Eagles are protected under the Bald and Golden Eagle Protection Act. The federal Migratory Bird Treaty Act (MBTA) applies to many bird species, including common species, and prohibits killing, possessing, or trading in migratory birds, including whole birds, parts of birds, bird nests, and eggs. The act restricts construction disturbance during the nesting season that could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

Sensitive natural communities are those native plant communities listed in the California Natural Diversity Database (CNDDB; CDFW 2019a) as rare or of limited distribution. They are evaluated using NatureServe's Heritage Methodology to assign global and state ranks based on rarity and threat, and these ranks are reviewed and adopted by CDFW's (2019b) Vegetation Classification and Mapping Program (VegCAMP). Evaluation with the state (S) level results in ranks ranging from 1 (very rare or threatened) to 5 (demonstrably secure). Those with ranks of S1 to S3 are to be addressed in the environmental review process under CEQA (CDFW 2019b).

Environmentally Sensitive Habitat Areas (ESHA) are designated pursuant to the California Coastal Act. A variety of plant communities within the Coastal Zone meet the definition of ESHA (Coastal Act Section 30107.5), including riparian areas, wetlands, maritime chaparral and special-status species habitat. The California Coastal Commission (CCC), with technical assistance from the CDFW, is responsible for protecting ESHA within the Coastal Zone, and have required local agencies such as the County of San Luis Obispo to develop policies aimed at protecting and preserving these areas.

CEQA defines a *significant effect on the environment* as "a substantial, or potentially substantial, adverse change in the environment." Projects that may have significant effects are required to be analyzed in an Environmental Impact Report (EIR). Under CEQA, a project's effects on biotic resources are deemed significant where the project would do any of the following:

- Potentially substantially degrade the quality of the environment
- Substantially reduce the habitat of a fish or wildlife species
- Cause a fish or wildlife population to drop below self-sustaining levels
- Threaten to eliminate a plant or animal community
- Substantially reduce the number or restrict the range of an endangered, threatened, or rare species
- Have possible environmental effects that are individually limited but cumulatively considerable

In addition to the criteria above that trigger mandatory findings of significance, Appendix G of the CEQA Guidelines includes six additional impacts to consider when analyzing the significance of project effects, which may or may not be significant, depending on the level of impact. A project's effects on biological resources could be deemed significant if the project would do the following:

a) 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 CDFW or USFWS.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

If the project proponent agrees to mitigation measures or project modifications that would avoid all significant effects or would mitigate the significant effect(s) to a point below the level of significance, an EIR would not be required. The project proponent would be bound to implement the mitigation measures to reduce the project effects to below a level of significance. Mitigation is not required for effects that are less than significant.

2.0 METHODS

This investigation followed the County's *Draft Guidelines for Biological Resources Assessments* (County 2016). Google Earth aerial imagery was employed in coordination with a field survey to define the current extent of onsite plant communities and assist in identifying potential habitat for special-status species. The project impact area, as shown on the project site plans developed by Eric J. Gobler Civil Engineering, dated April 15, 2019 (Appendix A), was assessed in entirety. The study area for this investigation covered the impact area plus a buffer of 100-feet (Figure 2).

KMA's Principal Biologist Kevin Merk and Senior Biologist Susan Christopher conducted a field survey of the study area on May 29, 2019 to assess the potential of the site to support sensitive biological resources. The site was accessed from South Green Valley Road, and the survey was conducted by walking and visually inspecting all portions of the study area. The project applicant, Dustin Hauge, provided an overview of the limits of disturbance associated with the project. Weather conditions were breezy, with air temperature in the 60's, high clouds, and clearing fog.

Dominant plant species in each plant community were determined, and all plant and animal species observed during the survey were recorded (Appendix B). Plant taxonomy followed the Jepson Flora Project (2019), and nomenclature for animals is reported as it appears in the CNDDB (CDFW 2019a) or as updates are available (California Herps 2019). Plant communities and habitat features were mapped on ESRI (2019) aerial imagery. Classification of the onsite plant communities was based on the CDFW's (2019b) *Vegetation Classification and Mapping Program* which generally follows Sawyer et al.'s (2009) *Manual of California Vegetation*. Holland's (1986) *Preliminary Descriptions of the Terrestrial Natural Communities of California* was also referenced as the sensitive natural communities listed in the CNDDB follows the Holland community names. *A Guide to Wildlife Habitats in California*, which is updated through the California Wildlife Habitat Relations System (CDFW 2019c), was also cross-referenced. Representative photos of each of the habitat types onsite and the proposed project area were taken, and a photo plate is included as Appendix C.

The *Web Soil Survey* was used to identify the soil mapping units present within the project site (Natural Resources Conservation Service [NRCS] 2019a). The *National Wetlands Inventory* (NWI) was reviewed to evaluate the extent of identified wetlands on the site and in the vicinity (USFWS 2019a). USGS topographic maps were also reviewed for information on hydrologic and topographic features. Designated critical habitat for species listed under FESA was identified according to information provided in *Environmental Conservation Online System* (USFWS 2019b).

The CNDDB (CDFW 2019a) was queried for special-status plant and animal species occurrences and sensitive natural communities within the following nine USGS 7.5-minute quadrangles: Cypress Mountain, Cambria, Pebblestone Shut-in, Lime Mountain, Adelaida, York Mountain, Morro Bay North, Cayucos, and Cayucos OE W. CNDDB records of special-status plant and animal occurrences and sensitive natural communities within a five-mile buffer of the study area were mapped. For the list of special-status species in the CNDDB search, local distribution and ecological information was obtained from a variety of online and published sources (Hoover 1970, Jennings and Hayes 1994, Bolster 1998, Moyle et al. 2015, Calflora 2019, California Native Plant Society 2019, California Herps 2019, The Cornell Lab of Ornithology 2019a, 2019b; CDFW 2019c). Those species that occur within the Santa Lucia Range, as well as each species recorded in the CNDDB within five miles, were considered to be within the project vicinity (Appendix D). Other species that were in the nine-quadrangle search which have limited distributions restricted to coastal dune or terrace areas or in the Salinas Valley were considered to be outside of the project vicinity. Based upon our knowledge of the local area and other sources of species occurrence records, we included additional special-status biological resources that have been documented in the project vicinity.

From the list of all special-status species known from the project vicinity, an evaluation of those species with potential to occur onsite was performed based upon the suitability of habitat conditions on the property, and the local distribution (geographical and elevational ranges) and specific requirements (plant communities and soils) of the species considered. Definitive surveys for the presence or absence of special-status animal species were not conducted. We relied on existing information and known occurrence records in the region coupled with our site-specific observations from other locations in the southern Santa Lucia Range to make determinations for the probability of occurrence of special-status species in the study area. If any special-status species had been observed during the site survey, these species would have been listed as "Present" in Appendix D. Those species listed as "Potential" met the following requirements: records in the site vicinity, appropriate plant community and/or soil associations onsite, and within the elevational range of the species. If any one of these elements was not met or considered to be marginal for the site, but the other elements were present, that species was considered "Unlikely". If onsite environmental conditions were clearly inappropriate, or the species has a limited distribution that does not overlap the site, those species were considered "Not Expected". If any lifestage or particular life history use (i.e., foraging) fit the requirements of the onsite conditions, even while other aspects were inappropriate for certain functions (i.e., breeding), these species were still considered to have potential to occur onsite, but the likelihood of occurring onsite along with a description of site suitability are provided in the special-status species table (Appendix D) as well as a more in-depth analysis in the text.

We determined whether special-status plant and animal species, designated critical habitat, sensitive natural communities, and wetlands or other waters under state or federal jurisdiction could occur on or near the site. We then evaluated the potential impacts of the proposed project on each of these biological resource issues, including the six additional impacts in CEQA Appendix G. An evaluation of significance as defined under CEQA is provided for each potential impact, and mitigation is proposed to reduce impacts to a level below the significance threshold.

3.0 RESULTS

A list of plants and animals observed during the survey is included as Appendix B. Appendix C is a photo plate of photographs taken during the site visit to characterize the onsite conditions. Appendix D includes a list of all special-status species, sensitive plant communities, and designated critical habitat recorded within the site vicinity, and an evaluation as to their potential presence onsite. Figure 1 is a site location map, Figure 2 shows the wetland habitats recorded in the NWI in the site vicinity, and a soils map is included as Figure 3. Figure 4 is a habitat map showing the plant communities and habitat features in the study area. Figures 5 and 6 are the CNDDB maps showing the locations of special-status plants and animals, respectively, recorded within five miles of the study area. Figure 5 also shows sensitive natural communities and Figure 7 shows designated critical habitat within five miles of the site.

3.1 Existing Conditions

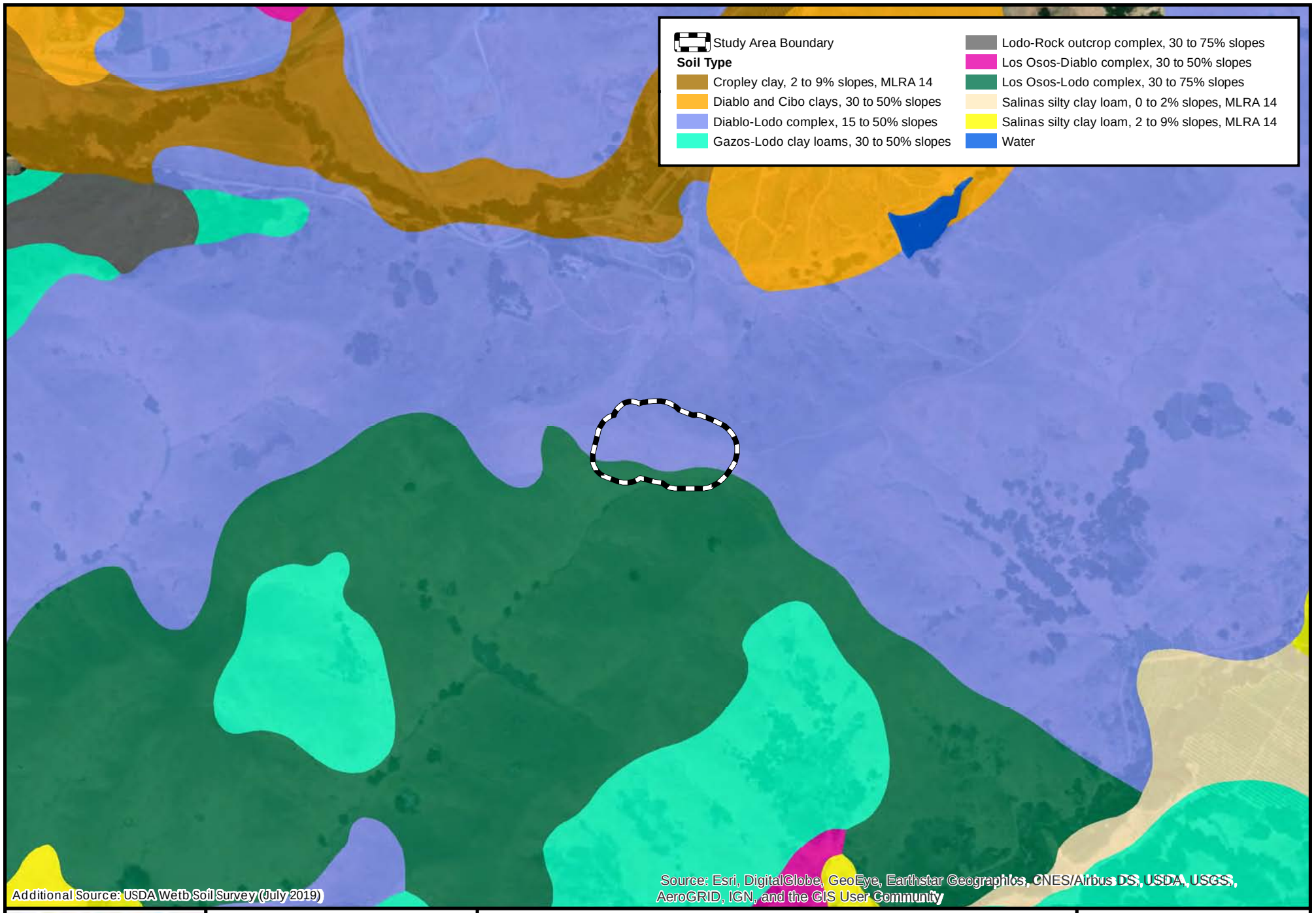
The proposed reservoir site is located in the saddle of a minor ridgeline in an area of rolling grasslands, approximately five (5) miles inland from the Pacific Ocean coast. Onsite elevations range from approximately 629 to 723 feet (192 to 220 meters) above mean sea level. Green Valley Creek is to the north, the upper watershed of Villa Creek is to the east, and the headwaters of Perry Creek are just outside of the property (but within the study area) to the south. Each of these creeks flow in a southwesterly or westerly direction to the Pacific Ocean. The subject property is part of a larger 1,283-acre ranch that is mainly open grassland used for rotational cattle grazing. Portions of the property have been planted in avocados, and a few homes are on the property along with ranch buildings in a rural setting. Two existing agricultural ponds are also present on the property, and are constructed as impoundments on ephemeral drainages along Highway 46. The proposed agricultural pond is intended to supplemental water for the avocado orchards when surface water is limited in the existing irrigation ponds.

An existing agricultural road from the residences and ranch buildings provides access to the proposed project site. At the time of the site survey, there was evidence of cattle grazing, including grazed inflorescences of grasses, but cattle were not present on the study site. Grazing activities have caused a moderate level of site disturbance from cattle congregating in the saddle area, likely the result of using the flatter ridgeline area for providing supplemental feed. This type of disturbance has influenced plant species composition and dominant cover of non-native species.

Interspersed within the grassland habitat in the study area are rock outcrops of various sizes (refer to photo plate). The upper drainage of Perry Creek is located to the south just outside of the fenced pasture in which the proposed reservoir is sited. The entire area is grazed, and a water tank and cattle watering trough were constructed along the creek to capture water from the drainage, and possibly from a spring. A small PVC pipe directs overflow from the trough back into the drainage, and has resulted in the establishment of wetland vegetation in the channel. Water was flowing out of the tank at the time of the site visit. Aside from this drainage, the remainder of the study area is dry upland habitat.

3.2 Soils

The study area contains two soil types. The Diablo-Lodo complex, 15 to 50 percent slopes, soil map unit occupies a majority of the site, including all of the project impact area (Figure 3; NRCS 2019a).



KEVIN MERK ASSOCIATES

N W E S

1 inch = 750 feet

Negranti Green Valley Ranch Ag. Reservoir

Negranti Green Valley Ranch LLC

Figure 3

Soils Map

The soils along the Perry Creek drainage are Los Osos-Lodo complex, 30 to 75 percent slopes (NRCS 2019a). Both of these soil types form on the crests or sideslopes of hills and mountains, and are predominantly clay loam. Unweathered bedrock is typically found within 12 inches of the surface (NRCS 2019a). As noted above and shown on the Habitat Map provided as Figure 4, several rock outcrops are also present in and surrounding the study area.

3.3 Habitat Types

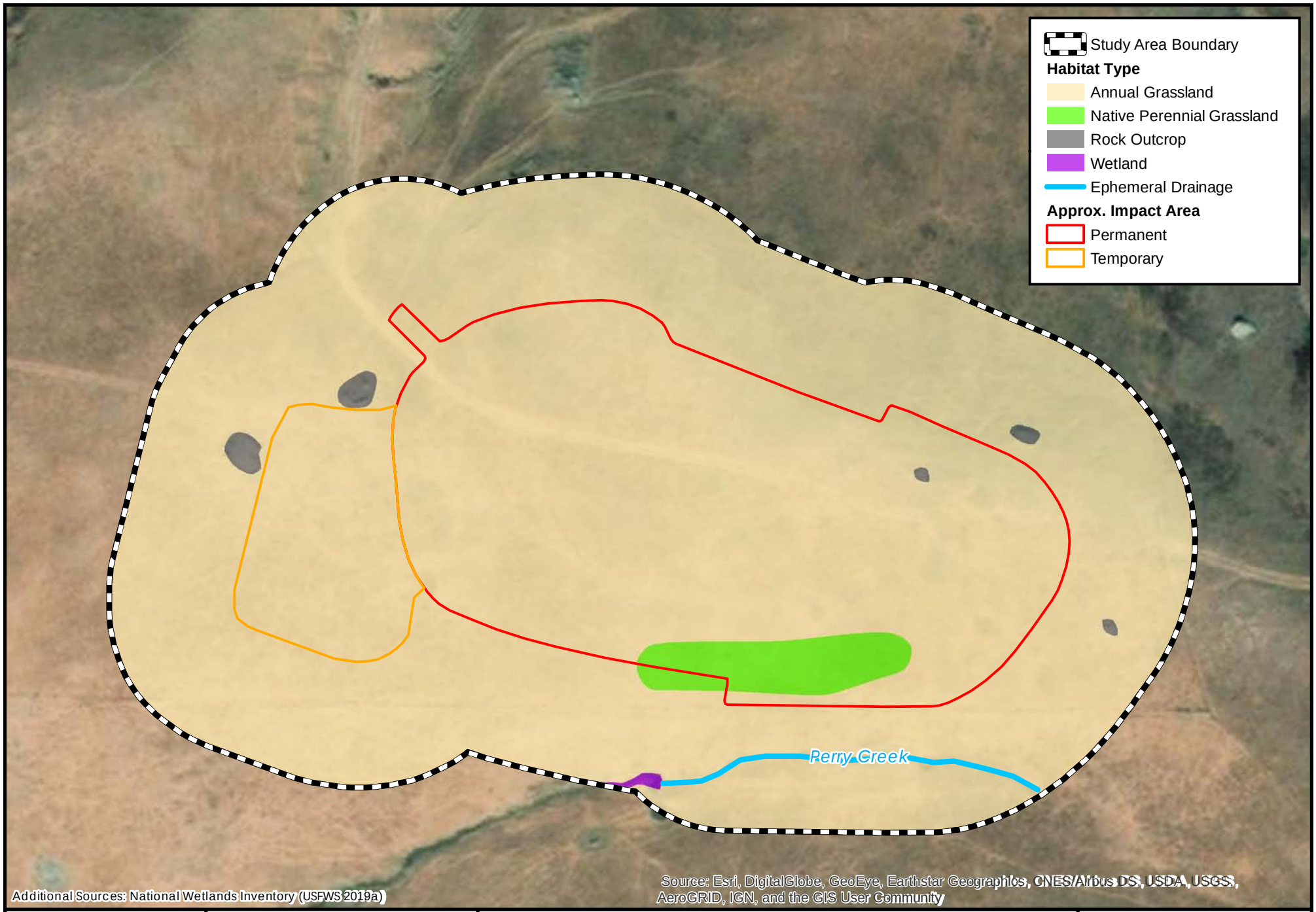
Five plant communities or habitat types were identified within the study area, and include: 1) Annual Grassland; 2) Native Perennial Grassland; 3) Rock Outcrop; 4) Ephemeral Drainage; and 5) Wetland. Only the two grassland types and rock outcrops occur in the reservoir footprint. The 100-foot buffer around the reservoir disturbance footprint included the section of Perry Creek that is technically offsite and outside any proposed direct disturbance. A description of these habitat types is given below and the areas occupied by these habitat types onsite is shown on Figure 4.

3.3.1 Annual Grassland

Annual Grassland is the primary habitat type on the study area (Figure 4). It is dominated by non-native grasses and herbs such as Italian rye grass (*Festuca perennis*), hare barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), purple false brome (*Brachypodium distachyon*), Harding grass (*Phalaris aquatica*), big heron bill (*Erodium botrys*), red stemmed filaree (*Erodium cicutarium*), fiddleleaf dock (*Rumex pulcher*), and Italian thistle (*Carduus pycnocephalus*). On the slopes below the top of the saddle where there were lower levels of disturbance, a higher proportion of native grassland species occurred. These species included scattered purple needle grass (*Stipa pulchra*), saw toothed goldenbush (*Hazardia squarrosa*), and miniature lupine (*Lupinus bicolor*). This habitat type corresponds to the Non-native Grassland community described by Holland (1986) and the Wild Oats and Annual Brome Grasslands semi-natural alliance (CDFW 2019b).

3.3.2 Native Perennial Grassland

Purple needle grass was present periodically throughout the study area, but in one location, a stand of purple needlegrass was observed forming the dominant cover in a contiguous area. It mapped as Native Perennial Grassland, as it is a native, perennial bunchgrass species. This community was observed on the gentle slope to the south of the saddle and uphill from Perry Creek, and occupied an area of approximately 8,400 square feet (Figure 4). Purple needle grass had approximately 30% cover in this area, and appears to persist in an area of thinner, shallow soils compared to the heavier and deeper clay soils in other parts of the study area. There were also non-native grassland species intermixed with the bunchgrasses, but at a lower frequency compared to the Annual Grassland habitat characterized above. Other species present included narrowleaf cottonrose (*Logfia gallica*), scarlet pimpernel (*Lysimachia arvensis*), and big heron bill, along with several native species including California plantain (*Plantago erecta*), and turkey-mullein (*Croton setiger*). This habitat corresponds to the Valley Needlegrass Grassland community described by Holland (1986) and the *Nassella pulchra-Avena* spp.-*Bromus* spp. alliance described by Sawyer et al. (2009).



KEVIN MERK ASSOCIATES

N W E S

1 inch = 100 feet

Negranti Green Valley Ranch Ag. Reservoir

Negranti Green Valley Ranch LLC

Figure 4

Habitat Map

3.3.3 Rock Outcrop

There were several scattered rock outcrops on the site that varied in size from individual rocks a few feet across to clusters of bedrock boulders approximately 25 feet in diameter and up to four or five feet tall. The smaller rock outcrops were surrounded by annual grassland habitat, but the larger rock outcrop in the western part of the site had several California goosefoot (*Chenopodium californicum*) and California sagebrush (*Artemisia californica*) plants present, as well as goldentop (*Lamarckia aurea*) growing in small patches of soil on the rocks.

3.3.4 Ephemeral Drainage

The upper reach of Perry Creek is present on neighboring property that was included in the study area since a 100 foot buffer around the limits of disturbance was used for this analysis. A water tank and cattle watering trough were present just offsite to the south. The portion of Perry Creek upstream from the water tank was vegetated by upland non-native grassland species. It had a defined bed and bank and a headcut was visible in the upper hillside draw. The drainage feature was classified as Ephemeral Drainage (Figure 4) as no water or damp soils were observed in this portion of the drainage. It is important to note that Perry Creek is not on the subject property, and it was not directly accessed but characterized using binoculars. This area was considered to be a habitat feature, instead of a distinct plant community, and would likely under the jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to the Clean Water Act, Regional Water Quality Control Board (RWQCB) pursuant to the Clean Water Act and Porter-Cologne Water Quality Act, and CDFW pursuant to California Fish and Game Code.

3.3.5 Wetland

Wetland habitat was restricted to the portion of Perry Creek offsite downstream from the water tank on neighboring property. Access restrictions precluded close inspection, but using binoculars the wetland plants appeared to be supported by overflowing water that was draining from the trough via a PVC pipe into the creek (Figure 4). The overflow appeared to be contributing to prolonged saturated conditions that supported wetland plant species consisting of rabbitsfoot grass (*Polypogon monspeliensis*), brown headed rush (*Juncus phaeocephalus*), spreading rush (*Juncus patens*) and slender willow herb (*Epilobium ciliatum*). This habitat type corresponds to the Vernal Marsh community described by Holland (1986) and the *Juncus phaeocephalus* alliance classified by Sawyer et al. (2009). The Wetland community occurred within the ephemeral drainage habitat feature, and would likely be considered "jurisdictional" as described above in Section 3.4 below.

3.4 Hydrologic Features and Wetlands

The study area is perched along a ridgeline located at the headwaters of Perry Creek, which drains the low coastal foothills of the southern Santa Lucia Range east of the hamlet of Harmony. On the north side of the study area, two small drainage features are mapped by the NWI, but these features did not have bed and bank structure or signs of flowing water extending into the study area. The study area is located north of the Villa Creek watershed (Figure 2), which drains to the south. Perry Creek flows in a generally westerly direction toward the hamlet of Harmony, and then bends to the northwest parallel to Highway 1 to join Green Valley Creek. The natural drainage feature continues to the northwest to join Santa Rosa Creek, which flows southwesterly through the community of Cambria and ultimately discharges into the Pacific Ocean.

The NWI classifies upper Perry Creek as Riverine, and our field observations confirmed this to be accurate (Figure 2). Riverine systems are aquatic habitats contained within a channel that periodically or continuously contains moving water, and which lack trees, shrubs, and emergent vegetation (Cowardin et al. 1992). The type of subsystem in the study area is Intermittent, which means it contains flowing water for only part of the year (Cowardin et al. 1992). The creek was not directly accessed due to a fence line, but the upper reach of the creek within the study area did not appear to support wetland vegetation. Wetland plants were observed forming the dominant cover in the channel downstream from the leaking watering trough. As stated above, other small riverine drainage features are mapped by the NWI on the north-facing slopes on the property, but did not have bed and bank structure extending into the study area.

3.5 Special-status Biological Resources

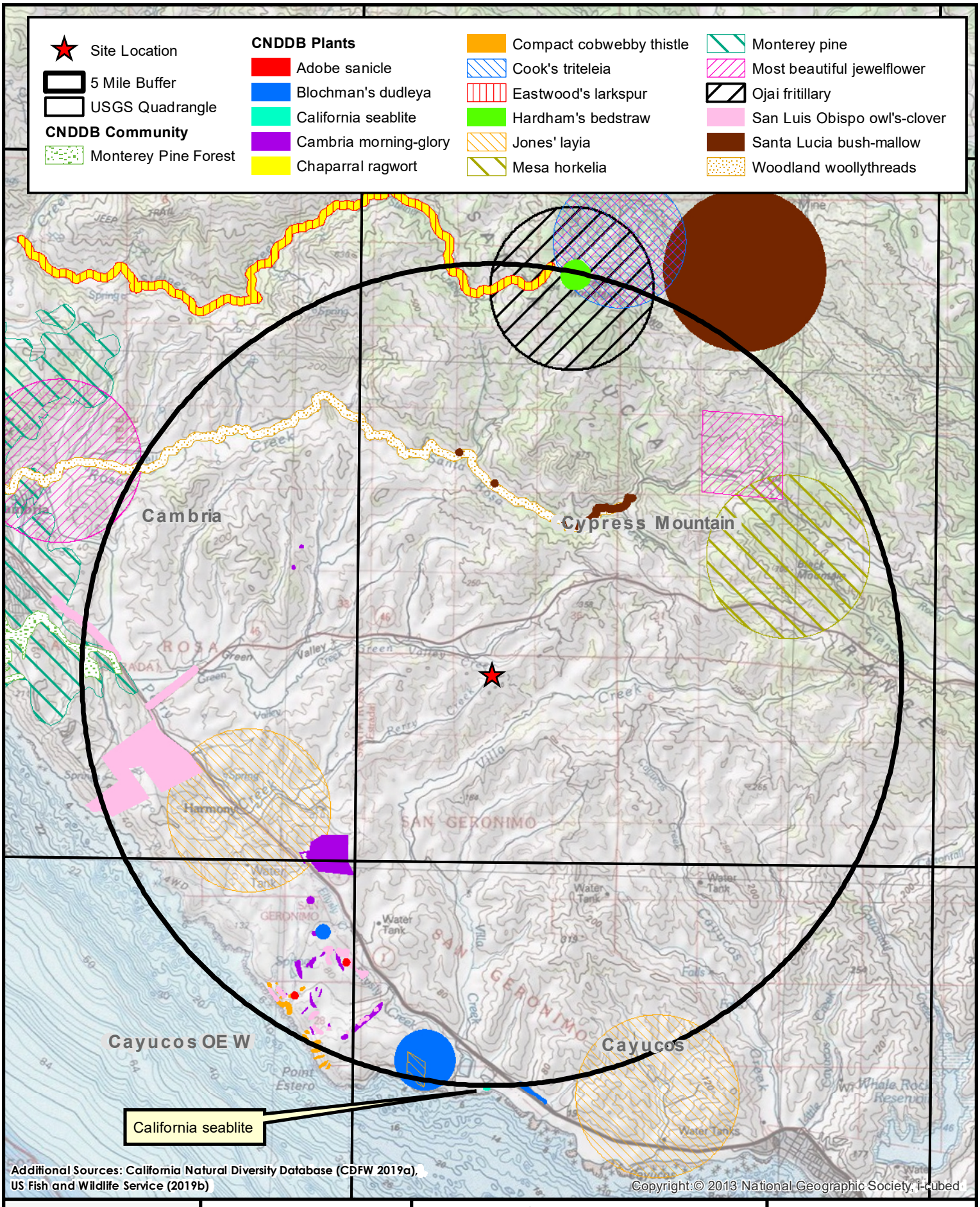
Figures 5 and 6 illustrate the CNDDB-documented occurrences of special-status plants and animals, respectively, within five miles of the property. Designated critical habitat is shown on Figure 7. No sensitive natural communities were reported in the CNDDB within five miles of the site, but those known to occur in the larger vicinity are included in Appendix D and described in Section 3.5.2 below. Appendix D also provides a list of special-status biological resources recorded from the site vicinity, their listing status, habitat associations, and our assessment as to whether these resources have potential to occur onsite. Those resources with potential to occur on the project site are described in further detail below.

3.5.1 Special-status Plants

The impact area and surrounding buffer were surveyed during the site visit and no special-status plant species were seen. The survey was conducted on May 29th during an above average rainfall year when rare plants were in identifiable condition well past their typically reported bloom periods. May rainfall helped extend the bloom period of many species that are typically in fruit by this time of year. Although only one survey to the site occurred, and grazing pressure influences plant distribution in the study area, the survey was able to thoroughly canvas the grassland areas and determine that special status plants are not present in the proposed disturbance area. Please refer to Appendix D for further detail of all the special status plants on the target list that were searched for onsite. One species, Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*; CRPR 1B.1) that is known to occur on rock outcrops and in grasslands on thin rocky soils has a typical bloom period of March to April. No *Dudleya* species were seen during the survey of the grassland areas with a search focus in the vicinity of the rock outcroppings and native grassland area. A Blochman's dudleya reference site in the San Simeon area was visited on the same day of the survey to ensure it was still in identifiable condition, and confirm the May 29th survey was sufficient to determine that no rare plants are present in the reservoir disturbance footprint.

3.5.2 Sensitive Natural Communities

The Native Perennial Grassland habitat onsite, which corresponds to the Valley Needlegrass Grassland community described by Holland (1986) and the *Nassella pulchra-Avena* spp.-*Bromus* spp. alliance described by Sawyer et al. (2009), was observed as a small patch (approximately 8,400 square feet) of bunchgrasses growing in an area dominated by non-native species. This habitat type has a state rarity ranking of S4, and as such, was determined to not be a sensitive natural community. The Wetland habitat in Perry Creek, corresponding to the Vernal Marsh community described by Holland (1986) and the *Juncus phaeocephalus* alliance classified by Sawyer et al. (2009), also has a State Rarity Ranking



KEVIN MERK ASSOCIATES

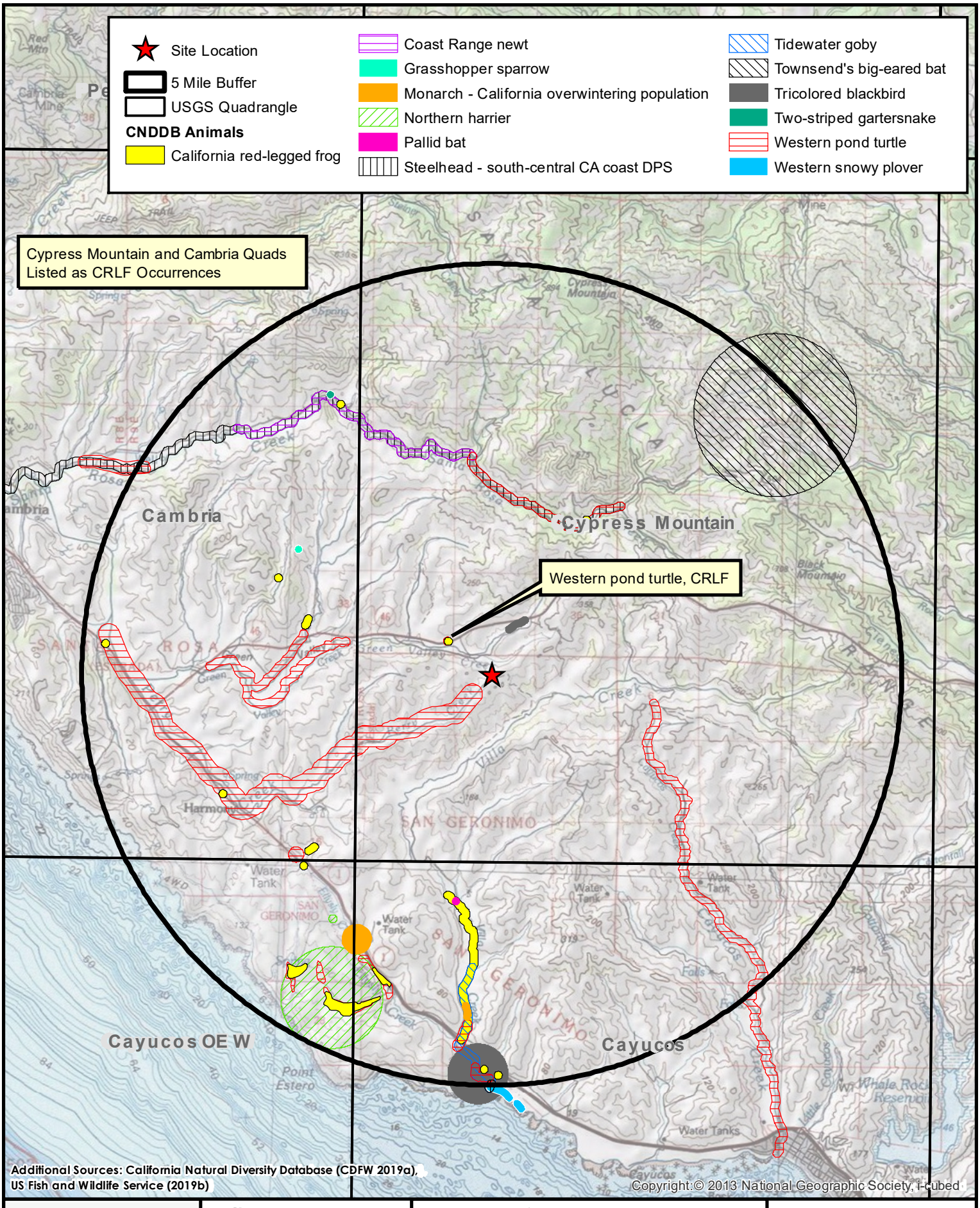
1 inch = 1.5 miles

Negranti Green Valley Ranch AG Reservoir

Negranti Green Valley Ranch LLC

Figure 5

CNDDB Plants



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N W E S 1 inch = 1.5 miles

Negranti Green Valley Ranch AG Reservoir

Negranti Green Valley Ranch LLC

Figure 6

CNDDB Animals

of S4, which is typically not considered under CEQA. However, wetland habitats are protected under the federal Clean Water Act, state Porter Cologne Water Quality Act, California Fish and Game Code, as well as the Coastal Act. As such, wetland habitat associated with Perry Creek was identified as a special status biological resource.

The Annual Grassland habitat onsite, also called the Wild Oats and Annual Brome Grasslands semi-natural alliance, is comprised predominantly of non-native species and is not a CDFW-designated sensitive natural community. The plant community within the Ephemeral Drainage habitat is Annual Grassland; thus, it is not a sensitive natural community, but the drainage feature was identified as potentially falling under the jurisdiction of USACE, CDFW, and/or RWQCB because it has defined bed and bank structure from periodic flowing water. The rock outcrops are surrounded by annual grassland and did not support any special status plants or other species of botanical interest. However, the larger Rock Outcrops may be considered a Sensitive Resource Area under the *Coastal Land Use Ordinance* (County 2018a), and as such, could considered to be ESHA under the Coastal Act. Therefore, the two largest rock outcrops in the western part of the study area would be considered ESHA, while the smaller ones would not. The project as proposed will avoid the two largest rock outcrops in the western part of the study area.

3.5.3 Special-status Animals

Based upon our background review of special-status species records, one invertebrate, four amphibian and reptile, nine bird, and two mammal species were considered to have potential to occur on the property. No special-status fish species could occur on the site due to the lack of sufficient water in Perry Creek. While the listing status, habitat associations and evaluation of occurrence are summarized in Appendix D, these 16 species are described in further detail below. Also see Figure 6 for a map of CNDDB wildlife records within the vicinity of the property.

The **monarch butterfly** (*Danaus plexippus,* population 1) is considered sensitive by CDFW for overwintering populations. This species roosts colonially during the winter in wind-protected groves of eucalyptus, Monterey pine and cypress. This type of habitat is not present on the study site. Milkweed is required as a host plant for caterpillars, and was not seen in the study area. Adults nectar on a variety of blooming plants, and could potentially occur onsite periodically while foraging or migrating. Overwintering sites have been documented along the coast in the vicinity of the study area (Figure 6; CDFW 2019a), and individuals migrating to or from these areas could stop over at the study area but it would not be used for overwintering.

Blainville's (=coast) horned lizard (*Phrynosoma blainvillii*) is a CDFW Species of Special Concern that occurs in a variety of habitat types, as long as those areas have open areas for sunning, and shrubs or other objects for cover. They are surface active primarily in the spring and summer during periods of warm weather, and retreat underground during periods of low temperatures or extreme heat (California Herps 2019). While they can "swim" into loose sandy soil for burial, they area also found in areas with sandy gravel or loam substrates where they use small mammal burrows (Jennings and Hayes 1994). There are few records from the vicinity, but they are known to occur along the immediate coast from Morro Strand to the south and in the interior part of the county (Jennings and Hayes 1994, Christopher 2005). They could occur in grassland areas onsite, particularly near the rock outcrops where there are patches of bare ground that they could use for thermoregulation and small shrubs and burrows for refugia.

The **California red-legged frog** (*Rana draytonii*) is a federally Threatened species and a CDFW Species of Special Concern. This species has been recorded relatively recently in Green Valley Creek

approximately 0.5 mile from the site (Figure 6; CDFW 2019a), and probably occurs throughout this drainage on the property based upon the extent of riparian vegetation observed. It has been recorded in the lower portions of Villa Creek (Figure 6; CDFW 2019a), and likely occurs in the reaches near the site based upon the position in the watershed, and riparian habitat and well-developed channel seen on aerial photography. Potentially suitable habitat also exists at the two existing agricultural ponds on the property, which are 0.3 and 0.6 mile from the study area. The headwaters of Perry Creek are likely to be too small, ephemeral and lacking sufficient cover to provide aquatic habitat for this species, but California red-legged frogs have been recorded in lower portions of the creek. Considering all of the aquatic habitats nearby, individuals could use the study area as a stopover point while migrating between aquatic habitats. This species requires aquatic habitats for reproduction and inhabits these areas most of the year, but they also use a variety of upland habitats far from water during the winter; when aquatic sites dry down in the late summer or fall; and, as post-metamorphic juveniles. In mesic habitats along the coast, they have been found to move through upland habitats up to a total distance of 2 miles (3,200 meters) in one season, with the greatest segment without encountering a water source being 0.74 miles (1,200 meters) (Bulger et al. 2003). Individuals migrating between aquatic sites used for summer residence and other aquatic sites used for breeding have been found to move overland distances of at least 1.7 miles (2,800 meters) (Bulger et al. 2003). However, in other situations with xeric to moderately mesic local climates, California red-legged frogs generally remained within 200 feet (60 meters) of water (Rathbun et al. 1993, Christopher 2000, Tartarian 2008). While undergoing terrestrial movements, they move through grassland areas, agricultural fields, and grazed areas including areas with substantial slopes or elevational changes (Bulger et al. 2003). Although the study site is positioned on a ridgeline, the elevation gain is only 200 feet from nearby aquatic habitats. Radio-tagged California red-legged frogs were found to move overland across slopes exceeding 50%, crossing multiple drainage divides with a minimum elevation change of 2001 feet (610 meters) (Bulger et al. 2003). They would only occur in the grassland of the study area during wet conditions in the early winter, and potentially could take cover during the day near rock outcrops or Perry Creek, but otherwise would be unlikely to remain in open grassland areas during the day.

The **southwestern (=western) pond turtle** (*Actinemys pallida*) is a CDFW Species of Special Concern. This species was documented in Green Valley Creek on the property in 2001, approximately 2,640 feet from the site (Figure 6; CDFW 2019a). Highly suitable habitat is also present at the existing agricultural ponds on the property. The CNDDB considers all of Perry Creek up to near the headwaters to be inhabited by this species, a distance of approximately 120 feet from the study site (Figure 6). However, the portion of Perry Creek in the study area appeared to lack sufficient aquatic habitat to support this species and it is not known definitively how far downstream they actually occur. This species is also found throughout many other drainages in the near vicinity (Figure 6; CDFW 2019a). Individuals may be present onsite during life history phases when they use upland habitats - in winter during overland movements or in summer for nesting. Southwestern pond turtles move away from aquatic sites in late summer or fall when water levels decline to begin a period of dormancy over the winter (Rathbun et al. 1993). They have been found to undergo movements of up to 3,596 feet (1,096 meters) within upland habitats in one season, and they occupy woodland, scrub and chaparral vegetation within 1,640 feet (500 meters) from their aquatic sites for up to 30 weeks (Reese and Welsh 1997, Rathbun et al. 2002, Pilliod et al. 2013). Nesting is also in upland areas 98 to 558 feet (30 to 170 meters) from aquatic habitats, in well-compacted soils of sunny open areas within sparse grassland (Rathbun et al. 1992, 1993, 2002; Scott et al. 2008). This species is primarily diurnal, and they make overland movements during the day. They could move through the study area while traveling between the many suitable aquatic sites nearby. They are unlikely to remain in the grassland habitats due to low cover, but potentially could take refuge at the base of shrubs or in crevasses near the rock outcrops. Nesting could also

occur onsite as this species selects nest locations away from aquatic and riparian habitats, usually within grassland where solar radiation warms the ground.

The **two-striped gartersnake** (*Thamnophis hammondii*) is a CDFW Species of Special Concern. This species is highly aquatic in summer, and they consume aquatic prey such as fish, tadpoles, newt larvae, and small frogs. In winter, they are mostly inactive in upland habitats, where they use small mammal burrows. In San Luis Obispo County north coastal streams, radio tracked two-striped gartersnakes were found away from water beginning in mid-October, where they used grassland or scrub habitats (Rathbun et al 1993). Mean distance to water for these individuals ranged from 165 to 600 feet (50 to 182 meters). Maximum distances from water are not known. This species is known to occur in the mid-reaches of Santa Rosa Creek, and Perry and Green Valley creeks are part of the same drainage system (Figure 6; CDFW 2019a). They are also known to occur at other coastal streams from Montana de Oro to San Simeon (Rathbun et al. 1993, Christopher 2005). It is likely that the reach of Perry Creek in the study area does not have a sufficient prey base or appropriate aquatic habitat to support this species. However, it could occur in suitable areas downstream from the study area and use upland grassland habitat on the site during winter.

The **bald eagle** (*Haliaeetus leucocephalus*) is a state Endangered species for nesting and wintering habitats and is a CDFW Fully Protected species. There are numerous observations from the site vicinity at all times of the year (The Cornell Lab of Ornithology 2019a). Their primary prey is fish, and they are common in this region along the coast, which has highly suitable habitat and prey base. They also feed on small mammals and could forage in the open grassland habitat onsite on a periodic basis. There is no suitable nesting or roosting substrates on the site, but there is a large California bay (*Umbellularia californica*) tree associated with a large rock outcrop about 415 feet south of the study area that could potentially be used by this species.

The **golden eagle** (*Aquila chrysaetos*) is considered a Fully Protected species by CDFW and is on the Watch List for nesting and wintering. Nesting is on cliffs, large trees or other structures such as electrical towers. Nesting has been reported at the rock outcrop and large California bay tree to the south of the study area. They have also been recorded at one of the existing agricultural ponds on the property (The Cornell Lab of Ornithology 2019a). This species forages over a variety of open habitats, and is likely to forage at the study area.

The **grasshopper sparrow** (*Ammodramus savannarum*) is a CDFW Species of Special Concern that occurs almost exclusively in grassland habitats. Other types of open habitats with patches of bare ground and little shrub cover, such as pastures and agricultural fields, may also be used. They nest on the ground at the base of clumps of grass. Suitable foraging and nesting habitat are present in the study area. Nesting has been documented nearby (CDFW 2019a) and there are numerous records from along the coast near the site (The Cornell Lab of Ornithology 2019a).

The **great blue heron** (*Ardea herodias*) does not have a specific listing status but is considered a sensitive species by CDFW for nesting colonies, which are located in forests near bodies of water. Appropriate aquatic habitat for nesting colonies is not present in or near the study area. Individuals occasionally forage in grasslands or fields, and there are several sightings in the Santa Lucia Range near the study area, including multiple observations from one of the existing agricultural ponds on the property (The Cornell Lab of Ornithology 2019a). Individuals could occur onsite periodically as transients while foraging, but nesting would not occur.

The **loggerhead shrike** (*Lanius ludovicianus*) is a CDFW Species of Special Concern for nesting. There are numerous observations from near the study area, including an observation from one of

the existing agricultural ponds on the property (The Cornell Lab of Ornithology 2019a). This species occurs in variety of relatively open habitats, including grasslands, and prefers areas where there are objects to perch on such as fences, trees or shrubs (Audubon 2019). Rock Outcrops on the study site could provide such suitable perches, and the grassland habitat onsite would be suitable for foraging. Nests are placed in dense and sometimes thorny trees or shrubs (Audubon 2019). No vegetation suitable for nesting in present in the study area, but individuals could occur onsite occasionally while foraging.

The **northern harrier** (*Circus cyaneus*) is a CDFW Species of Special Concern for nesting. This species prefers wide open country with wetlands, but they also occur in rolling grasslands or desert shrubland. Nests are placed on the ground usually in marshes, but occasionally they nest in dry open fields (Audubon 2019). There are numerous observations of this species along the coast and many from inland areas in close proximity to the study area, including observations from one of the existing agricultural ponds on the property (The Cornell Lab of Ornithology 2019a). They could occur onsite occasionally while foraging, but unlikely to nest in the study area.

The **prairie falcon** (*Falco mexicanus*) is on the CDFW Watch List for nesting. This species forages in open grasslands, and potential foraging habitat is present on the site. They have been recorded at numerous locations along the coast and the Santa Lucia Range in the vicinity (The Cornell Lab of Ornithology 2019a). Nesting habitat is generally rock formations and large trees; potentially suitable nesting habitat was observed offsite at a large rock outcrop and California bay tree approximately 415 feet south of the study area.

The **tricolored blackbird** (*Agelaius tricolor*) is a state Candidate for Endangered status and a CDFW Species of Special Concern for nesting colonies. This species nests colonially near bodies of water with dense emergent or riparian vegetation and forages in a variety of open habitats such as grasslands. This species has historically been documented to have a nesting colony at one of the existing agricultural ponds on the property, but they have not been observed since 1999 (CDFW 2019a, The Cornell Lab of Ornithology 2019a). A large breeding colony was documented in 2016 near the intersection of Highways 1 and 46 (The Cornell Lab of Ornithology 2019a). Therefore, individuals could occur in Grassland areas onsite while foraging, but no nesting habitat is present in the study area.

The **white-tailed kite** (*Elanus leucurus*) is a CDFW Fully Protected species for nesting sites. This species prefers areas of open space for foraging, and they nest in large isolated trees and occasionally in riparian habitats (CDFW 2019c). This species has been recorded in the vicinity, as well as at one of the existing agricultural ponds on the property (The Cornell Lab of Ornithology 2019a). They could use the site periodically while foraging in the area. No trees are present in the study area for nesting, but they could nest offsite in large trees that are associated with large Rock Outcrops.

The **American badger** (*Taxidea taxus*) is a CDFW Species of Special Concern. This species occurs in a variety of open habitats, and prefers grassland, oak savannah or edges of shrubland, and could occur in grassland habitats onsite. Ground squirrels observed in the study area could provide a food source. No potential dens were observed during the survey, but they may dig a new den each night, especially in summer (CDFW 2019c). Young are born in maternity dens in March and April (CDFW 2019c). Badgers are highly mobile and could move through the study area. The open and undeveloped nature of the surrounding area increases the chance that they could occur in the area, although the CNDDB contained no records from within five miles of the site (CDFW 2019a).

The **pallid bat** (*Antrozous pallidus*) is a CDFW Species of Special Concern. This species could forage in the grassland habitats over the site, there is a slight possibility they could night roost in crevasses within the Rock Outcrops onsite. Maternity and winter roost sites of the pallid bat are large cavities or caves in rock features or buildings that substantially moderate temperature, and these structures are absent from the site. However, foraging bats could occur periodically over the property at night and they could rest in the larger rock outcrops.

3.5.4 Designated Critical Habitat

The study area falls within designated critical habitat for the California red-legged frog, Unit SLO-2, which extends from Piedras Blancas to Cayucos Creek (Figure 7). This unit provides all of the features that are essential for the conservation of the species, including both aquatic habitat for breeding and non-breeding activities and upland habitat for foraging and dispersal activities (USFWS 2010). This area is also important because it provides connectivity between the Santa Lucia Range and the inner Coast Range (USFWS 2010). No aquatic habitat is present within the study area for this species, but suitable upland habitat for dispersal occurs (see California red-legged frog species account in Section 3.5.3).

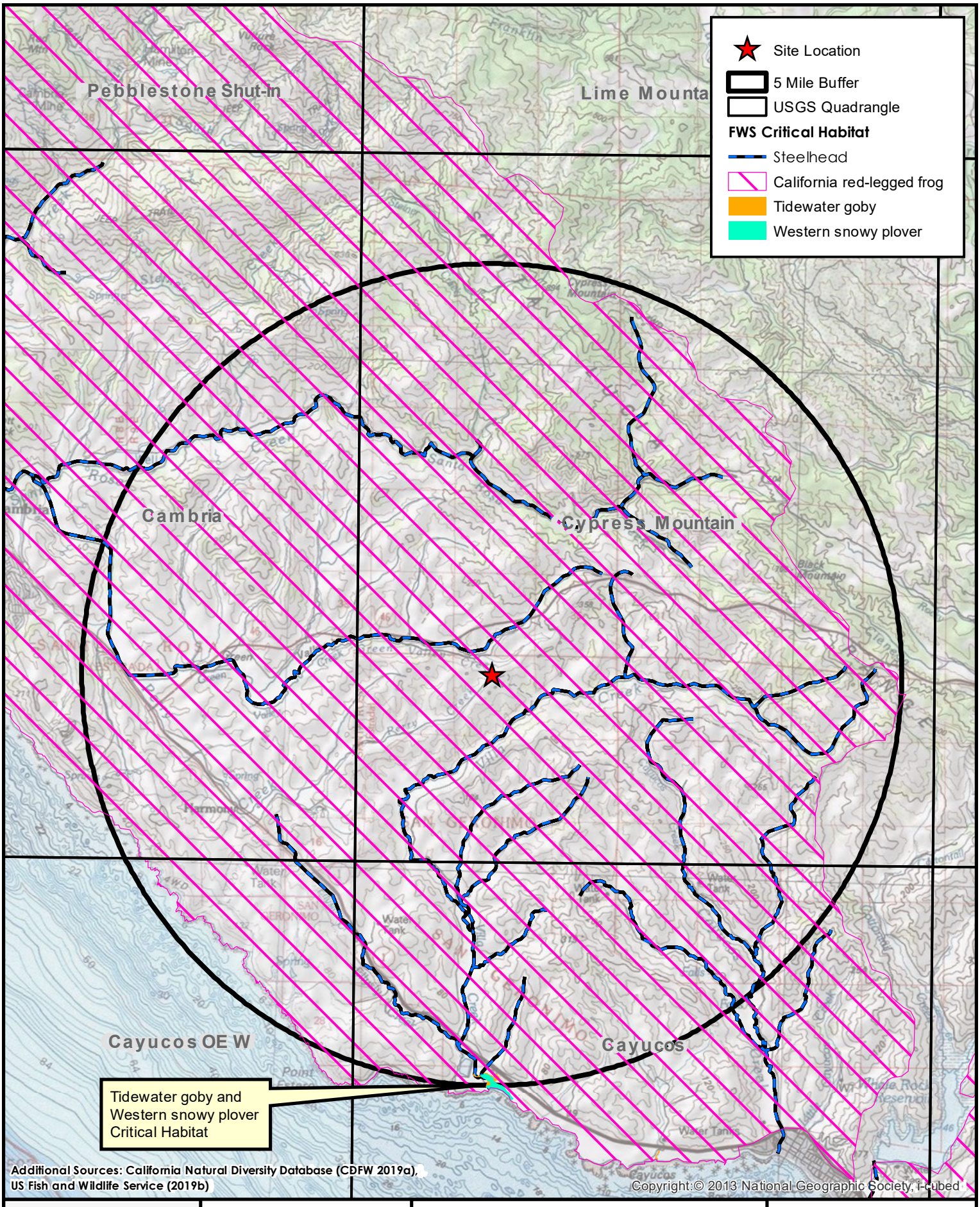
Designated critical habitat for the south-central California coast DPS steelhead (*Onchorhynchus mykiss irideus*) occurs at several drainages in the project vicinity that have suitable habitat for this species (Figure 7). This fish species is restricted to permanent streams without barriers to migration. The reaches of Perry Creek on or near the study area is too ephemeral to support steelhead and are not included in the listing of critical habitat for this species.

3.5.5 Migratory Birds and Raptors

Bird species that nest on the ground in grassland habitat could occur in project impact areas during nesting season. In addition to the special-status bird species described above, avian species that could nest onsite also include common species that are protected under the MBTA. Raptors protected under California Fish and Game Code could nest in the large trees associated with large Rock Outcrops offsite. The project site is located at least 415 feet away from any of these features. The standard buffer distance from raptor nests is 250 feet, which may be modified up or down based on local topography.

4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION

The following impact analysis and recommended mitigation measures are intended to help guide project planning efforts and support the CEQA review process. The impact discussion addresses the range of impacts that could result from implementation of the proposed project. Direct effects (or impacts), as defined under CEQA, are caused by a project and occur at the same time and place. Indirect effects are caused by a project, but occur at a different time or place. Cumulative effects are those that result from when the effects of the subject project combine with effects from other unrelated projects to compound environmental harm. Our understanding of the extent of proposed development footprint, along with the observations of onsite conditions from the site visit and evaluation of special-status biological resources, provided the basis for this analysis. Impact statements defining potential impacts on biological resources and proposed mitigation measures to reduce project-related impacts are described.



KEVIN MERK ASSOCIATES

N W E S 1 inch = 1.5 miles

Negranti Green Valley Ranch
AG Reservoir

Negranti Green Valley Ranch LLC

Figure 7

Critical Habitat

4.1 Direct and Indirect Effects

4.1.1 Adverse Effects on Candidate, Sensitive or Special-status Species

A suite of rare plant and animal species that are known to occur in the site vicinity were evaluated in this study to determine their potential to occur in the study area. The May 29, 2019 survey occurred when the rare plants known to occur in the region would have been in flower or in identifiable condition. No special status plants were observed in the study area, and therefore, no rare plants are expected to occur on the reservoir project site. The project proposes to utilize an existing agricultural ranch road that is disturbed regularly through site maintenance and periodic grading. No special status plants were observed while traversing this road to the project study area.

Many of the special-status animal species with potential to occur onsite are mobile species that would only use the site periodically while foraging or moving through the site, without using the area for breeding or other key life history traits. Species considered to be mobile include monarch butterfly, birds (adults, non-nesting) and bats. Individuals of these mobile species are expected to move away from any temporary disturbance during construction activities, and would not be directly affected. Individuals of less mobile species (amphibians, reptiles, and badger dens) could potentially be affected by construction activities if the work period coincided with the time of year that these species may be in impact areas. There would be no measurable negative effect on wildlife habitat as a result of construction of the agricultural reservoir because a minimal amount of a common habitat type would be converted to water source, which is expected to have a positive overall effect on wildlife habitat. In particular, the project could positively affect designated critical habitat for the California red-legged frog, which occurs at the site. There would be no adverse indirect effects to other nearby habitat areas.

Protected bird species could potentially nest in grassland habitats within or adjacent to the project impact area and raptors could nest offsite in large trees associated with large rock outcrops. Depending on the time of year that construction takes place, these activities could result in the mortality of eggs or young reliant on the nest, or disturbance from construction activities could potentially disrupt nesting behavior of avian species in adjacent areas.

Impact Bio-1. Construction of the project could potentially impact special-status animal species. This is a potentially significant but mitigable impact.

Individuals of special-status amphibian and reptile species could potentially occur in the study area and be directly impacted by construction activities, depending on the time of year work is conducted, and the seasonal timing of risk varies among species. Blainville's horned lizards bask on patches of open ground during the late-spring and summer, and likely would use underground retreats during the rest of the year. They could be onsite throughout the year, but detectable only during the warmer months. The California red-legged frog would only occur in the impact area during the winter and following substantial rain events when the ground conditions are moist. Additionally, they are nocturnal and would undergo movements at night. They are unlikely to remain in the grassland impact areas during the day due to insufficient cover, but they could use upper Perry Creek or the Rock Outcrops as stopover points. California red-legged frogs would not be present in the study area during dry periods of the summer and fall, and because Perry Creek does not have suitable breeding habitat for this species, juveniles migrating away from their natal ponds would not be expected onsite. Southwestern pond turtles could also move through the

impact area during the daytime beginning in the late summer or fall and remain in upland habitats through the winter. Adults would not remain long in open grassland areas, but they could take cover near the Rock Outcrops. They also could nest in the grassland habitat, with eggs being laid in the summer and hatchlings emerging the following spring. The two-striped gartersnake could be present in the grassland habitats closer to Perry Creek during the winter. As mentioned above, the Rock Outcrops are outside of project impact areas, so any animal species using these areas for cover would not be affected by construction activities. Additionally, for nocturnal species such as the red-legged frog, no impacts are expected because construction activities would take place during the day.

American badgers are a highly mobile species that could move through the area in search of prey. They could also have dens in the project vicinity in which they raise their young or utilize for refuge. Maternal or natal dens may be occupied in the spring and summer. Adults that are not raising young may be present in dens during the daytime at any time of year.

Construction equipment could injure or kill individuals of these species in work areas. Timing the initiation of construction activities to minimize the chance of effects is problematic because there is no one season when all five species would be restricted to areas away from these habitats. However, if construction were to occur during the winter when the Blainville's horned lizard, southwestern pond turtle eggs and two-striped gartersnake could be underground and would not be detectable during preconstruction visual surveys, impacts on these species could occur. Additionally, minimization measures involving a pre-activity survey by a qualified biologist prior to initial ground disturbance are required because avoidance by timing is not possible for each of these species with potential to occur. This survey shall involve a visual search for amphibians and reptiles within project impact areas and also include a search for American badger dens. If any potential den is found, additional mitigation to ensure the den is not occupied at the time of construction would be required. To reduce potential project impacts on special-status wildlife species to a level below significance the following Mitigation Measures BIO-2a through 2d are required.

Mitigation Measure BIO-1a: Conduct vegetation removal and excavation during the dry season, when special-status reptile species are unlikely to be underground within the impact area. The construction schedule shall be planned to avoid the time of year when special-status reptile species may be underground, and thus undetectable during preconstruction visual surveys. The initiation of construction, involving vegetation removal and initial excavation of topsoil areas, should take place between May 1 and September 30.

Mitigation Measure BIO-1b: Conduct a preconstruction den survey and establish no-work buffers around potential dens. Within seven days prior to the start of construction, a qualified biologist shall survey the project impact area plus a 100-foot buffer for dens of the American badger. Any potential dens found shall be marked in the field with flagging, and a 50-foot no-work buffer shall be flagged. If the potential den cannot be avoided with at least a 50-foot buffer, the following mitigation measure would also be required.

Mitigation Measure BIO-1c: If any potential dens are found, employ wildlife trail cameras and/or track plates to determine whether the dens are active, and excavate non-active dens to prevent re-occupation. A qualified biologist shall install wildlife trail cameras and/or tracking medium outside any potential dens that are found during the preconstruction survey, and monitor those sites for at least three days to determine whether the den(s) are currently occupied. Any unoccupied dens shall be excavated to prevent badgers from re-entering. If the work takes place in the late-spring or

summer, additional measures shall be employed to determine whether dens are occupied by young. No dens with young shall be disturbed, and no work shall be conducted within 50 feet of maternal dens until they have left the den. Any occupied dens that are being used by an adult with no young that cannot be avoided shall be blocked incrementally by placing sticks and debris over the entrance to discourage the badger from using the den. Only after the badger has left the den, as determined by wildlife cameras and/or tracking medium, can the den be excavated and work proceed.

Mitigation Measure BIO-1d: Conduct a preconstruction wildlife survey and avoid construction in any areas with special-status wildlife species. Immediately prior to the start of vegetation removal or grubbing, a qualified biologist shall survey impact areas for special-status wildlife species, focused on the amphibian and reptile species detailed above. Construction activities can commence once it has been determined that there are no special-status wildlife species within impact areas. If any special-status wildlife species are found within the impact area or would otherwise be at risk during construction, work activities shall be delayed in that particular area and the animal allowed to leave the work zone on its own volition. The biologist shall monitor the area to determine when individuals of special-status species have left and work can commence. If any California red-legged frogs or other federally listed species are found, the USFWS shall be contacted and work delayed until clearance is given.

Impact Bio-2. Construction activities could potentially directly impact nesting of bird species protected under the Migratory Bird Treaty Act and/or California Fish and Game Code. This is a potentially significant but mitigable impact.

If construction activities take place during the nesting season (February 1 to August 31), nesting behavior could be disrupted and construction disturbance could cause adults to abandon nests containing eggs or young. Nesting birds that are protected under the MBTA could potentially nest in the grassland habitat within the impact area and raptors that are protected under California Fish and Game Code could nest in the large trees associated with rock outcrops in adjacent offsite areas to the south. The project site is located over 415 feet away from rock outcrops with trees of sufficient size to support nesting raptors, and this could be a suitable distance that would buffer noise and disturbance during construction. The standard buffer distance range for active raptor nests is 250 to 500 feet depending on species, and this distance may be modified up or down based on local topography, slope aspect and vegetation that may separate the work area from the nest. To reduce potential project impacts to a level below significance, Mitigation Measures BIO-2 below is required. This assumes that the seasonal restriction for the initiation of construction described under Mitigation Measure BIO-1a would be followed, which would place the activities within the nesting season.

Mitigation Measure BIO-2: Conduct a preconstruction nesting bird survey. A qualified biologist shall conduct a preconstruction survey for nesting birds within 500 feet of project impact areas, within two weeks before the initiation of construction. During this survey, the qualified biologist shall inspect the impact and buffer areas, and any nests identified will be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within 50 feet (500 feet for raptors) of the construction area, the biologist, in consultation with the County and CDFW as needed, shall determine the extent of an appropriate avoidance buffer to be established around the nest. The buffer will be delineated with flagging, and no work shall take place within the buffer area until the young have left the nest, as determined by the qualified biologist. Since golden eagles have been observed in the area, the survey shall assess offsite nesting habitat to determine if project activities could affect this species' nesting activities.

4.1.2 Adverse Effects on Riparian Habitat or Sensitive Natural Communities

No riparian or wetland habitat occurs on the proposed project site. The wetland area identified in Perry Creek is offsite, and will not be directly impacted. The Native Perennial Grassland habitat as shown on Figure 4 has a State Rarity Rank of S4, and only Rank S1 through S3 are considered rare under CEQA. The purple needlegrass grassland area is small (approximately 8,400 square feet), and this habitat type is common throughout the region. No rare plants were identified in this native bunchgrass patch. Therefore, impacts to sensitive natural communities are not expected to occur as a result of the project and no mitigation is required.

4.1.3 Federally Protected Wetlands

The drainage channel for upper Perry Creek occurs within the study area, but is technically on adjacent property. The feature has a defined bed and bank, and the area between the top of bank on either side would likely be under the jurisdiction of the USACE, RWQCB and CDFW. Wetland habitat within the channel would be within this federally protected area, as well as the upper Ephemeral Drainage area (refer to Figure 4). As stated above, Perry Creek is on an adjacent property, and although it falls within the buffer of the study area, it is outside of project impact areas. The limits of disturbance are estimated to be approximately 60 feet away from top of bank of Perry Creek and its associated riverine and wetland habitat. The erosion controls and use of native vegetation applied via hydroseed would ensure indirect impacts from erosion and sedimentation do not affect the drainage features in the area. As currently proposed, no permitting would be needed from USACE, RWQCB or CDFW because the work will remain outside of jurisdictional areas.

Wetland habitat in the offsite reach of Perry Creek could be indirectly affected by pollutants and/or sediment by surface runoff from the project site. As such, additional measures are required to reduce potential indirect effects of construction on wetland habitat (please refer to Impact Bio-3 below).

Impact Bio-3. Stormwater runoff from the project site could potentially result in pollutants and sediment entering federally protected Wetland habitat in upper Perry Creek. This is a potentially significant but mitigable impact.

Perry Creek, which likely has Wetland habitat under the jurisdiction of USACE as well as RWQCB and CDFW, lies downslope to the south from the proposed project site. Construction of the agricultural reservoir would involve excavation of 48,812 cubic yards and fill of 11,211 cubic yards of soil. Fill will be used to create a berm to increase the height of the reservoir, and any excess fill would be spread on top of Annual Grassland habitat to the west as non-structural fill (Appendix A). These disturbed soils could erode into Perry Creek if they are not stabilized prior to significant rainfall. Sedimentation is considered to be a type of pollutant in aquatic systems because it decreases water quality through increased turbidity, fills in pools or causes lateral spread of channels, and covers instream vegetation and other aquatic life. The project site plans have incorporated erosion and sediment control measures into the project plan for the reservoir footprint (Appendix A). In order to further decrease the chance of sedimentation into wetland habitats, these measures shall also be applied to the area where excess fill would be spread. In addition, toxic substances from construction equipment such as oil, gas, diesel, and hydraulic fluid could leak or be spilled and be carried in stormwater runoff into the creek. To bring the chance of indirect effects on protected wetland habitats to a level below significance, the following mitigation detailing Best Management Practices (BMPs) are required, in addition to the measures specified in the site plans.

Mitigation Measure Bio-3: Install appropriate erosion and sediment controls and revegetate graded areas. The following erosion and sedimentation control methods are required to be implemented:

1. If possible, the potential for erosion and sedimentation shall be minimized by scheduling construction to occur outside of the rainy season, which is typically defined from October 15 through April 15. Consistent with Mitigation Measure BIO-1a, construction shall occur from May 1 through September 30 to avoid impacts to special status wildlife.
2. To minimize site disturbance, all construction related equipment shall be restricted to established roads, construction areas, and other designated staging areas.
3. A Sediment and Erosion Control Plan beyond what is shown on project plans may be required by the County. As proposed, the use of silt fence, straw wattles and other appropriate techniques will be employed to protect the drainage features on and off the property. All sediment and erosion control measures shall be installed per the engineer's requirements.
4. Spill kits shall be maintained on the site, and a Spill Response Plan shall be in place.
5. No vehicles or equipment shall be refueled within 50 feet of wetland areas and/or drainage features unless a bermed and lined refueling area is constructed. No vehicles or construction equipment shall be stored overnight within 100 feet of these areas unless drip pans or ground covers are used. All equipment and vehicles should be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills. Construction staging areas should attain zero discharge of stormwater runoff into these habitats.
6. No concrete washout shall be conducted on the site outside of an appropriate containment system. Washing of equipment, tools, etc. should not be allowed in any location where the tainted water could enter onsite drainages.
7. The use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation.
8. All project-related spills of hazardous materials within or adjacent to the project site should be cleaned up immediately.
9. All areas with soil disturbance shall have appropriate erosion controls and other stormwater protection BMPs installed to prevent erosion potential. Silt fencing, erosion control blankets, straw bales, sand bags, fiber rolls and/or other types of materials prescribed on the plan shall be implemented to prevent erosion and sedimentation. Biotechnical approaches using native vegetation shall be used as feasible.
10. Areas with disturbed soils shall be restored under the direction of the project engineer in consultation with a qualified restoration ecologist as needed. Methods may include recontouring graded areas to blend in with existing natural contours, covering the areas with salvaged topsoil containing native seedbank from the site, and/or applying the native seed mix shown on the project plans supplemented with species in Table 1. Native seed mix shall be applied to the graded areas through either direct hand seeding or hydroseeding methods. Seeding with the native erosion control seed mix should be provided on all disturbed soil areas prior to the onset of the rainy season (by October 15).

Table 1. Additional Species for Native Erosion Control Seed Mix

Species	Application Rate (lbs./acre)
Bromus carinatus (California brome)	5
Stipa pulchra (purple needlegrass)	10
Trifolium wildenovii (tomcat clover)	5
Vulpia microstachys (six weeks fescue)	5
Total	**25**

4.1.4 Interference with Movement of Native Fish or Wildlife, Wildlife Corridors, and Wildlife Nursery Sites

The proposed project would not affect the movement of native fish because all work will be conducted along the upper ridgeline in upland grassland habitat, which is outside of stream channels. In addition, the reach of Perry Creek near the project site is too ephemeral to support fish. No equipment or materials will enter or be placed in the channel that could affect fish downstream.

The less than three acres of grassland habitat where the project would be located is surrounded on all sides by open grassland used for cattle grazing, or is otherwise undeveloped and lacks barriers to wildlife movement. Wildlife moving through the area will be able to move unimpeded around the reservoir. Other water sources for wildlife in the area are streams or impoundments built within drainages, and therefore are located in the valley bottoms. The placement of the proposed reservoir on top of a saddle may facilitate wildlife movement through the area by providing an additional water source in an upland area. Therefore, there would be no negative impacts of the project on wildlife corridors or movement.

The open and grazed grassland habitat in the project impact area is not expected to be a wildlife nursery site for any species. Wildlife species that could breed in the area are limited to ground-nesting birds, small mammals such as rodents, and invertebrates. These species would be dispersed throughout the abundant grassland habitat in the coastal area, and not focused in the study area for reproduction or other key life history stages. Therefore, there would be no impact of the project on wildlife nursery sites.

Because there would be no project impacts on the movement of native fish or wildlife, wildlife corridors or wildlife nursery sites, no mitigation is required.

4.1.5 Conflicts with Local Policies or Ordinances, Such as Tree Preservation

The project does not involve the removal of trees, and furthermore, there are no trees in the study area. The *Coastal Land Use Ordinance* describes Sensitive Resource Area (SRA) combining designations to identify areas with special environmental qualities, rare vegetation, and habitat resources (County 2018a). The purpose of these combining designation standards is to ensure that proposed development be designed in consideration of and for the protection of sensitive resources, to satisfy the requirements of the California Coastal Act. The SRAs relevant to the proposed project area are Wetlands and Rock Outcrops. Setbacks from the Perry Creek wetland area and required mitigation for indirect effects of construction on this sensitive resource are described above in Section 4.1.3. Rock Outcrops can be considered to be an SRA when they are a "prominent geological feature visible from an off-site area". Such prominent Rock Outcrops are to

be protected and remain undisturbed by grading or development activities. The proposed project has been designed to avoid all prominent Rock Outcrops. The impact area is situated on a saddle where there are several moderately sized Rock Outcrops and small individual rocks that protrude above ground (Figure 4). Only two small individual rocks that lack sufficient size to be seen from an offsite area, and would not be considered to be an SRA, would be removed by the project.

The *North Coast Planning Area Rural Combining Designation Map* does not show any ESHA designated at the project site. No wetlands, significant stands of native grassland or other special status biological resources are present in the study area. The area is considered to be a Geologic Study Area, of which most of the Coastal Zone has been mapped (County 2017). Geologic Study Areas have moderate to high landslide risk and moderate to high liquefaction hazard (County 2018b). These areas must be evaluated for engineering problems associated with building or hillside grading (County 2018b). Because the project is located on a saddle, it is expected that there would be low landslide risk. Additionally, as detailed in the project site plans, all engineered and compacted fill slopes will conform to recommendations made by the geotechnical engineer, who will also provide a final evaluation upon completion of construction that the project was constructed in full compliance with the special inspections and reports (Appendix A).

Because there would be no conflicts with local policies or ordinances related to biological resources, no mitigation is required.

4.1.6 Conflicts with Local, Regional or State Conservation Plans

No local, regional or state conservation plans have been prepared for the area in which the project is located; therefore, there would be no conflicts with these plans and no mitigation is required.

4.2 Cumulative Effects

The project is sited in a rural agricultural area of coastal northern San Luis Obispo County. The reservoir project proposes to convert less than three acres of grassland to an agricultural reservoir. Grassland habitats on the study area are not considered to be sensitive natural communities and are widespread in the local area surrounding the project site. The loss of a small area of grassland including an approximately 8,400 square foot patch of purple needlegrass would not be significant from a biological perspective. Most lands in the surrounding area will continue to be used for grazing, and much larger occurrences of purple needlegrass were observed outside the study area on the subject property and neighboring ranches. Ranching and agriculture (primarily avocado orchards) are not threatened at this time by loss to residential or other types of urban development, and the continued land use would be supported by the proposed project. The addition of a water source may also provide a benefit to many smaller wildlife species, even if the reservoir is fenced. With mitigation incorporated as described herein, no significant effects on biological resources are expected to occur as a result of project implementation. Because there would be no effects of the project in the context of the site's importance in the overall area, the project would not contribute to cumulative effects of other non-federal projects planned in the area.

5.0 CONCLUSION

A supplemental water storage reservoir is proposed to support an existing avocado orchard at the Negranti Green Valley Ranch located off Highway 46 West near Cambria. The proposed reservoir has been sited along a ridgeline so water can be gravity fed to the crops in the lower elevations of the property. This particular site is at a location with the lowest degree of biological concerns on

the property (i.e., on a low ridge in grazed grassland with no special status plants or habitats). It has been designed to avoid prominent rock outcrops as well as other environmentally significant resources such as natural drainage features that occur in this area.

In the past, agricultural ponds were typically created by building impoundments on drainages. This practice disturbed native wetland and riparian habitats and increased areas of perennial open water, which has led to the proliferation of non-native aquatic species such as bullfrogs. More recently, agricultural reservoirs have been constructed in upland habitats in valley bottoms, which would avoid these types of effects to stream and riparian resources. However, in most cases reservoirs sited in these locations would be close to agricultural development, site infrastructure, and human activity. Depending on the intensity of development and land use surrounding the reservoir, some open water habitat could benefit wildlife.

The proposed project seeks to place an agricultural reservoir on a ridge above other ranch infrastructure, and have gravity flow for irrigation. It is possible that this location could have a net positive effect on wildlife habitat by placing a water source in an undeveloped area where wildlife occur. Many of the special-status animal species with potential to occur on the site are amphibian and reptile species that are associated with aquatic habitats. Individuals of these species undergo movements between aquatic habitats, crossing through dry upland habitats. The proposed agricultural pond could provide a suitable stopover point during overland movements between other habitats in the area. In particular, the project site is located within designated critical habitat for the California red-legged frog, and this species readily occupies constructed agricultural or stock ponds on a permanent or transitory basis. No negative effects of the project on critical habitat for this species are expected. Additionally, birds, bats and small mammals could also potentially use this water source.

As discussed above, grassland habitat is common in the area in which the project is located, and the loss of less than three acres of grassland composed primarily of non-native species would be inconsequential. Although the site has been grazed, there are some native grassland plant species present, such as purple needlegrass, and disturbed areas would be revegetated with a native erosion control seed mix. The spring 2019 survey confirmed no special status plants are in the project footprint, and none would be impacted by the construction activities. Since several special-status animal species could be present in or adjacent to the project impact areas during the initiation of construction, appropriate mitigation has been prescribed. An ephemeral drainage with a narrow band of wetland habitat, which is the headwaters of Perry Creek, is located just outside of the property. BMPs for short-term and long-term sedimentation and erosion control have been incorporated into the project plans, and additional measures that include pollution controls during construction activities are also provided. With mitigation incorporated as described herein, no significant effects on biological resources are expected to occur as a result of project implementation.

6.0 REFERENCES

Bolster, B.C. (editor). 1998. Draft Terrestrial Mammal Species of Special Concern in California. Contributing authors: P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Prepared for California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Conservation Program. Contract FG3146WM.

Bulger, J.B., N.J. Scott, and R.B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110:85-95.

Calflora. 2019. Information on Wild California Plants for Conservation, Education, and Appreciation. Berkeley, California. Accessed via http://www.calflora.org/ in July 2019.

California Department of Fish and Game (CDFG). 2001. Fish and Game Code of California, Section 3503.5. Gould Publications, Altamonte Springs, FL.

California Department of Fish and Game (CDFG). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November 24, 2009.

California Department of Fish and Wildlife (CDFW). 2018a (August). Special Animals. Biogeographic Data Branch, California Natural Diversity Database.

California Department of Fish and Wildlife (CDFW). 2018b (August). Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. Natural Diversity Database.

California Department of Fish and Wildlife (CDFW). 2019a. California Natural Diversity Database (CNDDB). Commercial version dated September 30, 2018. Accessed in July 2019.

California Department of Fish and Wildlife (CDFW). 2019b. Vegetation Classification and Mapping Program (VegCAMP). Accessed via: https://www.wildlife.ca.gov/Data/VegCAMP in July 2019.

California Department of Fish and Wildlife (CDFW). 2019c. California Wildlife Habitat Relationships System. Accessed via: https://www.wildlife.ca.gov/data/cwhr in July 2019.

California Herps. 2019. A Guide to the Amphibians and Reptiles of California. Accessed via: http://www.californiaherps.com in July 2019.

California Native Plant Society. 2019. Inventory of Rare and Endangered Plants of California. Online edition V8-03 0.39. Accessed via: http://www.rareplants.cnps.org in July 2019.

Christopher, S.V. 2000 (November). Natural History and Ecology of the California Red-legged Frog and Bullfrog at the Waterfowl Ponds, Vandenberg Air Force Base, California. Prepared for 30 CES/CEV, Vandenberg Air Force Base. Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara and the Santa Barbara Museum of Natural History.

Christopher, S.V. 2005. Amphibians and Reptiles of the Estero Bay Area. Prepared for the Morro Bay National Estuary Program and California State Parks.

The Cornell Lab of Ornithology. 2019a. eBird. Accessed via: https://ebird.org in July 2019.

The Cornell Lab of Ornithology. 2019b. All About Birds. Accessed via: https://www.allaboutbirds.org in July 2019.

County of San Luis Obispo (County). 2016. Draft Guidelines for Biological Resources Assessments, Guidelines for Biological Consultants. Department of Planning and Building.

County of San Luis Obispo (County). 2017 (March 16). North Coast Planning Area Rural Combining Designation Map. Department of Planning and Building.

County of San Luis Obispo (County). 2018a (September). Coastal Zone Land Use Ordinance. Title 23 of the San Luis Obispo County Code. Adopted by the San Luis Obispo County Board of Supervisors and Certified by the California Coastal Commission.

County of San Luis Obispo (County). 2018b (October 5). North Coast - the Land Use and Circulation Elements of the San Luis Obispo County General Plan. Adopted by the San Luis Obispo County Board of Supervisors and Certified by the California Coastal Commission.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1992. Classification of Wetlands and Deepwater Habitats of the United States. Prepared for U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. FWS/OBS-79/31.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento.

Hoover, R.F. 1970. The Vascular Plants of San Luis Obispo County, California. University of California Press, Berkeley, CA.

Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California, 1 November 1994. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 255 pp.

Jepson Flora Project (editors). 2019. Jepson eFlora. The Jepson Herbarium, University of California, Berkeley. Accessed via: http://ucjeps.berkeley.edu/eflora/ in July 2019.

Moyle, P.B., R.M. Quinones, J.V. Katz, and J. Weaver. 2015. Fish Species of Special Concern in California, Third Edition. California Department of Fish and Wildlife, Sacramento.

Natural Resources Conservation Service (NRCS). 2019a. Web Soil Survey. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed via: http://websoilsurvey.nrcs.usda.gov/ in June 2019.

Pilliod, D.S., J.L. Welty, and R. Stafford. 2013. Terrestrial movement patterns of western pond turtles (*Actinemys marmorata*) in central California. Herpetological Conservation and Biology 8(1):207-221.

Rathbun, G.B., N. Siepel, and D. Holland. 1992. Nesting behavior and movements of western pond turtles, *Clemmys marmorata*. The Southwestern Naturalist 37(3):319-324.

Rathbun, G.B., M.R. Jennings, T.G. Murphey, and N.R. Siepel. 1993. Status and ecology of sensitive aquatic vertebrates in lower San Simeon and Pico Creeks, San Luis Obispo County, California. Final Report under Cooperative Agreement 14-16-0009-91-1909 between U.S. Fish and Wildlife Service and California Department of Parks and Recreation. Publication Number PB93-230779, National Technical Information Service, Springfield, Virginia.

Rathbun, G.B., N.J. Scott, Jr., and T.G. Murphey. 2002. Terrestrial habitat use by Pacific pond turtles in a Mediterranean Climate. The Southwestern Naturalist 47(2):225-235.

Reese, D.A., and H.H. Welsh. 1997. Use of terrestrial habitat by western pond turtles, *Clemmys marmorata*: Implications for management. Pages 352-357 *In* Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles. An International Conference held by the New York Turtle and Tortoise Society.

Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

Scott, N.J., G.B. Rathbun, T.G. Murphey, and M.B. Harker. 2008. Reproduction of Pacific pond turtles (*Actinemys marmorata*) in coastal streams of central California. Herpetological Conservation and Biology 3(2):143-148.

Tatarian, P.J. 2008. Movement patterns of California red-legged frogs (*Rana draytonii*) in an inland California environment. Herpetological Conservation and Biology 3(2):155-169.

United States Fish and Wildlife Service (USFWS). 2000 (January). Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.

United States Fish and Wildlife Service (USFWS). 2010 (March 17). Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-legged Frog; Final Rule. Federal Register 75(51):12816-12959.

United States Fish and Wildlife Service (USFWS). 2019a. National Wetlands Inventory. U.S. Department of the Interior, Washington, D.C. Accessed via: http://www.fws.gov/wetlands/ in June 2019.

United States Fish and Wildlife Service (USFWS). 2019b. Threatened and Endangered Species Active Critical Habitat Report. ECOS Environmental Conservation Online System. Accessed via: https://ecos.fws. gov in June 2019.

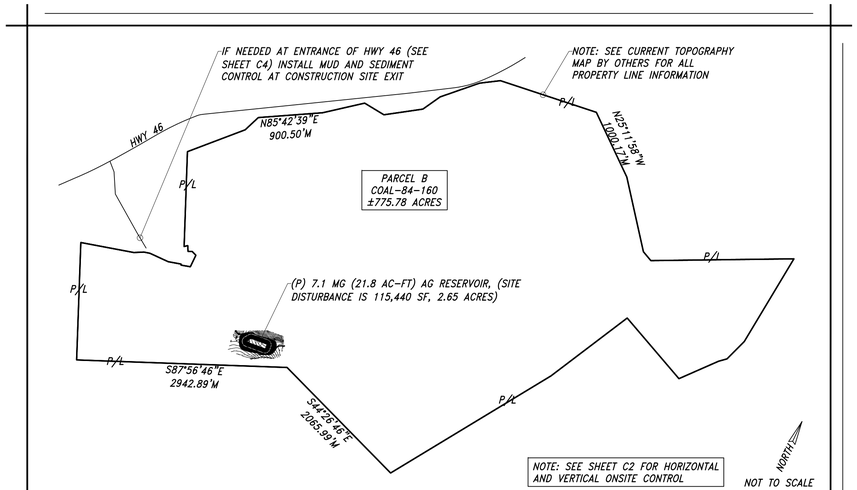
APPENDIX A

Site Plans

KMA

NEGRANTI GREEN VALLEY RANCH
AG RESERVOIR, 7.1 MG, 21.8 AC-FT

NEGRANTI GREEN VALLEY RANCH, LLC.
6425 GREEN VALLEY ROAD, CAMBRIA
PARCEL B, COAL-84-160, 38/PM/22
APN: 046-012-001, ±775.78 ACRES

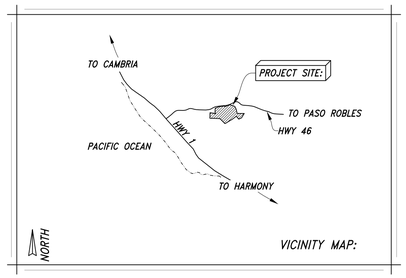


OVERALL SITE PLAN

SPECIAL INSPECTIONS & REPORTS TABLE:

VERIFICATION AND INSPECTION TASK PER CALIFORNIA BUILDING CODE 1705.6 & 1803.5	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	REPORT REQUIRED
1. VERIFY MATERIALS BELOW THE EMBANKMENT BASE ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY.	NO	YES	YES
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	NO	YES	YES
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	NO	YES	YES
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS' DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	YES	NO	YES
5. PRIOR TO PLACEMENT OF CONTROLLED FILL OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	NO	YES	YES
6. PROVIDE COMPACTION REPORT IN COMPLIANCE WITH CBC 1803.5.8.	NO	YES	YES
7. PRIOR TO PROJECT COMPLETION, THE SOILS ENGINEER TO PROVIDE WRITTEN VERIFICATION THAT GRADING PERFORMED IS SUITABLE TO SUPPORT THE INTENDED STRUCTURE.	NO	NO	YES
8. PRIOR TO FINAL APPROVAL, THE PROJECT ENGINEER OF WORK TO PROVIDE WRITTEN VERIFICATION THAT GRADING, DRAINAGE AND EROSION CONTROL MEASURES ARE IN SUBSTANTIAL CONFORMANCE TO THE APPROVED PLAN.	NO	NO	YES

NOTE: PRIOR TO THE COUNTY CONSTRUCTION INSPECTION, THE PROJECT SOILS ENGINEER (IDENTIFIED ON THIS SHEET) SHALL PROVIDE WRITTEN VERIFICATION (LETTER REPORT) TO THE COUNTY CERTIFYING THAT EACH TASK IDENTIFIED (TASK 1-7, ABOVE) HAS BEEN COMPLETED AND SATISFIES THE SPECIFIED REQUIREMENT. ADDITIONALLY, THE PROJECT ENGINEER OF WORK SHALL PROVIDE WRITTEN VERIFICATION TO THE COUNTY CERTIFYING THAT TASK 8, ABOVE HAS BE COMPLETED AND SATISFIES THE SPECIFIED REQUIREMENT.



ABBREVIATIONS USED:

(P) = PROPOSED
(E) = EXISTING
(TYP) = TYPICAL
MG = MILLION GALLONS
AC-FT = ACRE FEET
SF = SQUARE FEET
MIN = MINIMUM
P/L = PROPERTY LINE
R/W = RIGHT OF WAY
EG = EXISTING GRADE
FG = FINISHED GRADE
F/L = FLOWLINE
LID = LOW IMPACT DEVELOPMENT
NRCS = USDA NATURAL RESOURCE CONSERVATION SERVICE

APPLICABLE CURRENT CONSTRUCTION CODES:

NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS AND PERMITS APPROVED BY THE COUNTY, ALL PLANS AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING:

* 2016 CALIFORNIA BUILDING CODE
* 2016 CALIFORNIA ELECTRICAL CODE
* 2016 CALIFORNIA MECHANICAL CODE
* 2016 CALIFORNIA PLUMBING CODE
* 2016 CALIFORNIA REFERENCE STANDARDS
* TITLE 22 - COUNTY LAND USE ORDINANCE
* TITLE 23 - COUNTY COASTAL ZONE LAND USE ORDINANCE
* CURRENT COUNTY ENGINEERING STANDARDS AND SPECIFICATIONS
* CURRENT RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER

SITE ARCHAEOLOGICAL DISCOVERIES:

IN THE EVENT ARCHAEOLOGICAL RESOURCES ARE UNEARTHED OR DISCOVERED DURING ANY CONSTRUCTION ACTIVITIES, THE FOLLOWING STANDARDS APPLY:

1. CONSTRUCTION ACTIVITIES SHALL CEASE, AND THE ENVIRONMENTAL COORDINATOR AND THE PLANNING AND BUILDING DEPARTMENT SHALL BE NOTIFIED SO THAT THE EXTENT AND LOCATION OF DISCOVERED MATERIALS MAY BE RECORDED BY A QUALIFIED ARCHAEOLOGIST, AND DISPOSITION OF ARTIFACTS MAY BE ACCOMPLISHED IN ACCORDANCE WITH STATE AND FEDERAL LAW.

2. IN THE EVENT ARCHAEOLOGICAL RESOURCES ARE FOUND TO INCLUDE HUMAN REMAINS, OR IN ANY OTHER CASE WHERE HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, THE COUNTY CORONER IS TO BE NOTIFIED IN ADDITION TO THE PLANNING AND BUILDING DEPARTMENT AND THE ENVIRONMENTAL COORDINATOR SO THAT PROPER DISPOSITION MAY BE ACCOMPLISHED.

PRE-CONSTRUCTION MEETING:

A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE COUNTY INSPECTOR TO DISCUSS THE SPECIAL INSPECTION REPORTING REQUIREMENTS, EROSION CONTROL AND REQUIRED REPORTS; CALL MICHELLE FREEMAN AT (805) 461-6199, NORTH COUNTY.

CONSTRUCTION CERTIFICATION:

1. THE GEOTECHNICAL ENGINEER SHALL PROVIDE A LETTER TO THE SAN LUIS OBISPO COUNTY PLANNING AND BUILDING DEPARTMENT THAT THE EARTHWORK WAS INSPECTED AND CONFORMS TO THE RECOMMENDATIONS IN THE GEOTECHNICAL ENGINEERING REPORT. ANY MODIFICATIONS TO THE REPORT RECOMMENDATIONS SHALL BE CLARIFIED IN THE LETTER PROVIDED.

2. THE CIVIL ENGINEER OF RECORD SHALL PROVIDE A SIGNED STATEMENT INDICATING THAT THE AG RESERVOIR WAS CONSTRUCTED IN SUBSTANTIAL CONFORMANCE TO THE APPROVED PLANS. ANY SUBSTANTIAL FIELD MODIFICATIONS MADE SHALL BE CLARIFIED IN THE WRITTEN STATEMENT.

EARTHWORK ESTIMATES:

PROJECT TOTALS:
49,812 CY OF CUT - MAX HEIGHT 39.5 FT
11,211 CY OF FILL - MAX HEIGHT 15.5 FT
NET 38,601 CY

1. CUT AND FILL ESTIMATES ARE CALCULATED AT PROFILE CENTERLINE, EXACT SHRINKAGE, CONSOLIDATION AND SUBSIDENCE FACTORS AND LOSSES DUE TO CLEARING ARE NOT INCLUDED, THE GRADING CONTRACTOR IS RESPONSIBLE TO DETERMINE EXACT QUANTITIES AND BID ACCORDINGLY.

2. ANY EXCESS MATERIAL WILL BE SPREAD AND STABILIZED ONSITE AND BE PLACED AS NON-STRUCTURAL FILL AS SHOWN.

SITE AREA OF DISTURBANCE:

TOTAL AREA OF SITE DISTURBANCE:
(P) AG RESERVOIR 115,440 SF = 2.65 ACRES

SINCE THIS IS AGRICULTURAL GRADING, THE REGIONAL WATER QUALITY CONTROL BOARD HAS DETERMINED THAT ENROLLMENT IN THE STATE CONSTRUCTION GENERAL PERMIT IS NOT REQUIRED.

BENCHMARK & BASIS OF BEARINGS:

1. THE BENCH MARK FOR THIS PROJECT IS POINT NUMBER RTCM 26 (SHP 5). MONUMENT TYPE - GPS BASE POINT, ON THE TOP OF ELECTRIC PEDESTAL AT MADONNA ROAD AND STATE HIGHWAY 101 IN SAN LUIS OBISPO. ELEVATION = 170.713', NAVD 1988), TBM AS SHOWN.

2. THE BASIS OF BEARINGS FOR THIS PROJECT IS GEODETIC NORTH FROM POINT #1200 AS SHOWN.

ENGINEERS PROJECT STATEMENT:

RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER (SPECIAL INSPECTOR) HAVE BEEN INCORPORATED BY REFERENCE AND MUST BE COMPLIED WITH FULLY DURING CONSTRUCTION AS NOTER IN THE SPECIAL INSPECTIONS AND REPORTS TABLE (SEE SHEET C1). ALL ONSITE IMPROVEMENTS WILL BE SUPERVISED BY THE GRADING CONTRACTOR OR APPROPRIATE PROFESSIONALS. NO CONSTRUCTION IS ANTICIPATED WITHIN THE PUBLIC RIGHT-OF-WAY IN CONJUNCTION WITH THIS PROJECT. THESE PLANS ARE BASED UPON OUTSOURCED INFORMATION (i.e. TOPOGRAPHY & MAPS, MUNICIPAL CODES & STANDARDS, GEOTECHNICAL REPORTS) OR OTHER PROFESSIONAL REPORTS BY OTHERS. ERIC J. GOBLER CIVIL ENGINEERING ASSUMES NO RESPONSIBILITY FOR INCORRECT OR INSUFFICIENT INFORMATION SUPPLIED TO US AT THE AT TIME OF PROJECT DESIGN OR PROJECT REVISIONS.

SCOPE OF WORK:

THIS PLAN SUPPORTS ONLY THE GRADING, DRAINAGE AND EROSION CONTROL PORTION OF THE PROPOSED AG RESERVOIR PROJECT; THE IRRIGATION AND LINER SYSTEMS ARE SEPARATE AND THE RESPONSIBILITY OF OTHERS.

1. CONSTRUCTION SHALL CONFORM TO THESE PLANS, RECOMMENDATIONS FROM THE GEOTHECNICAL ENGINEERS REPORT, COUNTY GRADING REQUIREMENTS AND ALL APPLICABLE CALIFORNIA BUILDING CODES AND COUNTY CODES, ORDINANCES AND PRACTICES.

2. INSTALL A 7.1 MG, 21.8 AC-FT AG RESERVOIR, 25 FT DEEP (2 FT FREEBOARD) DAM HEIGHT 25' MAX.

3. CONSTRUCTION OVERSIGHT WILL BE PROVIDED BY THE ENGINEER OF RECORD AND THE GEOTECHNICAL ENGINEER AND WILL INCLUDE REQUIRED COUNTY INSPECTIONS.

4. ALL PERMITTING, APPROVAL AND CONSTRUCTION OVERSIGHT SHALL CONFORM TO THE GRADING PERMIT ISSUED BY THE COUNTY PLANNING AND BUILDING DEPARTMENT.

5. THE DETAILS OF THE IRRIGATION (PUMPING, PIPING & ELECTRICAL) SYSTEM ARE THE RESPONSIBILITY OF THE IRRIGATION CONSULTANT AND THE OWNER. CONSTRUCTION LAYOUT AND DETAILS ARE NOT A PART OF THIS PLAN.

6. THE DETAILS OF THE LINER SYSTEM ARE THE RESPONSIBILITY OF THE LINER CONSULTANT, MANUFACTURER, AND/OR THE OWNER. CONSTRUCTION LAYOUT AND DETAILS ARE NOT A PART OF THIS PLAN.

AG RESERVOIR SAFETY NOTES:

1. THE PROPERTY OWNER OR PROJECT MANAGER SHALL INSTALL A SAFETY ROPE SYSTEM VISIBLY MARKED WITH SIGNAGE AT STRATEGIC LOCATIONS AROUND THE AG RESERVOIR TO ENSURE THAT PEOPLE CAN EXIT THE POND SAFELY IN THE EVENT OF AN ACCIDENTAL FALL IN.

2. ALL PERSONNEL THAT WORK AROUND THE AG RESERVOIR SHOULD BE INFORMED AND PROPERLY TRAINED IN SAFETY PRACTICES AND PROCEDURES OF THE SAFETY ROPE SYSTEM.

THIS AG RESERVOIR IS "NON-JURISDICTIONAL" WITH THE CALIFORNIA DIVISION OF SAFETY OF DAMS, SINCE THE CAPACITY IS LESS THAN 50 AC-FT (7.1 MG, 21.8 AC-FT ACTUAL) AND THE DAM HEIGHT DOES NOT EXCEED 25 FT (25' ACTUAL)

N.R.C.S. PRACTICES CONSIDERED:

#378 - POND
#342A&B - CRITICAL AREA PLANTING
#402 - DAM
#436 - IRRIGATION RESERVOIR
#521A - POND SEALING OR LINING
#570 - STORM WATER RUNOFF CONTROL
#578 - CULVERT CROSSING
#903 - EARTH FILL
#907 - ROCK RIP-RAP
TR-60 - TECHNICAL RELEASE 60
(EARTH DAMS & RESERVOIRS)

NOTE: THIS PROJECT HAS BEEN DESIGNED CONSIDERING THE ABOVE N.R.C.S. PRACTICES AS WELL AS SLO COUNTY ORDINANCES AND STANDARD ENGINEERING PRACTICES, AND RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER.

OWNER:

NEGRANTI GREEN VALLEY RANCH, LLC.
6425 GREEN VALLEY ROAD
CAMBRIA, CA. 93428
(805) 927-8000

ENGINEER OF RECORD:

ERIC J. GOBLER, P.E.
LIC. #C30438
9110 ATASCADERO AVENUE
ATASCADERO, CA. 93422
(805) 459-3268 CELL
egcivilpe@gmail.com

POND LINER CONSULTANT:

TO BE DETERMINED

CONTRACTOR:

TO BE DETERMINED

RANCH MANAGER:

DUSTIN HAUGE
NEGRANTI GREEN VALLEY RANCH, LLC.
6425 GREEN VALLEY ROAD
CAMBRIA, CA. 93428
(805) 395-0900
dustin.hauge@gmail.com

GEOTECHNICAL ENGINEER:

GEO SOULTIONS INC.
220 HIGH STREET
SAN LUIS OBISPO, CA. 93401
(805) 543-8539
info@geosolutions.net
JOB # SL10962-1 & SL10962-2
DATED: 11-13-18

IRRIGATION CONSULTANT:

TO BE DETERMINED

SHEET INDEX:

C1	TITLE SHEET, OVERALL SITE PLAN, VICINITY MAP, CONSTRUCTION AND SITE REPORTS
C2	AG RESERVOIR GRADING, DRAINAGE AND HORIZONTAL CONTROL PLAN
C3	AG RESERVOIR PROFILES
C4	EROSION, SEDIMENT AND ENVIRONMENTAL CONTROL PLAN
C5	EROSION, SEDIMENT AND ENVIRONMENTAL CONTROL NOTES AND DETAILS
C6	CONSTRUCTION NOTES AND SITE DETAILS

REVISIONS
1
2
3

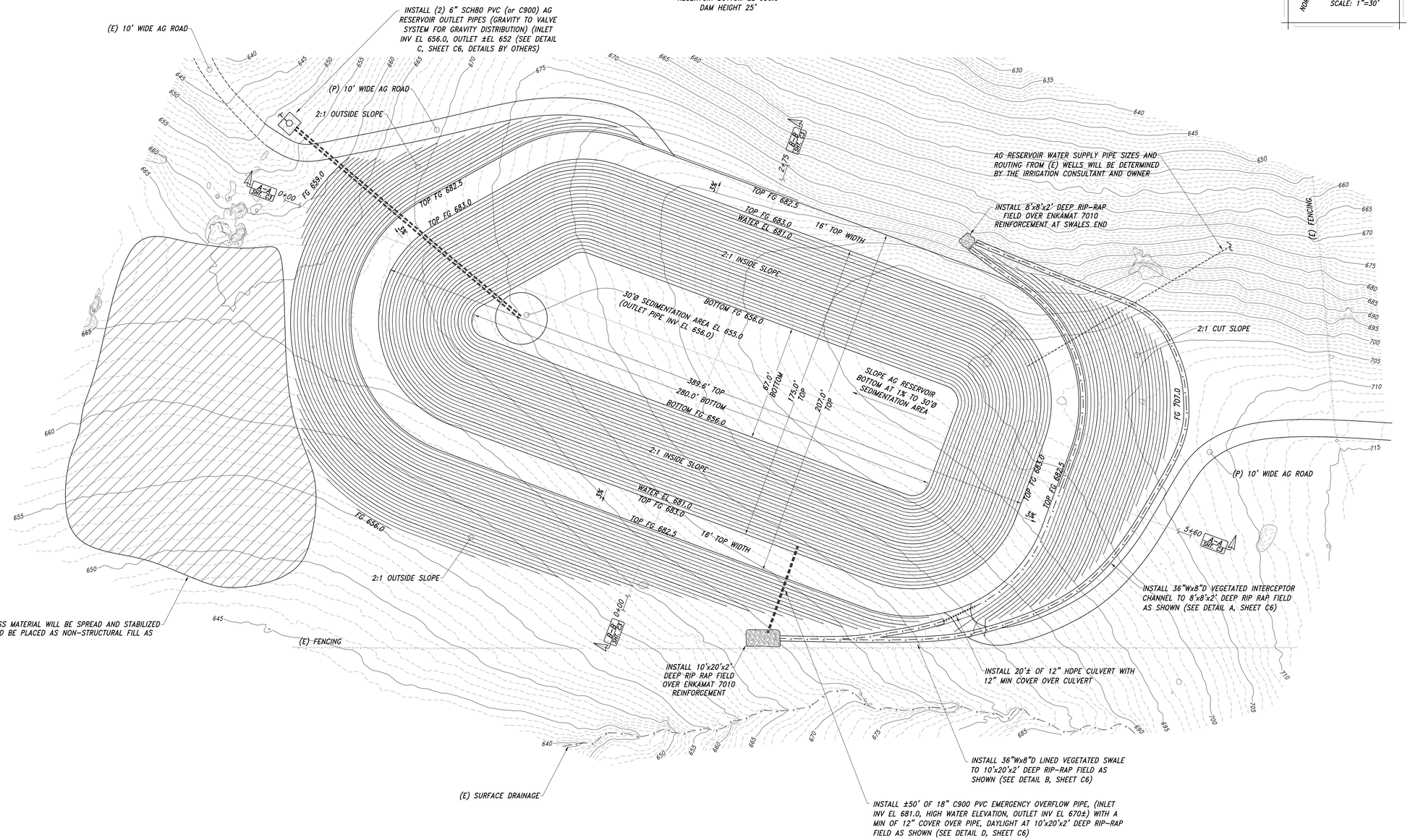
PROPRIETARY NOTES:
THESE PLANS, SPECIFICATIONS AND DESIGNS ARE INSTRUMENTS OF WORK AND SERVICES PREPARED FOR THIS PROJECT BY ERIC J. GOBLER CIVIL ENGINEERING. NO PART OF THESE PLANS SHALL BE USED IN PART OR IN WHOLE FOR ANY OTHER PROJECT UNLESS WRITTEN CONSENT IS OBTAINED FROM ERIC J. GOBLER, CIVIL ENGINEER.

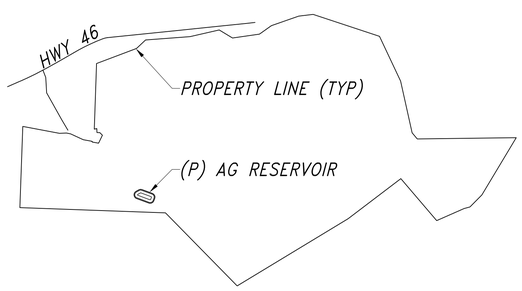
TOPOGRAPHIC SURVEY BY:
MBS LANDSURVEYS
MICHAEL B. STANTON
mike@mbslandsurveys.com
3563 SUELDO STREET, SUITE Q
SAN LUIS OBISPO, CA 93401
OFFICE (805) 594-1960
FAX (805) 594-1966
CELL (805) 440-4215
DATED: 12-11-18

ENGINEER OF WORK:
STATE OF CALIFORNIA - ERIC J. GOBLER - No. C 30438 Exp. 3/31/20 - CIVIL - REGISTERED PROFESSIONAL ENGINEER
ERIC J. GOBLER, P.E.
LIC. #C30438
9110 ATASCADERO AVENUE
ATASCADERO, CA. 93422
(805) 459-3268 CELL
egcivilpe@gmail.com
C030438 CIVIL ENGINEERING

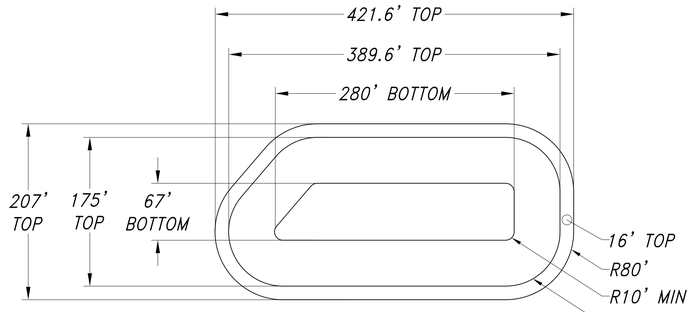
PROJECT DESCRIPTION:	NEGRANTI, 6425 GREEN VALLEY RD, CAMBRIA PARCEL B, APN: 046-012-001, ±775.78 ACRES
SHEET DESCRIPTION:	TITLE SHEET, OVERALL SITE PLAN, VICINITY MAP, CONSTRUCTION AND SITE REPORTS — PLAN #4 APRIL 2019
DESIGN/DRAWN: Eric Rivera	COUNTY PLAN CHECKER:
JOB NUMBER: 18-048	CO. PERMIT NUMBER:
APPROVING ENGINEER FOR COUNTY REQUIREMENTS: E J Gobler	DATED: 4-15-19
ERIC J. GOBLER, RCE 30438 EXP. 03/31/20	DATED:
CALIFORNIA COORDINATES: N E	SHEET: C1

NEGRANTI GREEN VALLEY RANCH AG RESERVOIR
7.1 MG (21.8 AC-FT), 25 FT DEEP (2 FT FREEBOARD)
RESERVOIR TOP EL 683.0
HIGH WATER SURFACE EL 681.0
RESERVOIR BOTTOM EL 656.0
DAM HEIGHT 25'





AG RESERVOIR SITE LOCATION



HORIZONTAL CONTROL

NORTH
0' 15' 30'
SCALE: 1"=30'

AG RESERVOIR GRADING, DRAINAGE AND HORIZONTAL CONTROL PLAN:

NEGRANTI GREEN VALLEY RANCH AG RESERVOIR
7.1 MG (21.8 AC-FT), 25 FT DEEP (2 FT FREEBOARD)
RESERVOIR TOP EL 683.0
HIGH WATER SURFACE EL 681.0
RESERVOIR BOTTOM EL 656.0
DAM HEIGHT 25'

Site Volume Table: Unadjusted

Site	Stratum	Surf1	Surf2	Cut (CY)	Fill (CY)	Net (CY)	Method
NEGRANTI GREEN VALLEY RANCH				49,812	11,211	38,601	Composite

NOTE: THIS DOES NOT ACCOUNT FOR SOIL LOSS RESULTING FROM COMPACTION (30-40% ESTIMATED)

CONSTRUCTION NOTES:

1. ALL AG RESERVOIR CONSTRUCTION, RESERVOIR PAD PLACEMENT AND ALL ENGINEERED AND COMPACTED FILL SLOPES SHALL CONFORM TO RECOMMENDATIONS MADE BY AND UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER (SPECIAL INSPECTOR) AND TO BE IN FULL COMPLIANCE WITH THE SPECIAL INSPECTIONS AND REPORTS TABLE (SEE SHEET C1).

2. IF ANY ADDITIONAL SOIL IS NEEDED TO COMPLETE ANY FILL SLOPES THE SOIL WILL BE BORROWED ONSITE. THE SOILS ENGINEER SHALL APPROVE ALL FILL MATERIALS, INCLUDING ONSITE BORROW SOILS. ANY EXCESS SOIL NEEDED WILL BE DISTRIBUTED ONSITE AS INDICATED ON THESE PLANS.

3. ALL SURFACE DRAINAGE SHALL FOLLOW THE APPROXIMATE PATHWAYS SHOWN ON THESE PLANS.

AG RESERVOIR SAFETY NOTES:

1. THE PROPERTY OWNER OR PROJECT MANAGER SHALL INSTALL A SAFETY ROPE SYSTEM VISIBLY MARKED WITH SIGNAGE AT STRATEGIC LOCATIONS AROUND THE AG RESERVOIR TO ENSURE THAT PEOPLE CAN EXIT THE POND SAFELY IN THE EVENT OF AN ACCIDENTAL FALL IN.

2. ALL PERSONNEL THAT WORK AROUND THE AG RESERVOIR SHOULD BE INFORMED AND PROPERLY TRAINED IN SAFETY PRACTICES AND PROCEDURES OF THE SAFETY ROPE SYSTEM.

EMERGENCY OVERFLOW:

1. AS SHOWN ON THIS SHEET, AN 18" PVC PIPE WILL PROVIDE MEANS FOR EMERGENCY OVERFLOW.

2. THE ONLY WATER INFLOW SOURCES ARE DIRECT RAINFALL AND THE SUPPLY PIPELINE. ALL SURFACE RUNOFF IS DIRECTED AROUND THE RESERVOIR.

PIPE SIZING:

100-YR RAINFALL EVENT => 5.0 IN/HR (~28 IN/YR ANNUAL)
RESERVOIR SUPPLY => 100 gpm (MAX) = 0.22 CFS
RESERVOIR SURFACE AREA => 62,140 SF
PIPE SIZE (D) => 18" PVC
PIPE SLOPE (S) => 11'/50' = 0.22
FRICTION COEFFICIENT (n) => 0.012 (PVC)

MANNING EQUATION:

$D = [2.159\ (Q)(n) / S^{*}0.5/]^{*}0.375$ WHERE Q=DESIGN FLOW (CFS)
n = 0.12; S = 0.22

Q = 100-YR RAINFALL (Q1) + MAXIMUM PUMPING RATE (Q2)
Q1 = (5.0 IN/HR)(62,140 SF)(1 FT/12 IN)(1 HR/3600 SEC)
Q1 = 7.2 CFS
Q2 = 0.22 CFS
Q = 7.2 + 0.22 = 7.42 CFS

THUS, THE MINIMUM PIPE DIAMETER NEEDED TO SAFELY CONVEY EMERGENCY FLOW CONDITIONS IS:

$D = [2.159\ (7.42)\ (0.012) / (0.22)^{*}0.5]^{*}0.375$
D = 0.72 FT = 9 IN (MIN)

SINCE THE 18" OVERFLOW PIPE IS GREATER THAN THE 9" MIN NEEDED, THE 18" EMERGENCY OVERFLOW PIPE IS ADEQUATE AND PROVIDES AMPLE SAFETY.

REVISIONS
1
2
3

PROPRIETARY NOTES:
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OFFICE (805) 594-1960
FAX (805) 594-1966
CELL (805) 440-4215
DATED: 12-11-18

ENGINEER OF WORK:
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egcivilpe@gmail.com

STATE OF CALIFORNIA · ERIC J. GOBLER · No. C 30438 · Exp. 3/31/20 · CIVIL · REGISTERED PROFESSIONAL ENGINEER

CIVIL ENGINEERING

PROJECT DESCRIPTION:	NEGRANTI, 6425 GREEN VALLEY RD, CAMBRIA PARCEL B, APN: 046-012-001, ±775.78 ACRES		
SHEET DESCRIPTION:	AG RESERVOIR GRADING, DRAINAGE AND HORIZONTAL CONTROL PLAN	PLAN #4 APRIL 2019	
DESIGN/DRAWN: Bea Rivera	COUNTY PLAN CHECKER:	APPROVING ENGINEER FOR COUNTY REQUIREMENTS	DATED:
JOB NUMBER: 18-048	CO. PERMIT NUMBER:	E J Gobler	4-15-19
CALIFORNIA COORDINATES: N E		ERIC J. GOBLER, RCE 30438 EXP. 03/31/20	DATED:
			SHEET: C2

APPENDIX B

List of Plants and Animals Observed During the Site Visit

Appendix B – List of Plants and Animals Observed Onsite During the Site Visit

Scientific Name	Common Name
Plants	
Achillea millefolium	Yarrow
Artemisia californica	California sagebrush
*Avena barbata**	Slender wild oat
Bloomeria crocea	Common goldenstar
*Brachypodium distachyon**	Purple false brome
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft chess
Calystegia macrostegia	Island morning glory
*Carduus pycnocephalus**	Italian thistle
Castilleja exserta	purple owl's clover
Chenopodium californicum	California goosefoot
*Convolvulus arvensis**	Field bindweed
Croton setiger	Turkey-mullein
Epilobium canum	California fuchsia
Epilobium ciliatum	Slender willow herb
*Erodium botrys**	Big heron bill
*Erodium cicutarium**	Red stemmed filaree
*Festuca perennis**	Italian rye grass
Hazardia squarrosa	Saw toothed goldenbush
*Hedypnois cretica**	Crete weed
Hemizonia congesta ssp. *luzulifolia*	Hayfield tarweed
Hordeum murinum ssp. *leporinum**	Hare barley
Juncus patens	Spreading rush
Juncus phaeocephalus	Brown headed rush
*Lamarckia aurea**	Goldentop
Logfia filaginoides	California cottonrose
*Logfia gallica**	Narrowleaf cottonrose
Lupinus bicolor	Miniature lupine
*Lysimachia arvensis**	Scarlet pimpernel
*Phalaris aquatica**	Harding grass
Plagiobothrys nothofulvus	Rusty haired popcorn flower
Plantago erecta	California plantain
*Plantago lanceolata**	English plantain
*Polypogon monspeliensis**	Rabbitsfoot grass
*Rumex pulcher**	Fiddleleaf dock
Stipa pulchra	Purple needle grass
*Trifolium hirtum**	Rose clover
*Vicia sativa**	Spring vetch
Animals	
Aquila chrysaetos	Golden eagle (foraging on neighboring prop)
Cathartes aura	Turkey vulture
Nymphalis antiopa	Mourning cloak butterfly
Otospermophilus beecheyi	California ground squirrel
Sceloporus occidentalis	Western fence lizard
Sturnella neglecta	Western meadowlark

*Non-native species

APPENDIX C

Photo Plate

KMA

Appendix C. Photo Plate

Photo 1. Overview of the study area looking to the east. Reservoir would be constructed on ridgeline in grassland habitat. The upper limits of Perry Creek are visible to the right.

Photo 2. Overview of the study area looking west. The reservoir would be constructed in the generally flat ridgeline area. Rock outcrops in the distance are near the western limits of disturbance.

Photo 3. View of a patch of native perennial bunchgrass grassland on the southern slope. Purple needle grass (*Stipa pulchra*) stands were present in other parts of the property outside the study area.

Photo 4. View of the smaller rock outcrops in the eastern part of the study area.

Photo 5. View of one of the larger rock outcrops in the western part of the study area, showing a cluster of boulder-sized pieces and a higher proportion of bare ground and herbs surrounding the base.

Photo 6. View of one of the larger rock outcrops in the western part of the site, seen in the distance, and annual grassland with a higher proportion of native herbs that were observed on the slopes below the saddle.

Photo 7. View of the headwaters of Perry Creek where a water tank and trough have been installed on neighboring property. Overflow from the tank into the drainage appears to support a narrow band of wetland vegetation in the channel further downstream.

Photo 8. Overview of orchard along Green Valley and existing ranch road to be used during construction and operation of the reservoir.

APPENDIX D

Special-status Biological Resources Summary

KMA

Appendix D. Special-status Biological Resources Summary

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
PLANTS						
Adobe sanicle	*Sanicula maritima*	—	R	1B.1	Perennial herb; chaparral, coastal prairie, meadows and seeps, valley and foothill grassland on clay and serpentine soils; 30-240 meters in elevation; blooms February to May.	**Not expected.** No suitable soils are present, and the species would have been in identifiable condition at the time of the May survey.
Blochman's dudleya	*Dudleya blochmaniae* ssp. *blochmaniae*	—	—	1B.1	Perennial herb; coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland on rocky, often clay or serpentine soils and sandstone rock outcrops; 5 - 450 meters in elevation; blooms April to June.	**Not expected**. Grassland with rock outcroppings on clay soils were searched for this species and it was not located. Reference population in San Simeon was visited and the species was still in flower and in identifiable condition in May.
California seablight	*Suaeda californica*	E	—	1B.1	Perennial evergreen shrub; coastal salt marshes and swamps; 0-15 meters in elevation; blooms July to October.	**Not expected.** The site is outside of the elevational range of the species, no suitable habitat is present, and the species is restricted to areas along the immediate coast.
Cambria morning-glory	*Calystegia subacaulis* ssp. *episcopalis*	—	—	4.2	Perennial rhizomatous herb; chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland usually on clay soils; 30-500 meters in elevation; blooms March to July.	**Not expected.** Suitable grassland habitat and soils are present, but species was not observed in the study area. Only the common non-native field bindweed was observed onsite.
Chaparral ragwort	*Senecio aphanactis*	—	—	2B.2	Annual herb; chaparral, cismontane woodland, coastal scrub in drying alkaline flats; 15-800 meters in elevation; blooms January to April.	**Not expected.** No suitable habitat is present and the CNDDB record in the vicinity is from 1958 and incorrectly mapped.
Compact cobwebby thistle	*Cirsium occidentale* var. *compactum*	—	—	1B.2	Perennial herb; chaparral, coastal scrub, coastal dunes, coastal prairie; 5-150 meters in elevation; blooms April to July.	**Not expected.** No suitable habitat is present, the site is outside of the elevational range of the species, and species is restricted to the immediate coast.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Cook's triteleia	*Triteleia ixioides* ssp. *cookii*	—	—	1B.3	Perennial bulbiferous herb; cismontane woodland, closed-cone coniferous forest in moist places with serpentine soils; 150-700 meters in elevation; blooms May to June.	**Not expected.** No suitable woodland habitat or serpentine soils are present.
Eastwood's larkspur	*Delphinium parryi* ssp. *eastwoodiae*	—	—	1B.2	Perennial herb; chaparral, valley & foothill grassland generally in serpentine soils; 75-500 meters in elevation; blooms February to March.	**Not expected.** No suitable soils are present, and the CNDDB record in the vicinity is from 1959 and is incorrectly mapped; site is outside of the species' local distribution.
Hardham's bedstraw	*Galium hardhamiae*	—	—	1B.3	Perennial herb; closed-cone coniferous forest and chaparral in serpentine soils; 395-975 meters in elevation; blooms April to October.	**Not expected.** No suitable habitat or soils are present and the site is outside the species' elevational range.
Jones' layia	*Layia jonesii*	—	—	1B.2	Annual herb; chaparral and valley and foothill grassland on clay or serpentine; 5-400 meters in elevation; blooms March to May.	**Not expected.** Grassland does not appear to be influenced by serpentine soils. Study area was searched during this species bloom period and it was not observed. Reference occurrences were also visited to confirm this species was in flower during the time the May survey was conducted.
Mesa horkelia	*Horkelia cuneata var. puberula*	—	—	1B.1	Perennial herb; chaparral, cismontane woodland, coastal scrub; sandy or gravelly soils; 70- 810 meters elevation; blooms February to September.	**Not expected.** No suitable habitat or soils are present, and this perennial species would be eliminated by frequent mowing.
Monterey pine	*Pinus radiata*	—	—	1B.1	Perennial evergreen tree; closed-cone coniferous forest and cismontane woodland; 25-185 meters in elevation.	**Not expected.** No woodland species are present in the study area and this species generally occurs at lower elevations than are at the site.
Most beautiful jewelflower	*Streptanthus albidus* ssp. *peramoenus*	—	—	1B.2	Annual herb; chaparral, cismontane woodland, and valley and foothill grassland on serpentine soils; 94-1000 meters in elevation; blooms March to October.	**Not expected.** No suitable serpentine soils are present and the only nearby record is imprecise and from 1929; local distribution is restricted to the rocky serpentine areas in the region.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Ojai fritillary	*Fritillaria ojaiensis*	—	—	1B.2	Perennial bulbiferous herb; broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest on rocky soils; 225-998 meters in elevation; blooms February to May.	**Not expected.** No suitable woodland or chaparral habitat is present and the site is slightly outside of the elevational range of this species.
San Luis Obispo owl's-clover	*Castilleja densiflora* var. *obispoensis*	—	—	1B.2	Annual herb; meadows, seeps, and valley and foothill grassland sometimes on serpentine; 10 to 400 meters in elevation; blooms March to May.	**Not expected.** Potentially suitable grassland habitat was searched, but the species was not observed. Reference populations were visited to confirm the species was still in flower in late May and that plants were in identifiable condition when the survey occurred.
Santa Lucia bush-mallow	*Malacothamnus palmeri* var. *palmeri*	—	—	1B.2	Perennial deciduous shrub; chaparral on rocky soils and slopes, but occasionally extending down canyons to near sea level; 3-670 meters in elevation; blooms May to July.	**Not expected.** No chaparral habitat is present and this shrub would have been seen during the survey.
Umbrella larkspur	*Delphinium umbraculorum*	—	—	1B.3	Perennial herb; cismontane woodlands and chaparral often on disintegrating shale; 85-1,035 meters in elevation; blooms April to June.	**Not expected.** No suitable habitat or soils are present, and although the site is within the elevational range of the species, it is restricted to the ridge of the Santa Lucia Range in this area.
Woodland woollythreads	*Monolopia gracilens*	—	—	1B.2	Annual herb; openings of broad-leaved upland forest, chaparral, cismontane woodland, north coast coniferous forest, and valley and foothill grassland on sandy rocky soils sometimes on serpentine; 100 to 1,200 meters in elevation; blooms February to July.	**Not expected.** The only records of this species in the area are imprecise and from 1911 and 1940; other localities are along the immediate coast. Suitable grassland habitat was searched and this species was not observed.

**E = Endangered; T = Threatened; '—' = no status; CRPR: Rank 1B – Rare or endangered in California and elsewhere; Rank 2A – Presumed extirpated in California, but more common elsewhere; Rank 2B – Rare or endangered in California, but more common elsewhere; Rank 4 – Limited distribution (Watch List). Sources: California Natural Diversity Database (California Department of Fish and Wildlife 2019a); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2018a); Inventory of Rare and Endangered Plants of California (California Native Plant Society 2019); Information on Wild California Plants for Conservation, Education, and Appreciation (Calflora 2019).*

SENSITIVE NATURAL COMMUNITIES	
Central Coast Arroyo Willow Scrub or Forest — State Rarity Rank S3	**Absent.** No willow (*Salix* sp.) occur in the study area.
Coastal and Valley Freshwater Marsh — State Rarity Rank S2 and S3	**Absent.** Wetland plant species composition in Perry Creek is more closely aligned with vernal marsh (see below) than coastal and valley freshwater marsh.
Monterey Pine Forest — State Rarity Rank S1	**Absent.** No Monterey pines (*Pinus radiata*) occur in the study area or in surrounding areas of the property.
Valley Needlegrass Grassland — State Rarity Rank S4	**Present.** The perennial native grassland habitat onsite, dominated by purple needlegrass (*Stipa pulchra*), occurs in the southeastern portion of the study area. Purple needlegrass grassland is common in the area.
Valley Oak Woodland — State Rarity Rank S2	**Absent.** No valley oaks (*Quercus lobata*) occur in the study area and their local distribution is away from the coast.
Vernal Marsh — State Rarity Rank S4	**Present**. This community was observed in Perry Creek within the study area and identified as a sensitive community since it is expected to be regulated under Clean Water Act, Porter-Cologne Water Quality Act and California Fish and Game Code.

Sources: Preliminary Descriptions of the Terrestrial Natural Communities of California(Holland 1986); California Natural Community List (California Department of Fish and Wildlife 2018); California Natural Diversity Database (California Department of Fish and Wildlife 2019a).

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
INVERTEBRATES						
Monarch butterfly	*Danaus plexippus* pop. 1	—	—	— (overwintering population)	Adults feed on the nectar of various blooming plants. During breeding can be found in fields, pastures, residential areas, grassland and scrub. Eggs are laid on and caterpillars feed on milkweed. Overwinters in wind-protected tree groves of eucalyptus, Monterey pine and cypress along the coast.	**Potential.** No groves of suitable trees occur in the study area to be used as an overwintering site. However, individuals could occur periodically while foraging.
Obscure bumble bee	*Bombus caliginosus*	—	—	—	Found on ceanothus, thistles, sweet peas, lupines, willows, clover and blackberry. Queens emerge from hibernation in late January, workers appear in early March, and males emerge in April. Colonies dissolve in late October, with only the new queens surviving.	**Not expected.** No suitable host plants are in the study area and the only record from the vicinity is an imprecise location from 1973.
FISH						
South-central California coast DPS steelhead	*Oncorhynchus mykiss irideus* pop. 9	T	—	—	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	**Not expected.** No suitable habitat is present in the study area. The reach of Perry Creek at the site is much too small in a headwaters location to be used by this species.
Tidewater goby	*Eucyclogobius newberryi*	E	—	SSC	Small, euryhaline, benthic fish that inhabits coastal lagoons, estuaries, stream mouths, and backwater marshes, rarely in open ocean. Usually in brackish lower reaches but can occur up to 7 miles upstream from the ocean. Requires shallow water with little to no flow and fine substrate.	**Not expected.** No suitable habitat is present in the study area. The reach of Perry Creek at the site is too far in a headwaters location to be used by this species.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
AMPHIBIANS/REPTILES						
Blainville's (=coast) horned lizard	*Phrynosoma blainvillii*	—	—	SSC	Grasslands, sandy washes, coastal scrub, chaparral, coniferous forest and woodlands with patches of open areas for sunning and bushes for cover. Often with loose sandy soils for burial, but also uses small mammal burrows. Preys on native species of ants and other small invertebrates.	**Potential.** Could occur in grassland habitat onsite, but dense clay soils would preclude burial and other habitat requirements. Could use open areas near rock outcrops for sunning, and take cover under small shrubs near rock outcrops. Has been recorded along the coast in the vicinity but also occurs inland.
California red-legged frog	*Rana draytonii*	T	—	SSC	Forages and breeds in streams with deep slow-moving pools, stock ponds, reservoirs, springs, lagoons, and marshes; usually with emergent or riparian vegetation but also found at sites lacking vegetation. Uses riparian and various upland habitats in winter and for dispersal.	**Potential.** Has been recorded at Green Valley Creek near the site; also observed in Villa Creek, and potential habitat exists at ponds in lower elevations on the property. Other stock ponds and springs are present in the vicinity. Could move through the study area while migrating between aquatic sites.
Coast Range newt	*Taricha torosa*	—	—	SSC	Primarily terrestrial in forests, oak woodlands, chaparral, and rolling grassland. Breeds in ponds, reservoirs and pools of clear streams with rocky substrates and cascades.	**Not expected.** Perry Creek is unsuitable due to being too ephemeral, small and lacking a riparian border and rocky substrate. Has not been recorded in Villa or Green Valley creeks. Due to lack of aquatic habitat nearby, would not be expected to occur in terrestrial habitat onsite.
Foothill yellow-legged frog	*Rana boylii*	—	CT	SSC	Rocky streams and rivers with open sunny banks, surrounded by forests, chaparral and woodlands. Sometimes found in isolated pools, backwaters, and spring-fed pools. Reproduction is exclusively in streams and rivers. Usually found near water and diurnal.	**Not expected.** This species has been extirpated from this area since 1975-1978, and the closest extant populations are from Rocky Point northward near the county line. Species needs streams with rocky substrates and at least 15 weeks of aquatic habitat to attain metamorphosis.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Lesser slender salamander	*Batrachoseps minor*	—	—	SSC	Forests composed of mixed oak, tanbark oak, sycamore and bay laurel with moist conditions. Found above 400 m elevation. Active above ground on warm, wet nights but otherwise is underground or under cover objects.	**Not expected.** Oak woodland habitat with leaf litter and mesic conditions are required by this species, and absent from the site. Also has a very restricted distribution along the ridge of the Santa Lucia Range, and site is below the elevational range of the species.
Northern California legless lizard	*Anniella pulchra*	—	—	SSC	Beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, oak woodland, and stream terraces with riparian vegetation. Fossorial species requires moist, loose soils or leaf litter with plant cover or surface objects (rocks, boards, logs, etc.). Can occur in residential areas.	**Not expected.** Generally not found in open grassland habitats on dense clay soils unless on the edge of shrubs or woodland. Very few records in the vicinity and only recorded along the coast in this area.
Southwestern pond turtle (=western pond turtle)	*Actinemys pallida* (=*Emys marmorata*)	—	—	SSC	Ponds, lakes, rivers, streams, marshes, brackish lagoons, and irrigation ditches with a mosaic of vegetation and open areas for basking. Uses upland areas for nesting and in winter, including woodland, forest, grassland, chaparral, and grasslands.	**Potential.** Species has been recorded in Green Valley and Perry creeks near the study site. Could occur periodically while undergoing terrestrial movements. Unlikely to take refuge in grassland habitats, but could use cover near rock outcrops while moving between aquatic sites.
Two-striped gartersnake	*Thamnophis hammondii*	—	—	SSC	Pools, creeks, and stock ponds in oak woodland, chaparral, scrub, and coniferous forest. Primarily aquatic, feeding on tadpoles, newt larvae, small frogs and toads, fish, earthworms and fish eggs. Occurs in upland habitats in winter in rodent burrows. Active from January to November, depending on weather.	**Potential.** Has been recorded at Santa Rosa Creek and many other coastal streams in the vicinity. Potential habitat may be present at Perry Creek, but this feature may be too ephemeral to support the species year round. Could occur in grassland habitats adjacent to the creek in winter months when conditions are wet.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
BIRDS						
Bald eagle	*Haliaeetus leucocephalus*	—	E	FP	Open areas near water where they mainly feed on fish, and may also eat birds, amphibians, reptiles, small mammals, and crabs; nests in large mature trees such as ponderosa pine or occasionally on cliffs or the ground, within 1 mile of a large water source; occurs year-round in this area.	**Potential.** Several observations in eBird are from near the study area, and the site is open enough and surrounded by open country for foraging. No nesting habitat is present onsite.
Golden eagle	*Aquila chrysaetos*	—	—	FP, WL (nesting & wintering)	Uncommon resident of mountainous and valley-foothill areas. Foraging typically occurs in open terrain where they prey on small mammals. Nesting usually occurs on cliff ledges, and less commonly in large trees or on structures such as electrical towers.	**Potential.** Suitable foraging habitat is present in the study area, and has been reported to nest in a large California bay tree growing on the rock outcrop offsite to the south. Recorded on the property in eBird, and an individual was observed foraging offsite during the survey.
Grasshopper sparrow	*Ammodramus savannarum*	—	—	SSC	Grasslands, prairies, hayfields, and open pastures with little scrub cover and some bare ground where they prey on grasshoppers and other invertebrates. Nests on the ground at the base of clumps of grass within a large patch of tall grass. Occurs in this area during breeding season.	**Potential.** Has been recorded in the area, including breeding. Even though grazing keeps the grass vegetation height low, potential grassland habitat is present onsite for foraging and breeding.
Great blue heron	*Ardea herodias*	—	—	— (nesting colony)	Freshwater and saltwater marshes, also foraging in grasslands and agricultural fields. Nesting colonies are near lakes, ponds and wetlands bordered by forests. Nests are placed mainly in trees, but may also nest on the ground, in bushes or artificial structures. Occurs year-round in this area.	**Potential.** Individuals could forage periodically in grassland onsite, but would not nest onsite because there is insufficient aquatic habitat and no trees. There are several records in eBird away from the coast and near the site.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Loggerhead shrike	*Lanius ludovicianus*	—	—	SSC (nesting)	Open country with low vegetation and well-spaced shrubs or trees such as coastal scrub, grasslands, agricultural fields, pastures, riparian areas, desert scrub, savannas, prairies, golf courses, and along roadsides where they prey on insects, amphibians, reptiles and small mammals; nests in trees, shrubs, or brush piles; occurs in this area year-round.	**Potential.** Suitable foraging habitat is present in grassland onsite but no vegetation for nesting is present. Several observations in eBird are from near the study area.
Northern harrier	*Circus cyaneus*	—	—	SSC (nesting)	Large areas of wetlands and grasslands with low vegetation where they prey on small mammals, amphibians, reptiles and birds; nesting is in marshes, grazed meadows, and desert shrubland where they nest on the ground in a dense clump of vegetation such as willows, grasses, sedge, bulrushes or cattails; occurs year-round in this area.	**Potential.** There are records from the area, including documented breeding along the coast. Suitable foraging habitat is present onsite, but unlikely to nest in the study area due to grazing and ranching activities and low vegetation height.
Prairie falcon	*Falco mexicanus*	—	—	WL (nesting)	Grasslands, desert shrubland, tundra, coastal scrub, feedlots, and agricultural fields where they feed on small mammals, insects and birds; nests on high cliff ledges, steep bluffs, trees, or on buildings or utility poles; occurs year-round in this area.	**Potential.** Suitable foraging habitat is present, but no nesting habitat occurs onsite. They have been recorded in eBird along the coast in the area.
Tricolored blackbird	*Agelaius tricolor*	—	CE	SSC (nesting colony)	Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots. Nests colonially in freshwater marshes with tules or cattails, or in other dense thickets of willow, thistle, blackberry, or wild rose in close proximity to open water. Occurs year-round in this area.	**Potential.** Species has historically bred on the property in one of the existing agricultural ponds. Suitable foraging habitat is present onsite, but is not appropriate for nesting.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
White-tailed kite	*Elanus leucurus*	—	—	FP (nesting)	Savannas, open woodlands (oak or pine), riparian forest, marshes, desert grasslands, and fields where they prey on small mammals, birds, lizards, and insects. Nests and roosts in the edges of forests or in tall isolated trees. Occurs in this area year-round.	**Potential.** Suitable foraging habitat is present in the study area, and the species has been recorded at one of the existing agricultural ponds on the property. No nesting habitat is present in the study area, but potentially could nest in large trees offsite.
MAMMALS						
American badger	*Taxidea taxus*	—	—	SSC	Open grasslands, fields and the edge of scrub and woodland habitats; requires dry loose soils for burrowing and shelter and feeds on a variety of small mammals such as California ground squirrel and pocket gopher.	**Potential.** Suitable grassland habitat onsite could be used for foraging, movement between other sites, and denning. No dens were seen during the survey but potential prey were observed.
Fringed myotis	*Myotis thysanodes*	—	—	—	Desert scrub, high elevation coniferous forest, oak woodland, mixed deciduous forest; roosts in caves, buildings, mines and cavities of large trees.	**Not expected.** No suitable forest habitat is present at or nearby the study area, and no roosting habitat occurs. Only one record in the area from San Simeon in 2000.
Pallid bat	*Antrozous pallidus*	—	—	SSC	Open dry habitats including deserts, grasslands, shrublands, woodlands, and forests. Roosts in rocky outcrops, caves, crevasses, mines, hollow trees, and buildings that moderate temperature. Night roosts on porches and open buildings.	**Potential.** Could forage over the site but no roosting habitat is present in the study area. Has been recorded in the vicinity.
Townsend's big-eared bat	*Corynorhinus townsendii*	—	—	SSC	Desert scrub, sagebrush, chaparral, oak woodlands, riparian and coniferous forests; prefers mesic habitats and closely tied to rock cliffs with crevasses; roosts in caves, cliffs, mines, tunnels and bridges.	**Not expected.** No suitable foraging or roosting habitat is present onsite and the only record in the vicinity is imprecise and from 1945.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Yuma myotis	*Myotis yumanensis*	—	—	—	Open forests and woodlands with water sources such as ponds, streams, and stock tanks; roosts in buildings, mines, caves, crevices and under bridges; night roosts in more open areas.	**Not expected.** No suitable forest habitat is present at or nearby the study area, and no roosting habitat occurs. Only one record in the area from San Simeon in 2000.

**E = Endangered; T = Threatened; E = Candidate; SSC = Species of Special Concern; FP = Fully Protected; WL = Watch List; '—' = no status; California Natural Diversity Database (California Department of Fish and Wildlife 2019a); Special Animals List (California Department of Fish and Wildlife 2018b); California Wildlife Habitat Relationships System (CDFW 2019c); A Guide to the Amphibians and Reptiles of California (California Herps 2019); eBird (The Cornell Lab of Ornithology 2019a); All About Birds (The Cornell Lab of Ornithology 2019b).*

CRITICAL HABITAT	
California Red-legged Frog	**Present.** The study site falls within Critical Habitat Unit SLO-2.
South-central California coast DPS Steelhead	**Absent.** Perry Creek is too ephemeral to support this species and is not part of critical habitat.
Tidewater Goby	**Absent.** Only occurs along the lower reaches of streams and study site is in the headwaters.
Western Snowy Plover	**Absent.** Only occurs on beaches.

Source: Threatened and Endangered Species Active Critical Habitat Report (United States Fish and Wildlife Service 2019b).