Appendix B
Biological Resources Assessment

Exhibit 8

CAMBRIA EMERGENCY WATER SUPPLY PROJECT

San Luis Obispo County, California

Habitat Assessment

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June 2014
JN 141290

Exhibit 8

CAMBRIA EMERGENCY WATER SUPPLY PROJECT

SAN LUIS OBISPO COUNTY, CALIFORNIA

Habitat Assessment

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Ryan Winkleman
Biologist
Natural Resources

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June 2014

Executive Summary

The Cambria Community Services District proposes to install and operate groundwater extraction and injection wells, a new water treatment plant, and a series of pipelines to help alleviate an emergency water shortage in the City of Cambria, San Luis Obispo County, California. The Project would be located within previously-disturbed areas and would consist of an existing well to extract groundwater, a water treatment plant to make the water potable, several monitoring wells, and an injection well located in an existing water well field for injection and subsequent re-extraction for the general water supply. In addition, the Project would include one of two alternatives: under the first alternative, 100 gpm of treated water would be continuously injected back into the groundwater supply at three lagoon injection wells, while in the second alternative 100 gpm of treated water would be discharged directly into Van Gordon Creek via an existing pipeline.

In May 2014 biologists from RBF Consulting conducted a habitat assessment within the Project site and the surrounding waterways. The Project site is located within designated Critical Habitat for the California red-legged frog (*Rana draytonii*), and the larger survey area is located within designated Critical Habitat for steelhead (*Oncorhynchus mykiss irideus*), tidewater goby (*Eucyclogobius newberryi*), and western snowy plover (*Charadrius alexandrinus nivosus*). Previous surveys conducted in the survey area since 1991 have identified the presence of California red-legged frog, steelhead, tidewater goby, western pond turtle (*Emys marmorata*), two-striped garter snake (*Thamnophis hammondii*), and compact cobwebby thistle (*Cirsium occidentale* var. *compactum*) within the survey area and/or general vicinity. Tidewater goby was observed during the habitat assessment.

While a formal jurisdictional delineation has not been conducted, the Project site contains several water bodies—San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon—that are expected to be Waters of the State and/or Waters of the U.S. under the regulatory authority of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW). The Project is currently designed to avoid direct impacts to these areas, although indirect operational impacts could still occur. If Project design changed and the Project could cause direct impacts to any these water bodies, the Project applicant would have to obtain a Corps Clean Water Act (CWA) Section 404 Permit, Regional Board CWA Section 401 Water Quality Certification, and CDFW Section 1602 Streambed Alteration Agreement prior to construction within these areas.

The Project is also located within the Coastal Zone as designated by the California Coastal Commission. Prior to approval by the Coastal Commission, the Project would have to demonstrate that it complies with the California Coastal Act of 1976. The Project would also

have to demonstrate compliance with San Luis Obispo County's Local Coastal Program, which ties into the Coastal Act on a county level.

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EXHIBITS

APPENDIX

LIST OF ACRONYMS

AMP	Adaptive Management Program
AWTP	Advanced Water Treatment Plant
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	United States Army Corp of Engineers
CPP	Coastal Plan Policies
CRLF	California Red-legged Frog
CWA	Clean Water Act
CZLUO	Coastal Zone Land Use Ordinance
EIR	Environmental Impact Report
ESA	Endangered Species Act
GIS	Geographic Information System
LIW	Lagoon Injection Well
MBTA	Migratory Bird Treaty Act
NCAP	North Coast Area Plan
NRCS	Natural Resources Conservation Service
RBF	RBF Consulting
RIW	Recharge Injection Well
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WEAP	Worker Environmental Awareness Program

Section 1 Introduction

This report contains the findings of RBF Consulting's (RBF) Habitat Assessment for the Cambria Emergency Water Supply Project (Project) located north of the Community of Cambria in unincorporated San Luis Obispo County, California. The habitat assessment was conducted by RBF biological manager Thomas J. McGill and biologists Travis J. McGill and Ryan Winkleman on May 8 and 9, 2014 to identify sensitive habitats and/or species potentially occurring within the boundaries of the Project site and/or adjacent to the Project boundary that could pose a constraint to development. Since 1991 there have been several biological studies conducted for projects in the general area surrounding the Project site.

Special attention was given to the suitability of the habitat onsite to support California red-legged frog (*Rana draytonii*), a federally threatened species and California species of special concern; western pond turtle (*Emys marmorata*), a California species of special concern; tidewater goby (*Eucyclogobius newberryi*), a federally endangered species and California species of special concern; the steelhead (*Oncorhynchus mykiss irideus*) south/central California coast distinct population segment (DPS), a federally threatened species and California species of special concern; western snowy plover (*Charadrius alexandrinus nivosus*), a federally threatened species and California species of special concern; two-striped garter snake, a California species of special concern; and general raptor species. For the purposes of this analysis, "Project site" refers to the 96-acre property (Exhibit 3, *Project Site Map*) and "survey area" includes the Project site as well as San Simeon Creek Lagoon, which is partially located in the site but continues offsite to the west onto San Simeon State Beach.

1.1 PROJECT LOCATION

The Project site is generally located east of State Route 1, south of the City of San Simeon, and north of the Community of Cambria in unincorporated San Luis Obispo County, California (Exhibit 1, *Regional Vicinity Map*). The Project site is located in an un-sectioned area of Township 27 South, Range 8 East of the Cambria quadrangle of the United States Geological Survey (USGS) 7.5-minute topographic map series (Exhibit 2, *Local Vicinity Map*). Specifically, the site is east of Van Gordon Creek Road, north of San Simeon Creek, and south of San Simeon Monterey Creek Road. It is located adjacent to but not within Hearst San Simeon State Park (Refer to Exhibit 3).

1.2 PROJECT BACKGROUND

All of Cambria's potable water is supplied by groundwater wells in the San Simeon and Santa Rosa Creek aquifers. The San Simeon and Santa Rosa aquifers are relatively shallow and porous, with the groundwater levels typically recharged every year during the rainy season. Groundwater levels generally exhibit a consistent pattern of high levels during the wet season,

6/5/2014 JN M:\Mdata\141290\MXD\01 Regional Vicinity.mxd AP

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0 2.5 5 10 Miles

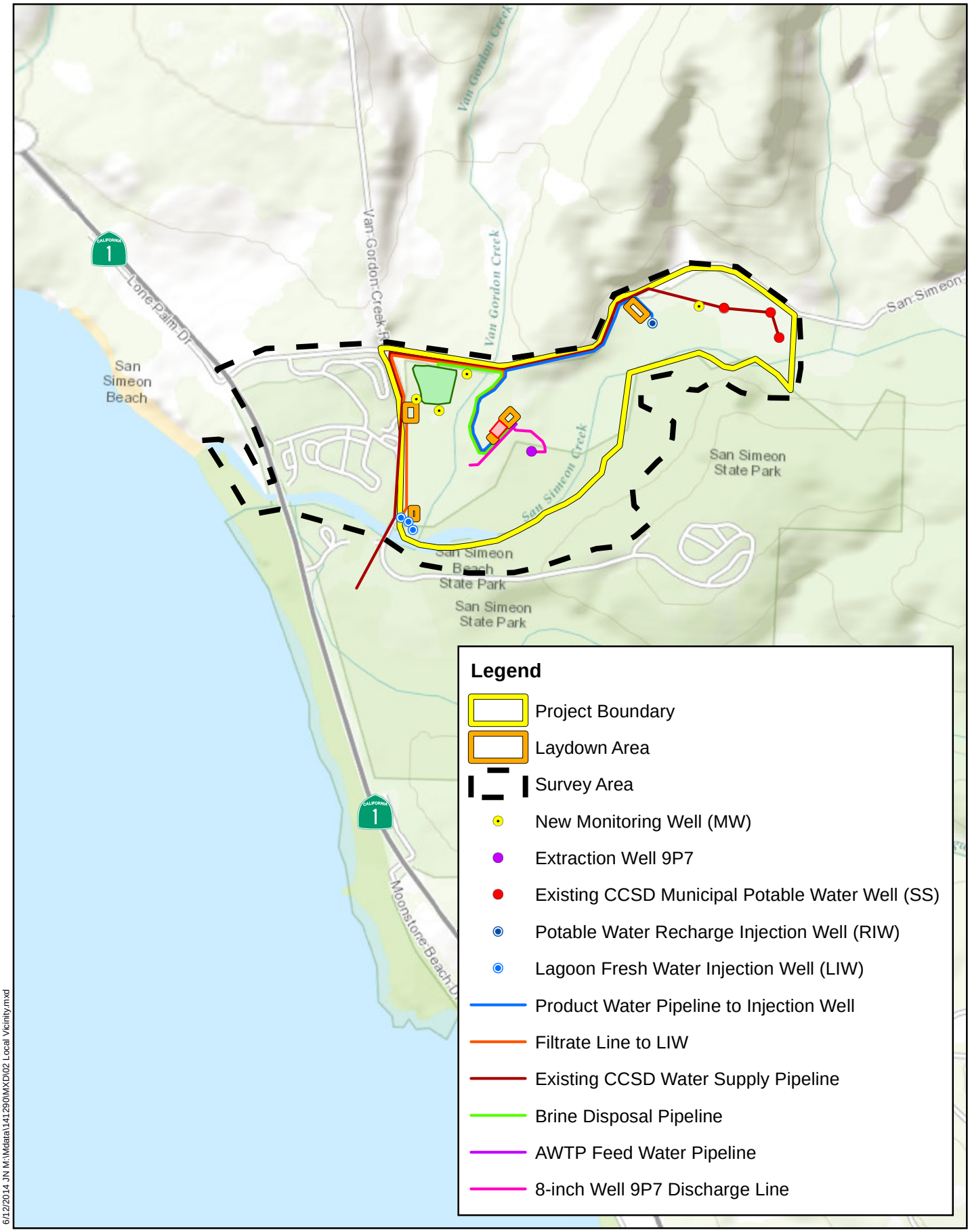
Source: ESRI Relief Map, National Highway Planning Network

CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Regional Vicinity Map

Exhibit 1

Exhibit 8



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CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Local Vicinity Map

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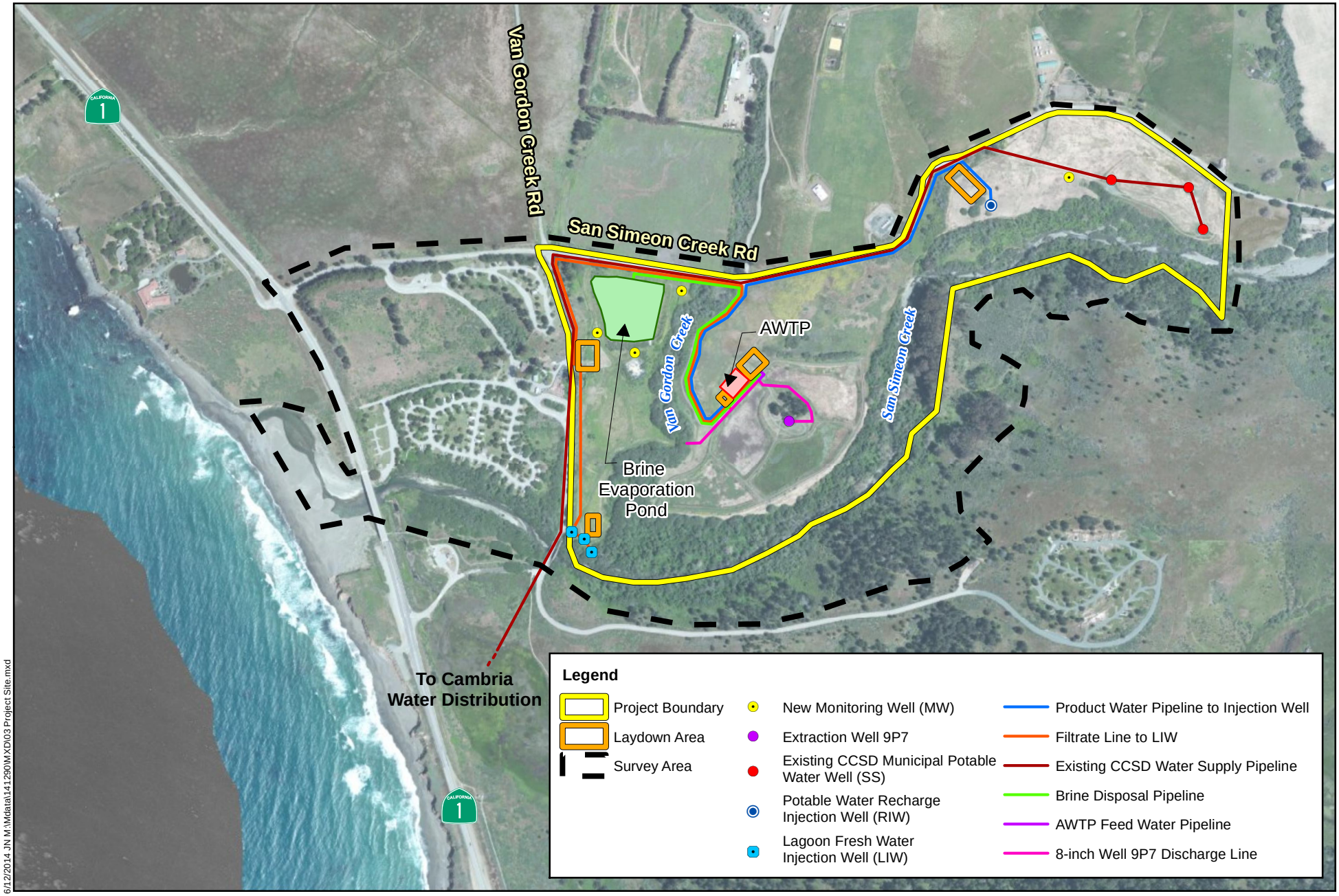
0 0.125 0.25 0.5 Miles

Source: CDM Smith, ESRI World Topographic Map

Exhibit 2



6/12/2014 JN M:\Mdata\141290\MXD\03 Project Site.mxd

CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Project Site Map

RBF CONSULTING A Baker Company

0 400 800 1,600 Feet

Source: National Hydrography Dataset, CDM Smith, ESRI World Imagery Basemap

Exhibit 3

steady decline during the dry season, and rapid rise when the wet season resumes. To minimize loss or contamination of potable groundwater at the aquifer and ocean interface, treated wastewater effluent is percolated into the San Simeon Creek aquifer downstream from its production wells. This practice also helps prevent saltwater intrusion into the freshwater water aquifer. If the groundwater level drops too far, treated effluent and seawater could migrate toward the water supply wells, deteriorating the water quality and potentially rendering the freshwater non-potable. The wastewater treatment plant is required to maintain a positive differential between the up-gradient groundwater levels at its production wells and the down-gradient percolation ponds. During the summer dry season, and depending upon the prior year's precipitation, the Cambria Community Services District (CCSD) may periodically pump groundwater from its percolation fields in order to maintain this differential.

In January 2014, the CCSD declared a Stage 3 water shortage emergency, the most stringent of three levels. In response to this emergency status, the CCSD is proposing the Cambria Emergency Water Supply Project.

1.3 PROJECT DESCRIPTION

The Project's source water is the San Simeon Creek aquifer from existing Well 9P7, which is located in the south end of a flat park-like area in the middle of the existing percolation ponds (Refer to Exhibit 3). The extracted groundwater would be transferred to a proposed Advanced Water Treatment Plant (AWTP) that would treat brackish water to produce potable water. The AWTP would consist of multiple unit processes including ultrafiltration membranes, reverse osmosis membrane, advance oxidation, and post-treatment and disinfection facilities. A feed water pipeline is proposed to transport the brackish water between existing Well 9P7 and the proposed AWTP. To meet California Department of Public Health and Regional Water Quality Control Board regulations, the treated AWTP product water would be re-introduced/pumped for injection into the groundwater basin so that it would become available in the existing San Simeon well field. To inject the product water into the basin, a new potable water recharge injection well (RIW) is proposed at the existing potable water well-field, approximately 1,000 feet east of existing potable water Well SS-3. A Project water pipeline is proposed to transport the product water between the proposed AWTP and proposed wells RIW and lagoon injection well (LIW).

A stream of the AWTP product water would be pumped southwest of the AWTP for discharge into the San Simeon creek via a LIW proposed just upstream of the fresh water lagoon, approximately 2,500 feet southwest of existing Well 9P7. The AWTP generated waste stream (brine) would be disposed for evaporation in the existing Van Gordon Reservoir, an evaporation pond that was originally constructed for percolation of the secondary effluent form the CCSD's wastewater treatment plant (WWTP). A brine disposal pipeline is proposed to transport the brine between the proposed AWTP and the existing Van Gordon Reservoir, which would be

lined with an impermeable liner to serve as the evaporation pond for this Project. Depending on the AWTP recovery, the proposed brine evaporation may need to be aided with mechanical spray evaporators or another forced evaporation equipment.

It is assumed the Project would be capable of generating 400 gallons per minute (gpm) of new water, out of which 300 gpm would be used for emergency water supply to the Cambria community and 100 gpm would be used for recharge into the San Simeon Creek fresh water lagoons.

Section 2 Regulatory Background

There are several overlying federal, state, and local biological resources regulations and policies that pertain to this Project. These policies are summarized below, along with a brief description of how they relate to the proposed Project's planning, permitting, and implementation.

2.1 FEDERAL REGULATIONS

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA 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." The presence of any federally threatened or endangered species that are in a Project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

"Harm" has been defined by the regulations of the U.S. Fish and Wildlife Service (USFWS) to include types of "significant habitat modification or degradation." The U.S. Supreme Court, in *Babbit v. Sweet Home*, 515 U.S. 687, ruled that "harm" may include habitat modification "...where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." Activities that may result in "take" of individuals are regulated by USFWS.

Under the ESA, "Critical Habitat" is also designated at the time of listing or within one year of listing. "Critical Habitat" refers to habitat or a specific geographic area that contains the elements and features that are essential for the survival and recovery of the species. In the event that a project may result in take or in adverse effects to a species' designated Critical Habitat, the project proponent may be required to engage in suitable mitigation. If the project is on federal lands, will require federal permits (e.g. regulatory permits), or otherwise will have a federal lead agency, the proponent will be required to enter into Section 7 informal and/or formal consultations with the USFWS to obtain, if possible, a biological opinion allowing for incidental take of the species in question. If the project is on private land or will not require any federal permits, the proponent will be required to write a habitat management plan to address the impacts.

The ESA defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is a species that is likely to become endangered in the foreseeable future. A "proposed" species is one that has been officially proposed by USFWS for addition to the federal threatened and endangered species list.

USFWS produced an updated list of candidate species for listing in June 2002 (Federal Resister: Volume 67, Number 114, 50 CFR Part 17). Candidate species are regarded by USFWS as candidates for addition to the "List of Endangered and Threatened Wildlife and Plants." Although candidate species are not afforded legal protection under the ESA, they typically receive special attention from federal and state agencies during the environmental review process.

USFWS also uses the label "species of concern," an informal term that refers to species which might be in need of concentrated conservation actions. As the species of concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

The proposed Project is located within several overlapping areas that have been designated Critical Habitat. Direct or indirect adverse impacts to these areas known or presumed to support federally listed species may trigger the requirement for state and/or federal incidental take permits.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act, otherwise known as the Magnuson-Stevens Act (MSA) was enacted to help protect, conserve, and manage the fishery resources of the United States in the face of overfishing, habitat losses, and ineffective international agreements. The MSA provides the United States with exclusive fishery management rights to all fish within and beyond the U.S.'s "exclusive economic zone" and all Continental Shelf fishery resources, except when the fish are within the waters of a foreign nation, and allows the United States to regulate international fishing within waters managed by the U.S.

Through Section 303 of the MSA, the National Oceanic and Atmospheric Administration (NOAA) is required to work with regional Fishery Management Councils to develop fishery management plans (FMPs) for the protection of fisheries under their jurisdiction. These FMPs are implemented by NOAA's National Marine Fisheries Service (NMFS). One of the required provisions in FMPs is to establish "Essential Fish Habitat" (EFH), defined as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." Through

Section 305(b) of the MSA, federal agencies are required to consult with the NMFS on activities that may affect EFH for species that are managed under fishery management plans.

The proposed Project is located within Essential Fish Habitat for Coho salmon (*Oncorhynchos kisutch*).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The proposed Project would be located within and adjacent to suitable nesting habitat for a variety of avian species. In order to demonstrate compliance with the MBTA, the Project proponent may be required to conduct preconstruction nesting surveys if construction is to occur during the nesting season.

Section 404 of the Clean Water Act

Section 404 of the Clean Water Act (CWA) requires that a permit be obtained from the U.S. Army Corps of Engineers (Corps) prior to the discharge of dredged or fill materials into any "waters of the United States or wetlands." Waters of the United States are broadly defined in the Corps regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Federal Register 1982). Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be "jurisdictional wetlands." In a recent Supreme Court Case, the Court acted to limit the regulatory jurisdiction of the Corps under Section 404 of the CWA as it applies to adjacent waters (USSC 2001). Specifically, the Court ruled that waters that are non-navigable, isolated, and intrastate are not subject to the Corps jurisdiction (Guzy and Anderson 2001). The Corps is required to consult with the USFWS, Environmental Protection Agency, and State Regional Water Quality Control Board (Regional Board) (among other agencies) in carrying out its discretionary authority under Section 404.

The Corps grants two types of permits, individual and nationwide. Project-specific individual permits are required for certain activities that may have a potential for more than a minimal

impact and necessitate a detailed application. The most common type of permit is a nationwide permit. Nationwide permits authorize activities on a nationwide basis unless specifically limited, and are designed to regulate with little delay or paperwork certain activities having minimal impacts. Nationwide permits typically take two to three months to obtain whereas individual permits can take a year or more. To qualify for a nationwide permit, strict conditions must be met. If conditions are met, permittees may proceed with certain activities without notifying the Corps. Some nationwide permits require a 30-day pre-construction notification before activities can begin. Fill of certain isolated waters or wetlands that affects less that 0.5 acre of impact per Project may be permitted with a pre-construction notification. Although Van Gordon and San Simeon Creeks would qualify as jurisdictional waters of the U.S. and State, initial Project design will avoid these jurisdictional areas. If jurisdictional areas cannot be avoided, a Section 404 wetlands permit would be required.

Section 401 of the Clean Water Act

Applicants for a federal license or permit for activities which may discharge to waters of the US must seek Water Quality Certification from the state or Indian tribe with jurisdiction.[1] Such Certification is based on a finding that the discharge will meet water quality standards and other applicable requirements. In California, Regional Boards issue or deny Certification for discharges within their geographical jurisdiction. Water Quality Certification must be based on a finding that the proposed discharge will comply with water quality standards, which are defined as numeric and narrative objectives in each Regional Board's Basin Plan. Where applicable, the State Water Resources Control Board has this responsibility for projects affecting waters within the jurisdiction of multiple Regional Boards. The Regional Board's jurisdiction extends to all waters of the state and to all waters of the US, including wetlands.

Section 401 of the Clean Water Act requires that "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the Corps will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the Regional Board. As noted above, jurisdictional waters will be avoided. However, if avoidance is infeasible then a 401 permit will be required.

2.2 STATE REGULATIONS

California Coastal Act §30000 et seq.

Chapter 3 of the California Coastal Act contains policies to protect water quality and the biological productivity of coastal waters (PRC Section 30231); avoid and minimize dredging,

[1] Title 33, United States Code, Section 1341; Clean Water Act Section.

diking, and filling sediments (PRC Section 30233); and mitigate wetland impacts (PRC Section 30607.1).

In addition, under the California Coastal Act "environmentally sensitive area means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (PRC Section 30107.5).

The California Coastal Act requires that jurisdictions protect Environmentally Sensitive Habitat Areas (ESHA). Specifically, PRC Section 30240 states that:

a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The Coastal Act generally protects ESHAs where they exist and also protects "against any significant disruption of habitat values." Section 30007.5 of the Coastal Act states that where there is a conflict between policies that it:

> *…be resolved in a manner, which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.*

The proposed Project is located within the jurisdiction of the Coastal Zone, is adjacent to San Simeon Creek and and San Simeon Creek Lagoon, both ESHAs, and is adjacent to Hearst San Simeon State Park.

California Endangered Species Act

State-listed threatened and endangered species are protected under provisions of the California Endangered Species Act (CESA). Activities that may result in "take" of individuals (defined in CESA as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the California Department of Fish and Wildlife (CDFW). Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection.

The proposed Project has the potential during its operational phase to indirectly affect several species protected by the State of California.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. However, in certain conditions a project may be entirely exempt from the CEQA process. In January 2014, California Governor Edmund G. “Jerry” Brown issued an emergency drought declaration stating the Department of Water Resources and the Water Board may take actions to make water immediately available, and that CEQA and all regulations adopted pursuant to CEQA “are suspended on the basis that strict compliance with them will prevent, hinder, or delay the mitigation of the effects of the emergency.”

California Native Plant Society Rare or Endangered Plant Species

Vascular plants listed as rare or endangered by the California Native Plant Society (CNPS), but which have no designated status under state and federal endangered species legislation are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513

The CDFW administers the California Fish and Game Code. There are particular sections of the Code that are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy the nests or eggs of any birds that are protected under the MBTA. Furthermore, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW will be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Examples of species that are State fully protected include golden eagle (*Aquila chrysaetos*), and white-tailed kite (*Elanus leucurus*). Section 3513 of the Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

The proposed Project would be located within and adjacent to suitable nesting habitat for a variety of avian species. In order to demonstrate compliance with the aforementioned Fish and Game Code sections, the Project proponent would be required to conduct preconstruction nesting surveys if construction is to occur during the nesting season.

Lake and Streambed Alteration Program

California Fish and Game Code Sections 1600-1616 establish a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;

(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or

(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. The project design and alignment expects to be able to avoid state jurisdictional waters; if avoidance is infeasible, a state 1602 Streambed Alteration Agreement would be required.

2.3 LOCAL POLICIES

Local Coastal Program

Under Section 30500 of the California Coastal Act, each local government within the California Coastal Zone must prepare or have the Coastal Commission prepare for it a Local Coastal Program (LCP). The San Luis Obispo County LCP is a comprehensive four-part management program that is intended to assist with the management and protection of the Coastal Zone and to ensure compliance with the California Coastal Act; it was certified by the California Coastal Commission in 1987. This LCP is composed of four separate documents: *Framework for Planning*, *Coastal Plan Policies* (CPP), Area Plans, and *Coastal Zone Land Use Ordinance* (CZLUO).

a) *Framework for Planning*: San Luis Obispo County is split into 13 separate land use categories. The Framework for Planning document (SLO County 1988a) describes each of those categories in detail, including purposes and definitions ("characters"). In addition, the Framework for Planning contains Coastal Table "O," a table which lists approved uses within each land use category.

b) *Coastal Plan Policies*: The San Luis Obispo County CPP (SLO County 1988b) are intended to help the county carry out the preservation policies of the Coastal Act of 1976. As such, this document recommends policies and standards to be implemented for development within the Coastal Zone and to remain in compliance with the Coastal Zone Land Use Ordinance. Among many others, the CPP includes provisions for development that may affect riparian vegetation, terrestrial habitats, wetlands, or that may require habitat restoration. Much of the CPP works in tandem with and is implemented pursuant to the CZLUO.

c) *North Coast Area Plan*: San Luis Obispo County is divided into eight separate planning areas, four of which fall within the Coastal Zone; the proposed Project is located within the North Coast Planning Area. The North Coast Planning Area extends from the northern San Luis Obispo County border south to Point Estero and east to the main ridge of the Santa Lucia Range, encompassing the communities of San Simeon and Cambria. The North Coast Area Plan (NCAP) (SLO County 1980) allocates land use within this planning area through the use of land use categories. Through these land use categories, the NCAP designates residential, commercial, and recreational development standards within the planning area to best protect and conserve natural resources and the overall land use plan. In addition to land use categories, there are "Combining Designations" (CDs). As defined by the NCAP, "Combining Designations are special overlay land use categories applied in areas of the county with potentially hazardous conditions or significant natural resources. In these areas more detailed project review is needed to avoid or minimize adverse environmental impacts, or effects of hazardous conditions on proposed projects." A 1998 update to the NCAP (CCC 1998) more specifically defined ESHAs and other protected areas within the planning area.

d) *Coastal Zone Land Use Ordinance*: The CZLUO (SLO County 1986) is enacted as Title 23 of the San Luis Obispo County Code. It is the implementation portion of the LCP and regulates development and land use within the unincorporated areas of the California Coastal Zone. Chapter 7 of the CZLUO deals with CD standards, and Sections 23.07.160 to 23.07.178 pertain specifically to environmentally sensitive areas, including Sensitive Resource Areas (SRAs), ESHAs, wetlands, streams and riparian vegetation, terrestrial habitat, and marine habitat. This document works in tandem with the CPP and provides in many cases more detailed instructions and requirements for development in or adjacent to environmentally sensitive areas.

Construction and implementation of the proposed Project will be required to remain in compliance with the LCP, and by extension, with the California Coastal Act. The proposed Project will be in or adjacent to multiple SRAs, ESHAs, and other sensitive habitats and has the potential to cause indirect operational impacts. Because the CZLUO works as the final point, the "implementation" point, in enacting the LCP and ensuring compliance with the California Coastal

Act, an analysis of the proposed Project's consistency with the CZLUO is provided in Section 6 of this document.

Section 3 Methodology

A literature review and records search was conducted to determine which sensitive biological resources have the potential to occur on the Project site or within the general vicinity. In addition, a general habitat assessment of the Project site was conducted. The field survey provided information on the existing conditions on the site and potential for sensitive biological resources to occur.

3.1 LITERATURE REVIEW

Prior to conducting the field visit, a literature review and records search was conducted for sensitive biological resources potentially occurring on or within the vicinity of the Project site. Previously recorded occurrences of special status plant and wildlife species and their proximity to the Project site were determined through a query of the California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CNDDB) Rarefind 5, the California Native Plant Society's (CNPS) *Electronic Inventory of Rare and Endangered Plants of California*, Calflora Database, compendia of special-status species published by CDFW, and USFWS species listings.

Literature detailing biological resources previously observed in the vicinity of the Project site and historical land uses were reviewed to understand the extent of disturbances to the habitats onsite. Standard field guides and texts on sensitive and non-sensitive biological resources were reviewed for habitat requirements, as well as the following resources:

- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- USFWS Endangered Species Profile and Primary Constituent Elements (PCEs) for tidewater goby, California red-legged frog, and steelhead;
- San Luis Obispo County Framework for Planning
- San Luis Obispo County Coastal Plan Policies;
- San Luis Obispo County North Coast Area Plan;
- San Luis Obispo County North Coast Area Plan Update; and
- San Luis Obispo County Coastal Zone Land Use Ordinance.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the Project site. Additional recorded occurrences of these species found on or near the Project site were derived from database queries. The CNDDB ArcGIS database was used, together with ArcGIS software, to locate the nearest occurrence and determine the distance from the Project site.

3.2 HABITAT ASSESSMENT AND FIELD INVESTIGATION

RBF biological manager Thomas J. McGill and biologists Travis J. McGill and Ryan Winkleman inventoried and evaluated the extent and conditions of the plant communities found within the boundaries of the survey area on May 8 and 9, 2014. The survey area included all Project components (i.e. pipelines and wells), as well as San Simeon Creek, portions of Van Gordon Creek at the confluence of San Simeon Creek, and the current extent of the San Simeon Creek Lagoon. Plant communities identified on aerial photographs during the literature review were ground-truthed by walking meandering transects through the plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support sensitive plant and wildlife species as well as the identification of riparian/riverine habitat, and corridors and linkages that may support the movement of wildlife through the area.

Special attention was paid to sensitive habitats and/or undeveloped, natural areas having a higher potential to support sensitive flora and fauna species. Methods to detect the presence of sensitive aquatic species included direct observation and dipnetting.

Notes were taken during the survey of all plant and wildlife species detected, including dominant plant species, as well as the locations and general characteristics of potential jurisdictional features. Detections of wildlife species were made by scat, trails, tracks, burrows, nests, and visual and aural observation. In addition, site characteristics such as soil condition, topography, presence of indicator species, condition of the plant communities, hydrology, and evidence of human use of the site were noted. The plant communities were classified in accordance with CDFW (2003) and Holland (1986), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

3.3 SOIL SERIES ASSESSMENT

Onsite and adjoining soils were researched prior to the field visit using the USDA NRCS Soil Survey for San Joaquin County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes the Project site has undergone.

3.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities within the Project site were classified according to CDFW's List of Terrestrial Natural Communities (2003) and cross-referenced to descriptions provided in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986).

The CDFW does not currently have a narrative description of the vegetation communities; therefore, the descriptions provided in Appendix A are according to Holland.

3.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field. Unusual or less familiar plants were identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this report follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

3.6 WILDLIFE

Wildlife species were detected and identified during the field survey by sight, calls, tracks, scat, trails, burrows, and nests. Field guides were used to assist with identification of species during surveys and included the National Geographic Field Guide to the Birds of North America (2011) for birds and Burt and Grossenheider (1980) for mammals. In this report, scientific names are provided immediately following common names of wildlife species (first reference only).

3.7 JURISDICTIONAL AREAS

Aerial photography was reviewed prior to conducting the habitat assessment. The aerials were used to locate and inspect any potential natural drainage features and water bodies that may fall under the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board, or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory authorities. During the habitat assessment, Van Gordon Creek and San Simeon Creek were noted as surface drainage features that would qualify as federal and state jurisdictional waters.

Section 4 Existing Conditions

4.1 LOCAL CLIMATE

The region has a year-round coastal climate with mild summers and cool winters. The warmest months are typically September and October with average highs of 71 degrees Fahrenheit (F), while the coolest months are typically December and January, with average lows of 45°F. Average annual rainfall is 17.61 inches, with February typically receiving the most precipitation. Weather conditions during the surveys included temperatures in the mid to high 60s (degrees Fahrenheit) with clear skies. Winds were minimal and progressively became stronger later in the day.

4.2 TOPOGRAPHY AND SOILS

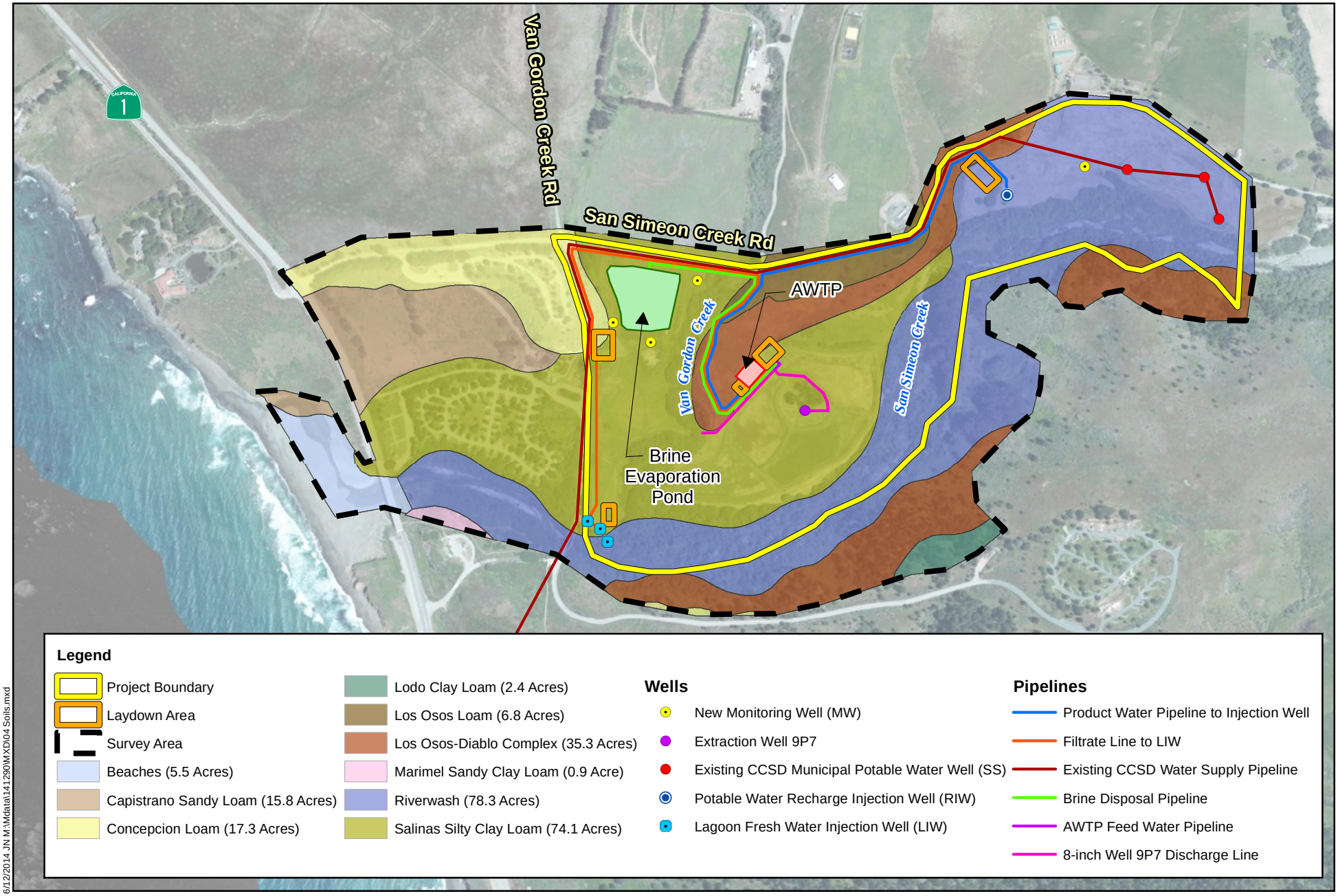
Surface elevations range from approximately 200 to 1,200 feet above mean sea level (msl) with areas of greater topographic relief located along the western boundary of the Project site. Based on the USDA Soil Survey, the Project site and survey area are underlain by the following soil units (Exhibit 4, *Soils Map*): Beaches, Capistrano sandy loam (rolling), Concepcion loam (5 to 9 percent slopes), Lodo clay loam (5 to 15 percent slopes), Los Osos loam (5 to 9 percent slopes), Los Osos loam (30 to 50 percent slopes), Los Osos-Diablo complex (15 to 30 percent slopes), Marimel sandy-clay loam (occasionally flooded), Riverwash, and Salinas silty clay loam (0 to 2 percent slopes).

Beaches (107)

Beaches are poorly-drained. In north coastal San Luis Obispo County they occur at an elevation of 0 to 10 feet, with a mean annual precipitation of 42 to 48 inches, a mean annual air temperature range of 52 to 57°F, and a frost-free period of 190 to 210 days. The typical profile for beaches in north coastal San Luis Obispo County includes sand from 0 to 60 inches. The depth to the water table is about 0 to 72 inches and the available water capacity is very low at approximately 2.4 inches. Beaches are not classified as prime farmland.

Capistrano Sandy Loam, Rolling (114)

This soil type is well-drained and is developed in Eolian deposits. In north coastal San Luis Obispo County it is found on dunes at an elevation of 0 to 200 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 20 to 24 inches, with a mean annual air temperature of 55°F and a frost-free period of 330 to 365 days. The typical profile of this soil in north coastal San Luis Obispo County includes sandy loam from 0 to 60 inches. The depth to a restrictive feature is more than 80 inches, the depth to the water table is more than 80 inches, and the available water capacity is moderate at approximately 6.8 inches. This soil type is classified as prime farmland if irrigated.



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RBF CONSULTING A Baker Company

0 400 800 1,600 Feet

Source: NRCS Soils ca-664, CDM Smith, ESRI World Imagery Basemap

CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Soils Map

Exhibit 4

Concepcion Loam, 5 to 9% (121)

This soil type is moderately well-drained and is developed in alluvium derived from sedimentary rock. In north coastal San Luis Obispo County it is found on terraces at an elevation of 10 to 800 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 17 to 24 inches, with a mean annual air temperature of 57°F and a frost-free period of 300 to 330 days. The typical profile of this soil in north coastal San Luis Obispo County includes loam from 0 to 19 inches, clay from 19 to 47 inches, and sandy clay loam from 47 to 63 inches. The depth to a restrictive feature is 10 to 21 inches to an abrupt textural change, the depth to the water table is more than 80 inches, and the available water capacity is low at approximately 3.2 inches. This soil type is classified as farmland of statewide importance.

Lodo Clay Loam, 5 to 15% (147)

This soil type is somewhat excessively-drained and is developed in residuum weathered from sandstone and shale. In north coastal San Luis Obispo County it is found on hills and mountains at an elevation of 300 to 3,000 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 15 to 35 inches, with a mean annual air temperature of 59°F and a frost-free period of 250 to 365 days. The typical profile of this soil in north coastal San Luis Obispo County includes clay loam from 0 to 12 inches and unweathered bedrock from 12 to 22 inches. The depth to a restrictive feature is 4 to 20 inches to lithic bedrock, the depth to the water table is more than 80 inches, and the available water capacity is very low at approximately 1.9 inches. This soil type is not classified as prime farmland.

Los Osos Loam, 5 to 9% (158)

This soil type is well-drained and is developed in residuum weathered from sandstone and shale. In north coastal San Luis Obispo County it is found on hills and ridges at an elevation of 100 to 2,000 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 15 to 25 inches, with a mean annual air temperature range of 55 to 59°F and a frost-free period of 275 to 350 days. The typical profile of this soil in north coastal San Luis Obispo County includes loam from 0 to 14 inches; clay from 14 to 32 inches; sandy loam, loam, and clay loam from 32 to 39 inches; and weathered bedrock from 39 to 59 inches. The depth to a restrictive feature is 20 to 40 inches to paralithic bedrock, the depth to the water table is more than 80 inches, and the available water capacity is moderate at approximately 7.3 inches. This soil type is classified as farmland of statewide importance.

Los Osos Loam, 30 to 50% (161)

This soil type is well-drained and is developed in residuum weathered from sandstone and shale. In north coastal San Luis Obispo County it is found on hills and ridges at an elevation of 100 to 3,000 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 15 to 35 inches, with a mean annual air temperature range of 55 to

59°F and a frost-free period of 275 to 350 days. The typical profile of this soil in north coastal San Luis Obispo County includes loam from 0 to 14 inches, clay from 14 to 32 inches, sandy loam from 32 to 39 inches; and weathered bedrock from 39 to 59 inches. The depth to a restrictive feature is 20 to 40 inches to paralithic bedrock, the depth to the water table is more than 80 inches, and the available water capacity is low at approximately 5.6 inches. This soil type is not classified as prime farmland.

Los Osos-Diablo Complex, 15 to 30% (164)

This soil type is well-drained and is developed in residuum weathered from sandstone and shale. In north coastal San Luis Obispo County it is found on hills and mountains at an elevation of 200 to 3,000 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 15 to 28 inches, with a mean annual air temperature of 59°F and a frost-free period of 275 to 350 days. The typical profile of this soil in north coastal San Luis Obispo County includes loam from 0 to 14 inches, clay from 14 to 32 inches, sandy loam from 32 to 39 inches; and weathered bedrock from 39 to 59 inches. The depth to a restrictive feature is 20 to 40 inches to paralithic bedrock, the depth to the water table is more than 80 inches, and the available water capacity is low at approximately 5.6 inches. This soil type is not classified as prime farmland.

Marimel Sandy Clay Loam, Occasionally Flooded (169)

This soil type is somewhat poorly-drained and is developed in alluvium derived from sedimentary rock. In north coastal San Luis Obispo County it is found in valleys, alluvial fans, and floodplains at an elevation of 0 to 400 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 15 to 20 inches, with a mean annual air temperature range of 55 to 59°F and a frost-free period of 300 to 365 days. The typical profile of this soil in north coastal San Luis Obispo County includes sandy clay loam from 0 to 16 inches and stratified loam to clay loam to silty clay loam from 16 to 60 inches. The depth to a restrictive feature is more than 80 inches, the depth to the water table is about 24 to 60 inches, and the available water capacity is high at approximately 10.2 inches. This soil type is classified as prime farmland if irrigated and drained.

Riverwash (194)

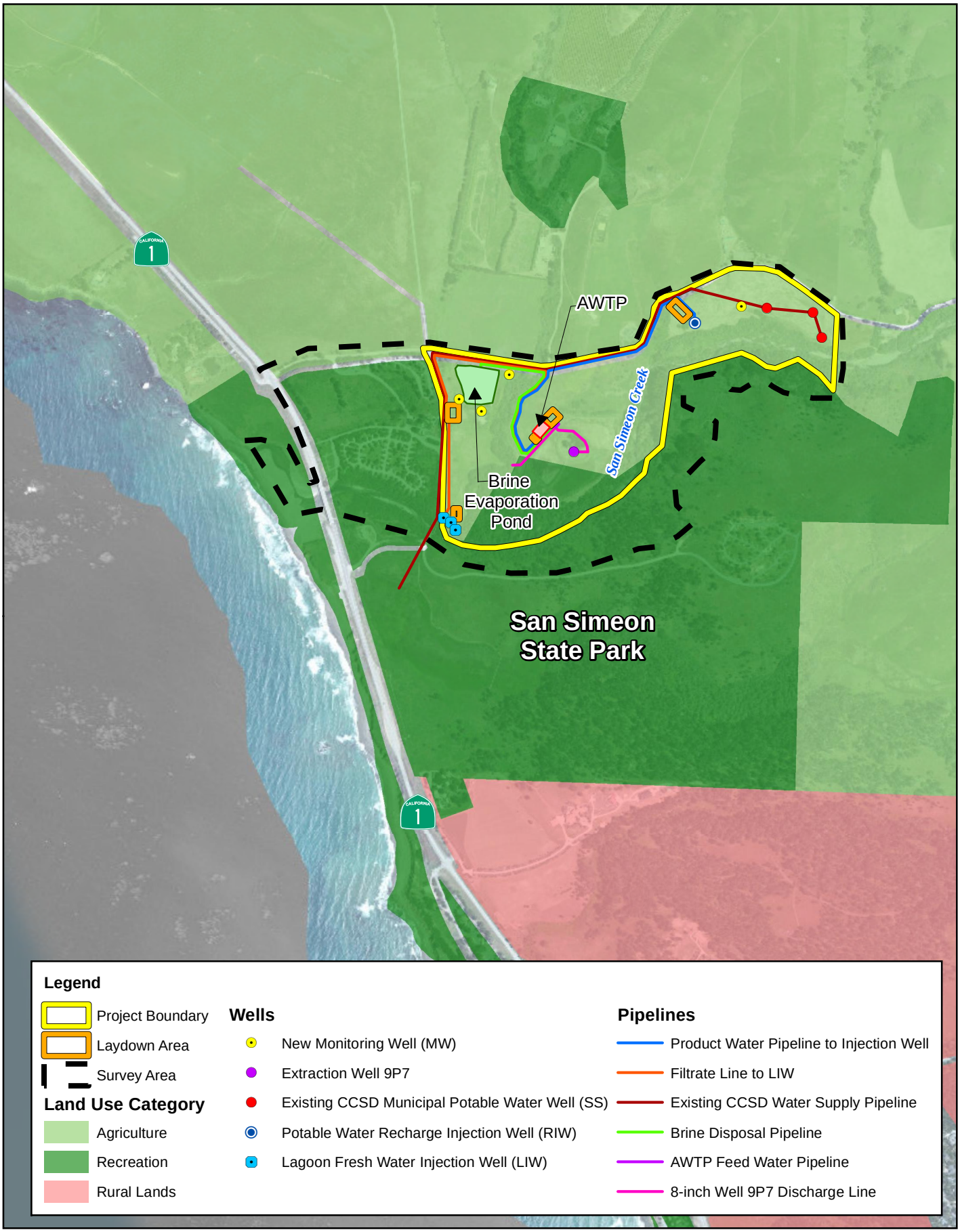
This soil type is excessively-drained. In north coastal San Luis Obispo County it is found in channels. The typical profile of this soil in north coastal San Luis Obispo County includes sand from 0 to 6 inches and stratified coarse sand to sandy loam from 6 to 60 inches. The depth to the water table is 0 to 24 inches, and the available water capacity is very low at approximately 2.9 inches. This soil type is not classified as prime farmland.

Salinas Silty Clay Loam, 0 to 2% (197)

This soil type is well-drained and is developed in alluvium derived from sedimentary rock. In north coastal San Luis Obispo County it is found on alluvial flats and alluvial fans at an elevation of 0 to 40 feet. The mean annual precipitation for where this soil type occurs in north coastal San Luis Obispo County is 14 to 22 inches, with a mean annual air temperature of 57°F and a frost-free period of 275 to 365 days. The typical profile of this soil in north coastal San Luis Obispo County includes silty clay loam from 0 to 29 inches and stratified loam to silty clay loam from 29 to 72 inches. The depth to a restrictive feature is more than 80 inches, the depth to the water table is more than 80 inches, and the available water capacity is high at approximately 10.5 inches. This soil type is classified as prime farmland if irrigated.

4.3 SURROUNDING LAND USES

The Project site is zoned Agriculture (Exhibit 5, *Surrounding Land Uses*). The western side of the Project site is located adjacent to Hearst San Simeon State Park, which encompasses the land both to the west and south. San Simeon Creek Campground is located directly across Van Gordon Creek Road to the west, while Washburn Campground is located across San Simeon Creek to the south. The lands to the north and east of the Project site are primarily open space and agricultural developments.



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CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Surrounding Land Uses

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0 0.125 0.25 0.5 Miles

Source: County of San Luis Obispo, CDM Smith, ESRI World Topographic Map

Exhibit 5

Section 5 Discussion

5.1 SITE CONDITIONS

The direct Project site is primarily undeveloped, although heavily disturbed. It consists mostly of open fields, with some paved roads and building development along Van Gordon Creek Road. The Project site is directly adjacent to Hearst San Simeon State Park, located to the west between San Simeon Monterey Creek Road and San Simeon Creek and to the south on the other side of San Simeon Creek. Areas to the north of the Project site on the other side of San Simeon Monterey Creek Road are also primarily undeveloped and consist mostly of agricultural fields.

5.2 VEGETATION

Six plant communities were observed within the boundaries of the Project site during the habitat assessment (Exhibit 6, *Vegetation Map*): Central Coast Arroyo Willow Riparian Forest, Monterey Pine Stand, Annual Grassland, Ruderal, Disturbed, and Developed. A lagoon and sandbar, located offsite to the west, were also observed. Although offsite, this vegetation is addressed in this assessment since Project implementation could indirectly affect the lagoon. These plant communities are described in further detail below.

5.2.1 Central Coast Arroyo Willow Riparian Forest

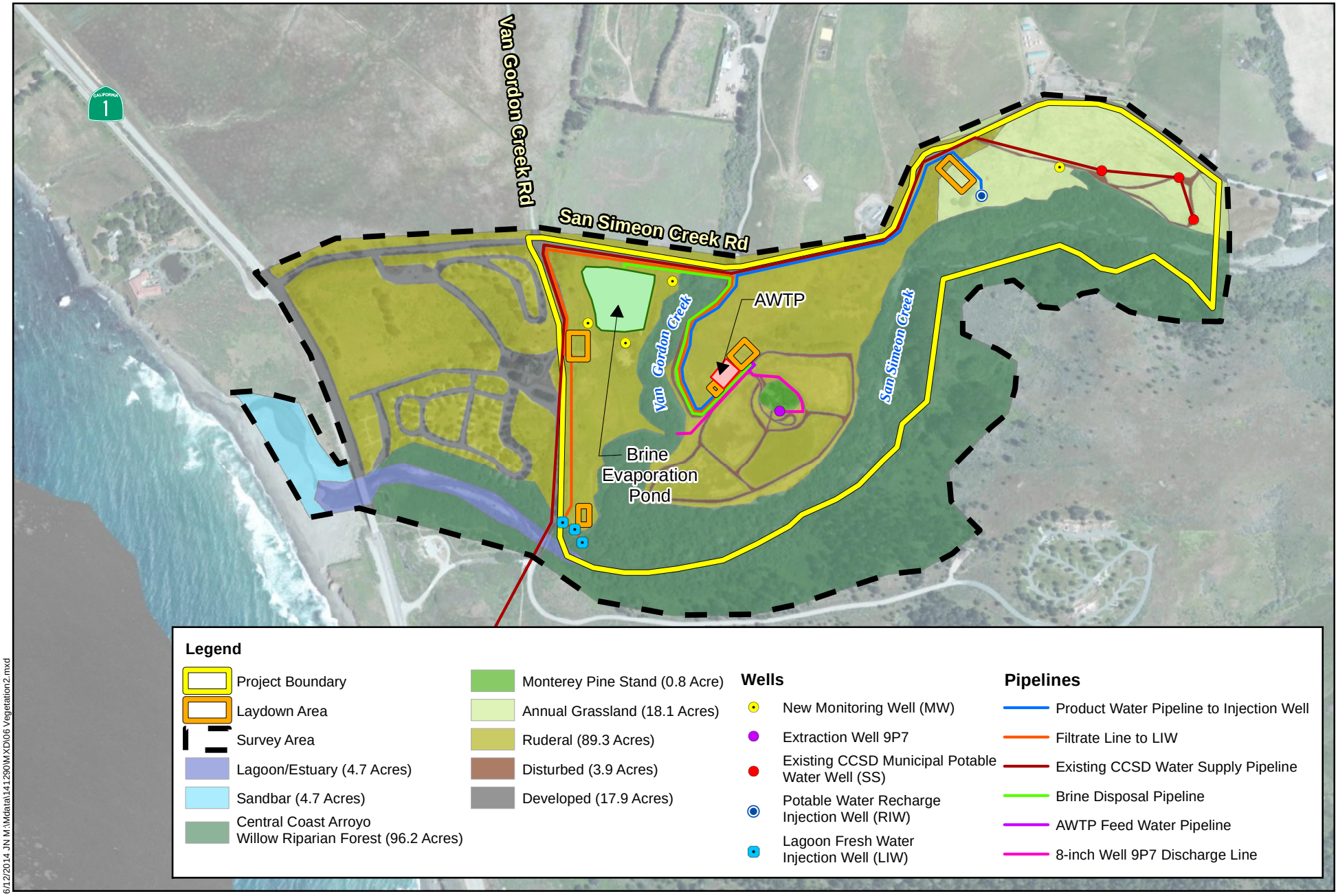
The Central Coast Arroyo Willow Riparian Forest is characterized by a dense, low, closed-canopy forest dominated by arroyo willow (*Salix lasiolepis*). It typically occurs in low gradient stream reaches in areas that are moist to saturated sandy or gravelly soil, especially in areas within the coastal fog incursion zone. Other common species along the edge of San Simeon Creek include western sycamore (*Platanus racemosa*), eucalyptus (*Eucalyptus* sp.), and cape ivy (*Delairea odorata*).

5.2.2 Monterey Pine Stand

There is one small stand of Monterey pine located within the Project site. It is located in the center of the percolation ponds, with Well 9P7 located underneath the trees. The canopy cover in this area is composed entirely of Monterey pines, with the understory composed mostly of ripgut brome (*Bromus diandrus*) and wild oat (*Avena fatua*).

5.2.3 Lagoon/Estuary

San Simeon Creek Lagoon is located at the downstream end of San Simeon Creek. It crosses under SR-1 and spreads onto San Simeon State Beach, providing valuable habitat for steelhead, tidewater goby, and threespine stickleback. At the time of the habitat assessment the



CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Vegetation Map

Exhibit 6

sand bar restricting the water from the shore was closed, resulting in a freshwater lagoon habitat. The sand bar generally opens in late fall and closes again by mid-spring; while the sand bar is open, oceanic salt water combines with the freshwater of San Simeon Creek to create an estuary. The downstream end of the lagoon is not vegetated, but the upstream end contains emergent and riparian vegetation, including cattails (*Typha* sp.) and arroyo willow.

5.2.4 Annual Grassland

An annual grassland is located on the eastern side of the Project site between San Simeon Monterey Creek Road and San Simeon Creek. There are three existing wells located in this area, which is also the area where the RIW is proposed to be located. Some of the more common species in this area include canary grass (*Phalaris aquatica*), wild oat, ripgut brome, coyote bush (*Baccharis pilularis*),

5.2.5 Ruderal

Much of the area surrounding the immediate Project site can be considered ruderal. This includes the percolation ponds, the brine evaporation pond, and the unpaved path from the northeastern corner of the site to the site of the LIW. Some of the more common species present within these areas include ripgut brome, black mustard (*Brassica nigra*) and shortpod mustard (*Hirschfeldia incana*), giant horse tail (*Equisetum telmateia* ssp. *braunii*), fennel (*Foeniculum vulgare*), plantain (*Plantago* sp.), coyote bush, Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), and canary grass.

5.2.6 Disturbed

Disturbed areas within the survey area can be described as unpaved dirt roads, particularly those surrounding the percolation ponds and those passing through the eastern well field. These areas are not vegetated.

5.2.7 Developed

Developed areas within the survey area include existing wells and buildings, as well as the main access road to Well 9P7. These areas are not vegetated.

5.3 WILDLIFE

Plant communities provide food sources, along with foraging, nesting and denning sites, cover, and protection from adverse weather or predation. This section provides a discussion of those wildlife species observed, expected or not expected to occur onsite. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the survey was conducted. Wildlife observations were based on calls, songs, scat, tracks, burrows and actual sightings of animals.

5.3.1 Amphibians

Much of the Project site and its immediate surrounding area would constitute suitable habitat for amphibians. However, only one amphibian was detected during surveys, Sierran chorus frog (*Pseudacris sierrae*). Adult frogs were heard calling in San Simeon Creek, and tadpoles of various development stages were observed in several disconnected small pools in the dry portion of the creek. Other common amphibian species that could occur in San Simeon Creek or during heavy rainfall and subsequent ponding of water in the percolation ponds include western toad (*Anaxyrus boreas*), American bullfrog (*Lithobates catesbeianus*), ensatina (*Ensatina eschscholtzii*), and various species of slender salamander (*Batrachoseps* sp.). The Project site and surrounding area have the potential to support multiple special-status amphibians, including foothill yellow-legged frog (*Rana boylii*), California red-legged frog, and Coast Range newt (*Taricha torosa*). The status and habitat requirements for each of these three species are discussed in greater detail in Section 5.7.2.1 below.

5.3.2 Reptiles

The Project site has the potential to support both terrestrial and aquatic reptiles. Two reptile species were observed during the habitat assessment, western fence lizard (*Sceloporus occidentalis*) and coast garter snake (*Thamnophis elegans terrestris*). The immediate Project site is primarily composed of disturbed, altered areas that are presently overgrown with vegetation. Two creeks, Van Gordon Creek and San Simeon Creek, traverse portions of the Project site. The general Project vicinity has the potential to support a number of reptilian species including gopher snakes (*Pituophis catenifer*), garter snakes (*Thamnophis* ssp.), California kingsnake *(Lampropeltis getula californiae*), northern Pacific rattlesnake (*Crotalus oreganus oreganus*), alligator lizard (*Elgaria multicarinata*), and side-blotched lizard (*Uta stansburiana*). The Project site and surrounding area have the potential to support multiple special-status reptiles, including western pond turtle and two-striped garter snake (*Thamnophis hammondii*). The status and habitat requirements for each of these two species are discussed in greater detail in Section 5.7.2.1 below.

5.3.3 Avian

The Project site and adjacent area support a high variety of avian species. Because of the high number of species observed, only the most numerous are mentioned here. Those that were observed in the greatest quantities included turkey vulture (*Cathartes aura*), California gull (*Larus californicus*), Pacific-slope flycatcher (*Empidonax difficilis*), bushtit (*Psaltriparus minimus*), cedar waxwing (*Bombycilla cedrorum*), song sparrow (*Melospiza melodia*), red-winged blackbird (*Agelaius phoeniceus*), and house finch (*Haemorhous mexicanus*). The Project site and surrounding area have the potential to support special-status raptors such as ferruginous hawk (*Buteo regalis*) and prairie falcon (*Falco mexicanus*). The status and habitat

requirements for each of these two species are discussed in greater detail in Section 5.7.2.2 below.

5.3.4 Mammals

The plant communities within the Project site are anticipated to provide suitable habitat for a number of mammalian species acclimated to heavy disturbance. However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. No mammals were directly observed during the habitat assessment, though coyote (*Canis latrans*) and other large mammal scat was observed throughout the survey area, and a woodrat (*Neotoma* sp.) midden was observed on the border of San Simeon Creek. Common mammalian species expected to occur on the Project site include California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), California vole (*Microtis californicus*), deer mouse (*Peromyscus maniculatus*), western skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), cottontail rabbits (*Sylvilagus audubonii*), and opossum (*Didelphis virginiana*). The Project site and surrounding area have the potential to support special-status mammals, including fringed myotis (*Myotis thysanodes*) and Yuma myotis (*Myotis yumanensis*). The status and habitat requirements for each of these two species are discussed in greater detail in Section 5.7.2.3 below.

5.3.5 Fish

When wetted, San Simeon Creek, Van Gordon Creek, the San Simeon Creek Lagoon, and their tributaries would provide suitable habitat for fish. Threespine stickleback (*Gasterosteus aculeatus*) and the federally endangered tidewater goby (*Eucyclogobius newberryi*) were observed during the habitat assessment in San Simeon Creek and San Simeon Creek Lagoon. In addition to tidewater goby, the aforementioned waterways have the potential to support another special-status fish species, steelhead trout. The status and habitat requirements for both of these species are discussed in greater detail in Section 5.7.2.4 below.

5.4 NESTING BIRDS

The plant communities within and adjacent to the Project site, have the potential to provide suitable nesting opportunities for raptors and passerines. The habitat assessment was conducted during the breeding season, and one likely red-tailed hawk (*Buteo jamaicensis*) nest was observed. A pair of red-tailed hawks was observed for a long period circling and flying in the vicinity of a large nest in a tall pine tree on the edge of San Simeon Creek, but neither bird was observed entering or leaving the nest.

5.5 MIGRATORY CORRIDORS AND LINKAGES

The eastern portion of the Project site abuts the foothills of the Santa Lucia Mountains. This mountain range provides a natural corridor to the north and south along the Coast Ranges. However, while the Project vicinity is considered to be a north-south migratory linkage along the mountains, no formal east-west linkage has been recognized along San Simeon Creek or the other waterways by connectivity assessments such as Missing Linkages (Penrod et al. 2001) or the California Essential Habitat Connectivity Project (Spencer et al. 2010). Regardless, San Simeon Creek and the other waterways are likely to provide valuable migration habitat for birds and fish. San Simeon Creek is recognized by the California Coastal Commission and by CDFW as an essential creek for steelhead migration, and the lagoon that forms at the mouth of San Simeon Creek can host both juvenile steelhead and tidewater goby (CCC 1998). While California red-legged frog can migrate or move to upland areas during the nonbreeding season, this is decided by individual frogs and is not necessarily a feature of every frog in a population. Nevertheless, frogs that may be present in San Simeon Creek or other waterways in the Project vicinity may migrate up and down the waterways or leave the water and head to upland grasslands during seasonal migrations.

5.6 JURISDICTIONAL AREAS

A formal jurisdictional delineation has not been conducted for the proposed Project. However, it is expected based on RBF's 2014 habitat assessment that both Van Gordon and San Simeon Creeks would qualify as Waters of the U.S. and Waters of the State. The Project components are proposed outside of these jurisdictional areas. The proposed Project is designed to avoid direct impacts to both of these waterways. It is not currently expected that 404, 401, or 1602 permits would be required, but if Project design changes and directly impacts these creeks, any or all of these permits may be required prior to construction.

5.7 SENSITIVE BIOLOGICAL RESOURCES

The CNDDB was queried for reported locations of listed and sensitive plant and wildlife species as well as sensitive natural plant communities in the Cambria, Pebblestone Shut-in, Pico Creek, and San Simeon USGS 7.5-minute quadrangles. A search of published records of these species was conducted within these quadrangles using the CNDDB Rarefind 5 online software. The CNPS Inventory of Rare and Endangered Plants of California supplied information regarding the distribution and habitats of vascular plants in the vicinity of the Project site. The habitat assessment was used to assess the ability of the plant communities found onsite to provide suitable habitat for relevant special-status plant and wildlife species.

The literature search identified 33 sensitive plant species, 16 sensitive wildlife species, and two sensitive habitats as having the potential to occur within the queried quadrangles. Sensitive plant and wildlife species were evaluated for their potential to occur within the Project

boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in Appendix A, Sensitive Habitats and Potentially Occurring Sensitive Plant and Wildlife Species. Appendix A summarizes conclusions from analysis and field surveys regarding the potential occurrence of listed and sensitive plant and wildlife species within the Project site.

Numerous special-status plant and wildlife species are known to occur or have the potential to occur on the Project site or in the general vicinity of the Project site. In particular, the percolation ponds, San Simeon Creek, and the San Simeon Creek Lagoon have the highest potential to support special-status species.

5.7.1 Sensitive Plants

Thirty-three special-status plant species have been recorded in the Cambria, Pebblestone Shut-in, Pico Creek, San Simeon USGS quadrangles. Based on habitat requirements for specific species, availability and quality of habitats needed by sensitive plant species, it was determined that the survey area has a moderate potential to provide suitable habitat for two sensitive plant species, with one additional species that was observed to be present. These species are listed below.

Compact Cobwebby Thistle

Compact cobwebby thistle (*Cirsium occidentale* var. *compactum*) is a perennial herb that flowers between April and June. It is designated by the CNPS with the Rare Plant Rank 1B.2, indicating that is rare, threatened, or endangered in California and elsewhere, and is fairly endangered in California. It is endemic to California and is primarily known from San Luis Obispo County. It occurs in chaparral, grassland, coastal prairies, and coastal scrub on dunes and in clay soils at elevations between 16 and 492 feet.

There is suitable habitat for this species within the Project site's grassland areas. Many of the soils in the Project area also have clay elements necessary to support this species. This species was detected in 1991 on a coastal bluff approximately 0.25 mile north of the western edge of San Simeon Creek Lagoon, and approximately 0.5 mile from the edge of the site. This species is expected to have a moderate potential to occur.

Jones' Layia

Jones' layia (*Layia jonesii*) is an annual herb that flowers between March and May. It is designated by the CNPS with the Rare Plant Rank 1B.2, indicating that is rare, threatened, or endangered in California and elsewhere, and is fairly endangered in California. It is endemic to California and is only known to occur in San Luis Obispo County. It occurs in clay and

serpentine soils in chaparral and valley and foothill grassland at elevations between 16 and 1,312 feet.

Suitable habitat for this species occurs on the eastern side of the Project area in the grassland areas. Many of the soils in the Project area also have clay elements needed to support this species. This species is expected to have a moderate potential to occur.

Monterey Pine

Monterey pine (*Pinus radiata*) is a perennial evergreen tree. It is designated by the CNPS with the Rare Plant Rank 1B.1, indicating that is rare, threatened, or endangered in California and elsewhere, and is seriously endangered in California. It is cultivated throughout the world but only occurs naturally at three locations in California, including one near Cambria. It occurs in closed-cone coniferous forests and cismontane woodlands at elevations between 82 and 607 feet in elevation.

This species was observed onsite during the habitat assessment. It is present in a small stand in the center of the percolation ponds, surrounding Well 9P7.

5.7.2 Sensitive Wildlife

Sixteen special-status wildlife species have been recorded in the Cambria, Pebblestone Shut-in, Pico Creek, San Simeon USGS quadrangles. Based on habitat requirements for specific species, availability and quality of habitats needed by sensitive wildlife species, it was determined that the Project site has a moderate to high potential to provide suitable habitat for 10 sensitive wildlife species. One additional sensitive wildlife species was observed onsite.

5.7.2.1 Amphibian and Reptile Species

Based on the results of the habitat assessment, it was determined that the habitat in and around the Project site has a moderate to high potential to provide suitable habitat for five sensitive amphibian and reptile species listed in the CNDDB as having the potential to occur on or within the general vicinity of the Project site.

Western Pond Turtle

The western pond turtle is designated by the CDFW as a California species of special concern. It typically inhabits slow-moving streams, ponds, and marshes with exposed banks, logs, and other suitable locations for basking. Pond turtles mate and lay eggs in spring and summer in upland grassland habitat, and in most of their range will overwinter between October and April.

Western pond turtle has been previously documented in San Simeon Creek and San Simeon Creek Lagoon, but was not observed during RBF's habitat assessment. Suitable habitat is located within these two areas, particularly in the downstream reaches of San Simeon Creek where the creek substrate gives way from rocks to sandy or muddy bottoms, which are often utilized by pond turtles for hiding during evasive movements. This species has a high potential to occur in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek.

Foothill Yellow-legged Frog

Foothill yellow-legged frog is designated by the CDFW as a California species of special concern. It is primarily found in slow-moving rocky streams with open, sunny banks, though it may also be found in isolated pools and backwaters. Surrounding vegetation may include forests, woodlands, chaparral, and meadow communities. Foothill yellow-legged frogs typically breed between April and July after water levels have stabilized and turbidity has decreased.

There is suitable habitat for this species in the upland portions of San Simeon Creek, where the creek contains a rocky substrate. At the time of the habitat assessment this area was almost completely dry, with only small pools persisting that contained Sierran chorus frog tadpoles. This species has a moderate potential to occur in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek.

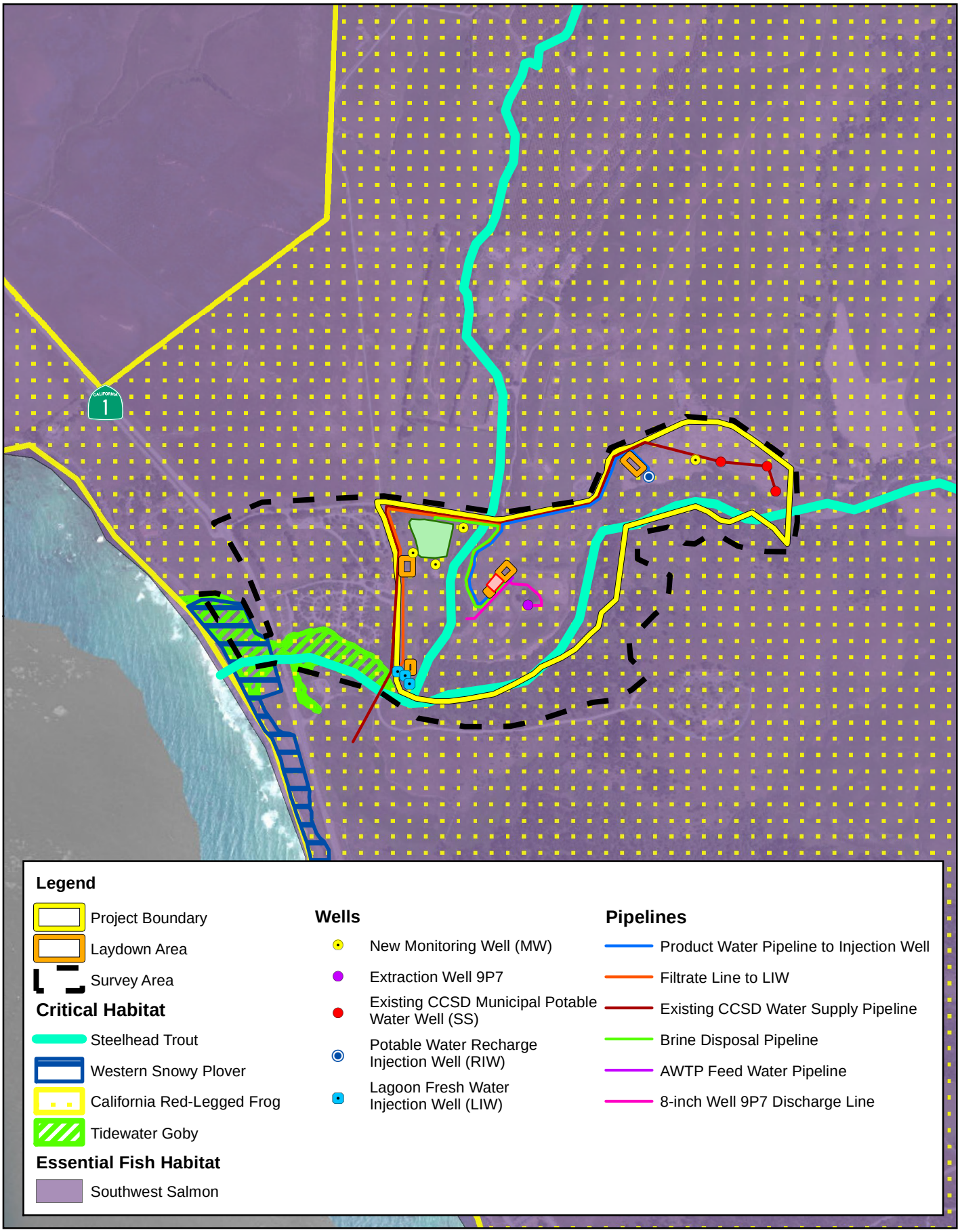
California Red-legged Frog

The CRLF is federally listed as threatened and is designated by the CDFW as a California species of special concern. The CRLF is primarily found near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover and is most common in lowlands or foothills. The CRLF breeds typically breeds in winter and spring between February and April in permanent or ephemeral water sources including lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.

CRLF have been reported in San Simeon Creek and its tributaries but no life forms of this species were recorded during the site assessment. The entire Project site is located within CRLF Critical Habitat Unit SLO-2 (Exhibit 7, *Critical Habitat and Essential Fish Habitat*). Observed wetted habitat within San Simeon Creek during the habitat assessment was highly suitable for this species. This species has a high potential to occur and, in the absence of protocol surveys, should be assumed present in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek.

Coast Range Newt

The coast range newt is designated by the CDFW as a California species of special concern. It is typically found in rivers, streams, lakes, and ponds, particularly those with rocky substrates. It is never far from water. In most areas this species is terrestrial during most of the year, but in



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CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Critical Habitat/Essential Fish Habitat

RBF CONSULTING
A Baker Company

0 0.125 0.25 Miles

Source: USFWS Critical Habitat, NOAA Fisheries, CDM Smith, ESRI World Topographic Map

anticipation of its breeding season (typically December to May) these individuals will migrate back to water and undergo a physiological change into an aquatic form. In areas of permanent water, some individuals may stay in the aquatic phase year-round.

There is suitable habitat for this species in San Simeon Creek, particularly in the upper portions and areas where water may be slow-moving or have distinct and protected pools. This species was not observed during the habitat assessment, but has a moderate potential to occur in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek.

Two-striped Garter Snake

The two-striped garter snake is designated by the CDFW as a California species of special concern. It is primarily an aquatic species and is typically found in or near permanent or semi-permanent water including creeks, pools, stockponds, and other areas. Surrounding vegetation is typically made up of chaparral, forest, woodland, and grassland, and may vary according to the season. This species is primarily active between spring and fall, and in many cases will retreat into a burrow for the winter. Breeding occurs in the spring after the snakes emerge into the active season again.

There is suitable habitat for this species in San Simeon Creek. While it is more likely to be found in the downstream sections where there is more water, it could occur throughout the creek. This species was not observed during the habitat assessment, but has a moderate potential to occur in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek.

5.7.2.2 Avian Species

Based on the results of the habitat assessment, it was determined that the habitat in and around the Project site has a moderate to high potential to provide suitable habitat for two sensitive avian species listed in the CNDDB as having the potential to occur on or within the general vicinity of the Project site.

Ferruginous Hawk

The ferruginous hawk is on the CDFW watch list of sensitive species. This species frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. It nests in foothills or prairies; on low cliffs, buttes, cut banks, shrubs, trees, or in other elevated structures, natural or human-made. This species requires large, open tracts of grasslands, sparse shrub, or desert habitats. Ferruginous hawk could roost or forage within the general Project vicinity, though it is only present in this area during the fall and winter. This species has a moderate potential to occur.

Prairie Falcon

The prairie falcon is on the CDFW watch list of sensitive species. This species is relatively uncommon and is most often found in dry, open habitats including deserts, shrublands, agricultural areas, and especially grasslands. While it will forage in these areas, it nests on cliff ledges. Along the immediate South/Central Coast such as where the proposed Project is located, this species is only present as a wintering bird, but just inland it is a year-round resident.

This species could forage in the Project vicinity, especially in adjacent agricultural and open fields. It may also perch and roost on transmission structures and tall trees in the area. This species has a moderate potential to occur.

5.7.2.3 Mammalian Species

Based on the results of the habitat assessment, it was determined that the habitat on the Project site has a moderate to high potential to provide suitable habitat for two sensitive mammal species listed in the CNDDB as having the potential to occur on or within the general vicinity of the Project site.

Fringed myotis

Fringed myotis occurs in a wide variety of habitats but is most often found in pinyon-juniper, valley foothill hardwood, and hardwood-coniferous habitats, generally between 4,265 and 7,218 feet in elevation. However, it can also be found down to sea level, and in 2000 multiple individuals of this species were trapped close to shore, including one only 0.25 mile from the San Simeon Creek Lagoon. This species roosts in caves, mines, buildings, and crevices, and may roost in separate areas during the day from at night. Maternity colonies are located in the same types of roosting habitat between late April and September and may contain up to 200 individuals. This species typically hibernates between October and March, and maternity colonies may hibernate together as well.

There is suitable foraging habitat within the Project site and the surrounding vicinity. It is unknown if suitable roosting habitat is present, but none was observed during the habitat assessment. This species is nocturnal and was not observed during the habitat assessment, but is expected to have a moderate potential to occur.

Yuma myotis

Yuma myotis occurs in a wide variety of habitats but is most often found in open forests and woodlands near water for foraging, generally at elevations between sea level and 10,827 feet. In 2000 three Yuma myotis were trapped close to shore only 0.25 mile from the San Simeon Creek Lagoon. This species roosts in caves, mines, buildings, and crevices, and may also use

abandoned swallow nests and bridges as roosts. It may roost in separate areas during the day from at night, with night roosts generally being more open. Maternity colonies are located in the same types of roosting habitat and may contain thousands of individuals, though if temperatures exceed 40°C the individuals tend to roost elsewhere where it will be cooler and situate themselves farther apart from each other. This species probably hibernates, though not much information is available on its habits.

There is suitable foraging habitat within the Project site and the surrounding vicinity. It is unknown if suitable roosting habitat is present, but none was observed during the habitat assessment. This species is nocturnal and was not observed during the habitat assessment, but is expected to have a moderate potential to occur.

5.7.2.4 Fish Species

Tidewater Goby

The tidewater goby is federally listed as endangered and is designated by the CDFW as a California species of special concern. It occurs primarily in coastal lagoons and estuaries and has only been captured in marine environments in very few instances. In their habitat, tidewater gobies are generally present in the upper estuary where the freshwater and saltwater mix, and will range upstream into pure freshwater and downstream into areas of majority salt water (up to about 75%). Though they can be present in water where salinity ranges up to 28 parts per thousand, they are predominantly found in areas where salinity is less than 12 parts per thousand, i.e. on the upper edges of tidal bays and in coastal lagoons. Tidewater gobies reproduce throughout the year but peak reproduction occurs in spring and late summer.

There is occupied habitat for this species downstream of the Project site in San Simeon Creek Lagoon. This species was observed in the San Simeon Creek Lagoon, which is also tidewater goby designated Critical Habitat Unit SLO-5 (Refer to Exhibit 7), during the habitat assessment.

Steelhead (South/Central California Coast DPS)

Steelhead is federally listed as threatened and is designated by the CDFW as a California species of special concern. The population in the Project vicinity ranges from Santa Cruz County south to, but not including, the Santa Maria River. Typical freshwater steelhead habitat consists of gravel-bottomed, fast-flowing, well-oxygenated rivers and streams. Dissolved oxygen levels should be at least seven parts per million, and streams should have deep, low-velocity pools for wintering. Juveniles will typically spend between one and three years maturing in a freshwater or estuarine environment before migrating out to sea. After a typical span of one to four years of maturation in the ocean, the fish will return to their natal waters to spawn again.

There is suitable habitat for this species in San Simeon Creek. This species has been historically recorded over many years to occur within the creek, both in the creek and downstream in the lagoon. San Simeon Creek and Van Gordon Creek are part of the steelhead designated Critical Habitat unit that is located within the Estero Bay Hydrologic Unit (Refer to Exhibit 7). While not observed during the habitat assessment, this species is expected to have a high potential for occurrence and should be assumed to be present in these two water bodies in the absence of any formal surveys.

5.7.3 Sensitive Habitats

The CNDDB lists two sensitive habitats, Monterey Pine Forest and Valley Oak Woodland, as having the potential to occur within the Cambria, Pebblestone Shut-in, Pico Creek, San Simeon USGS quadrangles. An existing water well in the center of the percolation ponds is in a small stand of Monterey pines. However, based on the small size of this stand it is unlikely to be considered an actual “forest” community, but rather an isolated stand. There are scattered Monterey pines present on the hillsides south of San Simeon Creek.

5.7.4 Critical Habitat

As discussed in Section 2, Critical Habitat is designated under the authority of the ESA. However, consultation for impacts to Critical Habitat is only required when a project is issued federal permits (e.g. a U.S. Army Corps of Engineers Section 404 Clean Water Act permit). If a project does not have a federal nexus, Critical Habitat consultations are not required.

Designated Critical Habitat for four species is located in and around the Project site (Refer to Exhibit 7). CRLF Critical Habitat Unit SLO-2 encompasses the entire Project site. This area includes aquatic habitat that is suitable for both breeding (PCE 1) and non-breeding (PCE 2) habitat, as well as upland habitat that could be used for foraging (PCE 3) and dispersal (PCE 4). This area could be indirectly affected by Project implementation and a reduction in the groundwater that is currently feeding San Simeon Creek.

Tidewater goby Critical Habitat Unit SLO-5 includes San Simeon Creek Lagoon and the downstream reach of an eastern tributary immediately north of SR-1. This area includes a persistent, shallow lagoon containing soft substrate suitable for the construction of burrows for reproduction (PCE 1a) and with submerged and emergent aquatic vegetation that provides protection from predators and high flow events (PCE 1b). This area could be indirectly affected by Project implementation and a reduction in the amount of freshwater entering San Simeon Creek Lagoon.

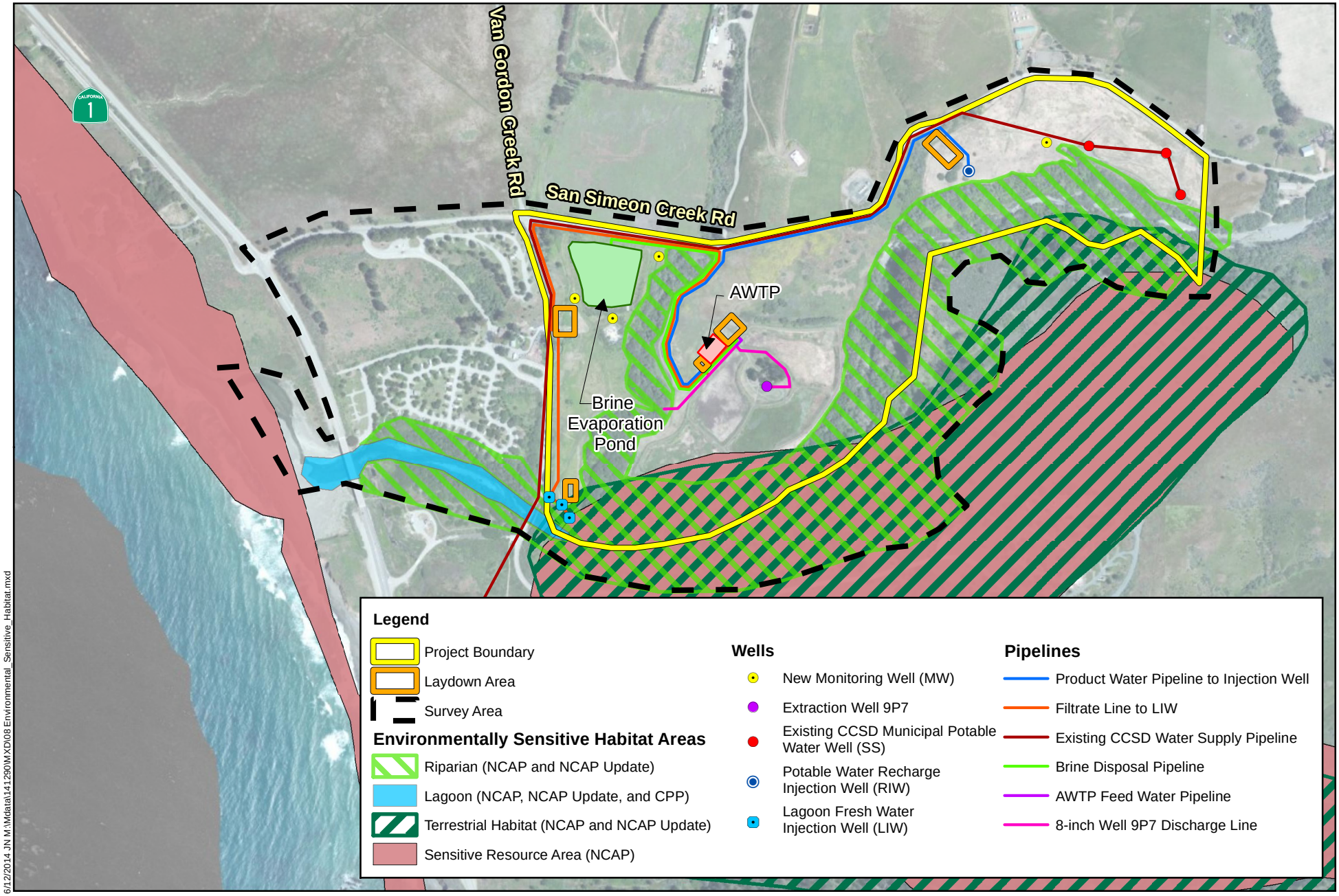
South-central California Coast steelhead Critical Habitat is located within the Estero Bay Hydrologic Unit and includes an approximately 5.5-mile stretch of San Simeon Creek beginning

downstream of the North Fork/South Fork San Simeon Creek convergence and ending at the ocean. This area could be indirectly affected by Project implementation and a reduction in both the groundwater that is currently feeding San Simeon Creek and the amount of freshwater entering San Simeon Creek Lagoon.

Snowy plover Critical Habitat Unit CA-26 is located along San Simeon State Beach and encompasses most of San Simeon Creek Lagoon downstream (west) of SR-1. This area includes sandy beach above and below the high-tide line (PCE 1) with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain (PCEs 2 and 3). It is an important wintering area where up to 143 snowy plovers have been recorded in a single season (at the time of the Critical Habitat designation in 2012). This area includes a portion of the San Simeon Creek Lagoon, which is likely to be affected by Project implementation; however, the occupied habitat of this species is unlikely to be adversely affected as it is a terrestrial bird.

5.7.5 Essential Fish Habitat

As discussed in Section 2, EFH is designated under the MSA. The proposed Project is located within designated EFH for Coho salmon (Exhibit 7, *Critical Habitat/Essential Fish Habitat*). EFH for various species of groundfish is designated near the proposed Project but ends at the shoreline. Under the provisions of MSA Section 305(b), if the Project has a federal nexus and will be issued a federal permit, the federal agency will be required to consult with NMFS for impacts to EFH. If no federal agency is involved, this consultation will not be necessary.



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RBF CONSULTING A Baker Company

0 400 800 1,600 Feet

Source: CDM Smith, ESRI World Imagery Basemap

CAMBRIA EMERGENCY WATER SUPPLY PROJECT
HABITAT ASSESSMENT

Environmentally Sensitive Areas

SECTION 6: SEE SECTIONS 8.7.1 AND 8.7.2

SECTION 7: SEE SECTIONS 8.7.1 AND 8.7.2

Section 8 Discussion of Impacts and Mitigation

The discussion below provides a summary of survey results; avoidance and minimization efforts; direct, indirect, and cumulative Project impacts; and compensatory mitigation measures for each biological resource area required to be analyzed according to the California Environmental Quality Act (CEQA), based on Appendix G (Environmental Checklist Form) of the CEQA Guidelines.

***CEQA Threshold**: Would the proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

Species determined to have the potential to occur within the general vicinity are presented in Appendix A, Sensitive Habitats and Potentially Occurring Sensitive Plant and Wildlife Species.

8.1 LISTED PLANT SPECIES

No federally or State listed plant species occur or have the potential to occur on the Project site or within the riparian habitat associated with San Simeon and Van Gordon Creeks.

8.2 SPECIAL-STATUS PLANT SPECIES

Survey Results

Three special-status plant species were identified during a CNDDB and CNPS search as potentially occurring in the area: compact cobwebby thistle, Jones' layia, and Monterey pine. Compact cobwebby thistle was identified during surveys in 1991 approximately 0.5 mile northwest of the Project site, and Monterey pine was observed onsite during RBF's 2014 habitat assessment. Jones' layia has not been recorded onsite but has a low to moderate potential to occur based on availability of suitable habitat.

Avoidance and Minimization Measures

Compact cobwebby thistle and Jones' layia, while not identified during RBF's habitat assessment, can be found in grasslands and scrub habitats on the eastern side of the Project site. This area will have minimal development, with only the installation of the RIW occurring . A Monterey pine stand is present in the center of the percolation ponds, near Well 9P7.. The pipeline from Well 9P7 to the AWTP would be sited to avoid this stand of pine trees.

Direct and Indirect Project Impacts

Direct or indirect impacts could occur to special-status plant species as a result of Project implementation. Excavation and fill for wells and pipelines could result in the loss of sensitive plant species. Construction activity could result **in th**e spread of nonnative weed seeds via clothing, tires, or vehicle undercarriages. In addition, vehicle travel and pedestrian foot traffic within the project boundaries could result in the trampling of plant species.

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: All work areas shall be visibly flagged or staked prior to construction. Construction activities shall be limited to these approved work areas except with prior authorization from regulatory agencies.

BIO-2: A Worker Environmental Awareness Program (WEAP) shall be implemented to educate all construction personnel of the area's environmental concerns and conditions and relevant environmental protection measures. The WEAP will include environmental concerns and appropriate work practices, including spill prevention, emergency response measures, protection of sensitive resources, and proper implementation of BMPs, to all construction and maintenance personnel. All new workers that arrive after construction has started shall be trained under the WEAP within two days' time.

BIO-3: A qualified biologist or botanist shall conduct a preconstruction clearance survey for special-status plant species within the Project site. If present, any special-status plants shall be clearly flagged for avoidance with a suitable buffer zone during construction. If avoidance is not possible, the Project applicant will discuss potential relocation strategies with applicable regulatory agencies.

BIO-4: Prior to construction, all heavy equipment that will be left onsite in laydown yards shall be washed offsite and cleaned of all potential non-native weed seeds. Worker trucks shall be washed daily if they will be driven offroad or shall otherwise be left parked in laydown yards or on existing roads during construction.

BIO-5: All excavated material shall be removed from the Project site and disposed of properly or reused elsewhere. If left onsite, the material shall be moved into an area where it will not wash or erode into any riparian areas and shall be suitably covered or watered to reduce the potential for dust during high winds or rain events.

8.3 LISTED WILDLIFE SPECIES

8.3.1 Tidewater Goby

Survey Results

Tidewater goby was observed in San Simeon Creek Lagoon during RBF's habitat assessment. It is historically known to be present and to spawn within San Simeon Creek Lagoon; San Simeon Creek Lagoon has also been designated as tidewater goby Critical Habitat Unit SLO-5.

Avoidance and Minimization Efforts

This species occurs in San Simeon Creek Lagoon but is unlikely to occur within either San Simeon Creek or Van Gordon Creek, where riffles and even minor turbulence are deterrents. The lagoon will not be directly affected by construction and is located mostly offsite. Only a small section of the lagoon, approximately the uppermost 230 feet, is located within the Project site. BMPs would be designed to avoid or reduce any sedimentation within the water bodies.

Direct and Indirect Project Impacts

While direct impacts to special-status wildlife species are expected to be negligible during construction, indirect operational impacts may occur as the result of pumping 400 gpm of groundwater upstream of San Simeon lagoon and only returning 100 gpm to the San Simeon Creek aquifer adjacent to the lagoon. If the Project, as proposed, results in a water budget deficit, it could result in quicker reduction in stream levels during dry periods. While a perennial section of San Simeon Creek is known to be present upstream of the confluence with Steiner Creek, the lower reaches are intermittent and are generally only inundated from late fall to late spring or early summer. Early reduction in water levels could result in a premature sandbar closure at San Simeon Creek Lagoon. This could reduce the amount of habitat for tidewater goby found in the lagoon habitat. Unexpected habitat loss may result in decreased food and shelter, resulting in increased competition for resources not just between tidewater gobies, but between gobies and other fish species that may be present in the lagoon.

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-2: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-6: The Project applicant shall develop and implement an adaptive management program (AMP) for post construction operations. This plan shall be incorporated

indefinitely until the Project facilities are no longer in use or until deemed no longer necessary by applicable regulatory agencies. The AMP is intended to monitor and protect the lagoon and riparian habitats adjacent to the Project site and, by extension, protect the species that inhabit it. The primary goal of the AMP would be to monitor the response of the lagoon and riparian habitats to the proposed project and, based on any noted adverse changes in these habitats, to adjust operations so that the amount of treated water that is injected or discharged back into the system,is either increased or decreased to restore affected habitat features. This may require a combination of any of the following:

- Monthly stream surveys during the period that the Project is actively drawing groundwater (currently expected to be May through October). The surveys would document the upstream extent of inundation in each water body, as well as water depth at predetermined locations to measure changes in water levels;
- Surveys for tidewater goby, steelhead, CRLF, western pond turtle, and/or two-striped garter snake to measure population levels over time; and
- Monitoring of riparian vegetation in the water bodies and in their upland extents.

Based on the results of the biological monitoring, the AMP would provide measures that to increase or decrease the amount of water injected or discharged back into San Simeon Creek and Lagoon. It is expected that the minimum amount of water returned at any time would be 100 gpm, but that when necessary based on biological monitoring, the amount of water would increase to 150 gpm of continual water.

8.3.2 Steelhead (South/Central California Coast DPS)

Survey Results

Steelhead trout were not observed during RBF's habitat assessment. This species is known to occur and to spawn in San Simeon Creek, and San Simeon Creek Lagoon is used as habitat for smolts preparing to enter the Pacific Ocean. San Simeon Creek and Van Gordon Creek are part of steelhead designated Critical Habitat in the Estero Bay Hydrologic Unit.

Avoidance and Minimization Efforts

This species occurs in both San Simeon Creek, San Simeon Creek Lagoon, and, if inundated, Van Gordon Creek. These areas would not be directly affected by the proposed Project but a portion of each is located within the Project site. BMPs would be used as necessary to avoid or reduce any sedimentation within the water bodies.

Direct and Indirect Project Impacts

As described in Section 8.1.3.1, direct impacts to aquatic species are expected to be negligible during construction, but indirect operational impacts could occur, particularly if reductions in the water table result in earlier-than-average seasonal drops in creek surface water. Adult steelhead typically migrate from the ocean into coastal streams between December and May, according to weather patterns and stream flow. On the other hand, smolts typically migrate downstream to lagoons and eventually the ocean between March and June, although low stream flows can block smolts from reaching their destinations. Reduced water in the lower reaches of San Simeon Creek could lead to earlier-than-usual sandbar closures in San Simeon Creek Lagoon, affecting the ability of smolts to migrate to the ocean and prematurely altering the lagoon/estuary temporal interchange. This may result in smolts becoming stranded in San Simeon Creek Lagoon and spending an extra year in the lagoon instead of at sea. Stranded smolts would suffer from increased competition in the lagoon habitat, particularly as upstream areas within San Simeon Creek dry up and leave only an isolated portion of the creek and lagoon.

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-2: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-6: Refer to Section 8.3.1 for the full text of this mitigation measure.

BIO-7: The Project applicant shall delay the annual period of groundwater pumping to the greatest extent possible, preferably after June, in order to maximize the amount of time for steelhead to migrate up and down San Simeon Creek.

8.3.3 California Red-legged Frog

Survey Results

No CRLF life stages were detected during RBF's habitat assessment. This species is historically known to occur in San Simeon Creek and in addition the entire Project site is included in CRLF designated Critical Habitat Unit SLO-2.

Avoidance and Minimization Efforts

This species occurs in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek. Some upland habitat present in the percolation ponds may be used by this species. All four

areas are located within the Project site and would be avoided during construction. BMPs would be used as necessary to avoid or reduce any sedimentation within the water bodies.

Direct and Indirect Project Impacts

As described in Section 8.1.3.1, direct impacts to aquatic species are expected to be negligible during construction, but indirect operational impacts could occur, particularly if reductions in the water table result in earlier-than-average seasonal drops in creek surface water. In San Simeon Creek, because CRLF can breed as late as late April, early drops in water levels could possibly affect the ability of CRLF eggs to hatch. CRLF typically attaches its eggs to floating vegetation or vegetation rooted in the creek substrate; drops in the water level could cause egg masses to desiccate. Tadpoles in turn could be lost if the creek dries too quickly, or increased competition for food from fish (such as stranded smolts) could result in tadpoles being subjected to increased predation.

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-2: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-6: Refer to Section 8.3.1 for the full text of this mitigation measure.

BIO-8: Preconstruction diurnal and nocturnal surveys shall be conducted for CRLF in the percolation ponds and surrounding area within 48 hours of the start of construction. Any CRLF detected during surveys shall be relocated to areas outside of the construction zone, i.e. to San Simeon Creek, San Simeon Creek Lagoon, or Van Gordon Creek. Exclusion fencing shall be placed around work areas to avoid or minimize the risk of CRLF migrating into work areas during upland movements. The biologist conducting the surveys and performing any relocations shall hold a valid 10(a)(1)(A) recovery permit and Scientific Collecting Permit allowing take of CRLF.

BIO-9: All Project-related trash, food or otherwise, shall be disposed of after use in appropriate secured containers. These containers shall be emptied offsite regularly.

8.4 SPECIAL-STATUS WILDLIFE SPECIES

Survey results

Only one non-listed special-status wildlife species was observed during RBF's habitat assessment: yellow warbler (*Setophaga petechia*). In addition, based on a CNDDB search, eight additional species were determined to have a moderate or higher potential to occur within the Project site: ferruginous hawk, western pond turtle, prairie falcon, fringed myotis, Yuma myotis, foothill yellow-legged frog, Coast Range newt, and two-striped garter snake. Western pond turtle and two-striped garter snake are historically known to occur in San Simeon Creek.

Avoidance and Minimization Measures

Of the nine non-listed special-status wildlife species that could occur on the Project site, all would most likely occur in areas that are likely to be directly avoided by the Project. Yellow warbler would forage and nest in the summer in riparian trees; which are expected to be avoided except for possible light trimming. Ferruginous hawk and prairie falcon would be most likely to occur in the winter around grassy fields such as that on the east side of the Project site or in surrounding agricultural fields; grassy fields will be minimally affected and by constructing the Project in the summer, the applicant will avoid direct construction effects to these two species. Fringed myotis and Yuma myotis are most likely to roost in trees during the day and forage over the water or over fields at night; by constructing during the day, foraging would be unlikely to be affected, and by mostly avoiding arboreal habitat, roosting habitat would be mostly unaffected. Finally, western pond turtle, foothill yellow-legged frog, Coast Range newt, and two-striped garter snake would be most likely to occur in San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek, or in the generally immediate upland areas. These areas would be avoided by Project construction. If the Project is constructed in the summer, these species would be expected to be mostly tied to the water as well.

Direct and Indirect Impacts

Direct impacts to any of these species are expected to be minimal. Construction near to trees may result in disturbance to nesting birds or roosting bats, potentially resulting in increased stress or nest failure. In extreme situations, excessive disturbance may cause individual animals to leave the area, temporarily or permanently; For aquatic species, changes in seasonal water levels can result in habitat degradation and premature life events (e.g., upland breeding, overwintering, migrations).

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-2: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-10: No more than one week prior to construction, a qualified biologist shall conduct a preconstruction nesting bird clearance survey in all work areas and all areas within 500 feet of the general construction zone. Active nests shall be given an avoidance buffer, typically 300 feet for non-listed, non-raptor species, and 500 feet for listed or raptor species. This buffer shall remain in place until the young fledge or the nest otherwise becomes inactive, and may be reduced with approval from CDFW and/or USFWS.

BIO-11: If deemed necessary by the CDFW, a preconstruction roosting bat survey shall be conducted within one week prior to construction. Any bat roosts found in the Project vicinity shall be protected with coordination from CDFW.

BIO-12: All construction shall occur between dawn and dusk.

BIO-13: In areas adjacent to riparian habitat, construction noise shall be minimized to the amount necessary to avoid or reduce the risk of adverse impacts to wildlife.

BIO-14: In areas within 100 feet of riparian habitat, BMPs shall be implemented. These should include, but are not limited to, sedimentation control, erosion control, spill prevention and cleanup, and hazardous materials.

CEQA Threshold: *Would the proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

CEQA Threshold: *Would the proposed Project 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?*

8.5 RIPARIAN HABITAT AND WETLANDS

Survey Results

The Project site contains two intermittent creeks (San Simeon Creek and Van Gordon Creek) and one wetland (San Simeon Creek Lagoon). San Simeon Creek runs along the southern boundary of the Project site, whereas Van Gordon Creek is situated along the site's western boundary. San Simeon Creek Lagoon begins in San Simeon Creek approximately 230 feet upstream of Van Gordon Creek Road and extends west to San Simeon State Beach, where it seasonally switches between a lagoon and an estuary. Vegetation within these water bodies is

dominated by a Central Coast Arroyo Willow Riparian Forest community as described in Section 5.2.1. A jurisdictional delineation has not yet been conducted to determine specific acreages of potentially jurisdictional areas.

Avoidance and Minimization Efforts

No construction is currently anticipated to occur within the streambeds, lagoon, or within the terrestrial extent of the riparian vegetation. Nearby construction would be shielded from riparian vegetation through the implementation of BMPs.

Direct and Indirect Project Impacts

Few if any direct impacts to riparian habitat are expected to occur. Minor tree trimming may be necessary for areas where the Project is sited close to vegetation. However, potentially significant indirect impacts could occur as a result of Project implementation and groundwater loss. These are discussed partially in Sections 8.3 – 8.6 in regards to effects on wildlife and effects on movement corridors. In addition to these potential effects, implementation and operation of the Project may result in degradation of riparian habitat. Drawdown of the water table could have adverse effects on riparian vegetation, eventually resulting in loss or conversion of vegetation. If this is a seasonal drawdown, it may only result in seasonal impacts, e.g. temporary browning or loss of vitality of vegetation. However, if Project operation results in permanent, gradual, and cumulatively reduced groundwater levels, riparian vegetation may suffer permanent effects.

If the depth of the water table has any direct correlation to the amount and longevity of surface water, reductions in surface water may lead to reduced growth rates and plant mortality, eventually leading to reduced plant cover and reduced plant species diversity as a result of prolonged low flows (Nilsson and Svedmark 2002). This is because during the dry season, the increased ambient temperatures cause increased transpiration in plants, resulting in increased water loss from leaves. Water replenishment is less crucial during the wet season, as temperatures are cooler, transpiration rates are lower, and rainfall adds to the water that is already present in streambeds. In the dry season, however, plants can become stressed more easily during low water conditions. While phreatophytic—vegetation that draws water from both above and below the surface—and more drought-tolerant vegetation like Fremont's cottonwood (*Populus fremontii*), willows (*Salix* sp.), and mulefat (*Baccharis salicifolia*) may persist longer under dryer conditions, shallow-rooted and streamside vegetation would be expected to be more susceptible to general reductions in water levels (Stromberg et al. 2007). Additionally, nutrient-cycling organic litter decomposition that is normally aided by downstream water movement may be reduced by low surface flows (Nilsson and Svedmark 2002).

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-6: Refer to Section 8.3.1 for the full text of this mitigation measure.

BIO-14: Refer to Section 8.4 for the full text of this mitigation measure.

BIO-15: The Project Applicant shall consult with the Corps, CDFW, and Regional Board regarding potential impacts and required mitigation once the final Project design is available. If impacts are anticipated to occur to instream and riparian habitats, wetland permits may be required from these agencies.

CEQA Threshold: *Would the proposed Project 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?*

8.6 WILDLIFE CORRIDORS

Survey Results

Although not observed during RBF's habitat assessment, steelhead trout are known to migrate up and down San Simeon Creek. Adult steelhead migrate from the ocean upstream into San Simeon Creek between December and May, and smolts migrate downstream toward the ocean between March and June. Several mule deer (*Odocoileus hemionus*) were observed in the percolation ponds and likely utilize the riparian corridor to make movements up and down the stream between foraging, fawning, and shelter areas, as well as other critical habitat types. Other large mammals may utilize the riparian corridors to move in cover, particularly between habitat near the coast and habitat in the Santa Lucia Mountains. Finally, birds likely use the riparian corridor for movements.

Avoidance and Minimization Efforts

San Simeon Creek and the general riparian zone will be mostly avoided by construction, with any tree trimming and direct disturbance kept to the minimal amount necessary.

Direct and Indirect Project Impacts

Migrating fish species may be deterred from moving through the areas due to active construction, but movements of terrestrial and avian species are otherwise not expected to be significantly affected. The movement corridors are not expected to be directly affected.

However, San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek may experience indirect Project-related effects as a result of the drawdown in the water table. As discussed in Sections 8.3 and 8.4, if the depth of the water table has a strong correlation with the amount of surface water available in these water bodies, it may result in early seasonal cuts in aboveground water supplies. This would in turn degrade the quality of the movement corridor and potentially render it unusable by animals that are strictly confined to aquatic movement (e.g. fish).

Mitigation

The following mitigation measures are proposed to reduce Project impacts to less than significant with mitigation incorporated:

BIO-1: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-2: Refer to Section 8.2 for the full text of this mitigation measure.

BIO-7: Refer to Section 8.3.2 for the full text of this mitigation measure.

BIO-14: Refer to Section 8.4 for the full text of this mitigation measure.

CEQA Threshold: *Would the proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

8.7 LOCAL POLICIES AND ORDINANCES

As detailed in Section 6, the proposed Project could conflict with the San Luis Obispo County Coastal Zone Land Use Ordinance (SLO County 1986) and therefore with the Local Coastal Program. The LCP was implemented and approved to ensure the protection of San Luis Obispo County's Coastal Zone in compliance with the Coastal Act of 1976. The CZLUO contains separate provisions intended to protect sensitive resource areas, environmentally sensitive habitat areas, wetlands, streams and riparian vegetation, terrestrial habitat, and marine habitat. The Project is assumed to already be in compliance with several of these provisions including SRAs, wetlands, terrestrial habitat, and marine habitat. However, the Project would potentially conflict with provisions intended to protect ESHAs and streams and riparian vegetation.

In addition, as described in Section 7, the proposed Project could conflict with the California Coastal Act of 1976, which is intended to help secure the "orderly, long-range conservation, use, and management of the natural, scenic, cultural, recreational, and manmade resources of the coastal zone" (CA PRC 30000-30900). To receive approval from the Coastal Commission,

the Project would be required to demonstrate compliance with Sections 30231 and Sections 30240 of the Coastal Act.

Section 30231 of the Coastal Act states that:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30240 of the Coastal Act states that:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

8.7.1 San Luis Obispo County Coastal Zone Land Use Ordinance

Steelhead Stream Protection: Net Loss Stream Diversions Prohibited (23.07.170e(3))

Subsection 23.07.170e(3) of the CZLUO states that diversions of surface and subsurface water will not be allowed if they will result in a significant adverse impact on steelhead runs. This subsection applies to diversion dams, water supply wells that tap the subflow, and similar water supply facilities that could significantly harm steelhead runs. Exceptions may be considered only where impacts are unavoidable, are fully mitigated, and result in no significant disruption.

As of this writing, it is unknown if the proposed Project will have significant adverse effects on steelhead runs. The Project is proposing to extract groundwater from the basin below San Simeon Creek and the surrounding area for treatment. The treated water is expected to be equivalent to 400 gpm of flow, of which 300 gpm would be injected back into the ground on the eastern side of the Project site at the RIW for subsequent extraction for the Community of Cambria's water supply. Under the two proposed alternatives, one hundred (100) gpm of water would either be injected into the ground on the western side of the Project site at three LIWs, just northwest of the confluence of Van Gordon Creek and San Simeon Creek, or would be

discharged directly into Van Gordon Creek west of Well 9P7. Although hydrologic studies suggest that effects will be limited, there is uncertainty in the possible effect these actions may have on the supply of surface water in San Simeon Creek.. Monitoring of groundwater and surface water, as well as additional hydrologic modeling, is needed to track changes in groundwater, surface waters and instream and riparian habitats in order to remove remaining uncertainty and to fully understand the Project's potential impacts. An adaptive management approach will be implemented that would provide the needed data and provide an oversight of uncertain effects of removing 300 gpm from the groundwater adjacent to San Simeon Creek and will allow up to 150 gpm of water to be returned at either the LIWs or the discharge pipe, depending on stream conditions, to avoid potential adverse impacts to aquatic species.

While enough water may remain in the system with the proposed Project as designed to continue supplying suitable habitat for steelhead runs, it is possible that over time, especially during dry periods, the surface water in San Simeon Creek may dry up quicker than it currently does, possibly resulting in a significant adverse effect to steelhead runs. Adult steelhead typically migrate from the ocean into coastal streams between December and May, according to weather patterns and stream flow. On the other hand, smolts (young steelhead that have prepared to migrate to the ocean) typically migrate downstream to lagoons and eventually the ocean between March and June, although low stream flows can block smolts from reaching their destinations. Reduced water in the lower reaches of San Simeon Creek could lead to earlier-than-usual sandbar closures in San Simeon Creek Lagoon, affecting the ability of smolts to migrate to the ocean and prematurely altering the lagoon/estuary temporal interchange. Without additional information, the proposed Project could violate this subsection. Adaptive management measures, including biological monitoring, hydrologic monitoring and modeling will be implemented to demonstrate that the proposed Project would be in compliance with this provision and an adaptive management plan is recommended to help avoid or reduce impacts to aquatic vertebrates.

Interference with Fish Migration (23.07.170e(4)iv)

Subsection 23.07.170e(4)iv prohibits any development activity that would raise overall stream temperatures to unfavorable levels, or that would interfere with normal fish migration and movement within the stream. As stated above, the proposed Project may result in decreased water levels in San Simeon Creek and, when applicable, Van Gordon Creek. If Project operations do result in decreased water levels regularly, seasonally, or during particularly dry periods, the proposed Project could violate both measures of this subsection by resulting in increased water temperatures due to decreased water levels as well as restrictions on fish migration and movement. Without additional studies, the proposed Project could violate this subsection. Additional hydrologic information that will be gathered as part of the adaptive management program is expected to demonstrate that the proposed Project would be in compliance with this provision.

Grading Adjacent to Environmentally Sensitive Habitats (23.07.170e(5))

Subsection 23.07.170e(5) states that grading adjacent to ESHAs shall conform to the provisions of Section 23.05.034c, Grading Standards, which states that:

> *Grading shall not occur within 100 feet of any Environmentally Sensitive Habitat except:*
> *c) Where a setback adjustment has been granted as set forth in Sections 23.07.172d(2) (Wetlands) or 23.07.174d(2) (Streams and Riparian Vegetation) of this title; or*
> *d) Within an urban service line when grading is necessary to locate a principally permitted use and where the approval body can find that the application of the 100-foot setback would render the site physically unsuitable for a principally permitted use. In such cases, the 100-foot setback shall only be reduced to a point where the principally-permitted use, as modified as much as practical from a design standpoint, can be located on the site. In no case shall grading occur closer than 50 feet from the Environmentally Sensitive Habitat or as allowed by planning area standard, whichever is greater.*

It is unknown at this time if a road would be graded along the pipeline right-of-way west of Van Gordon Creek. Based on current Project plans, there may be multiple proposed laydown yards that are within 100 feet of Van Gordon Creek and San Simeon Creek. If no grading is required within 100 feet of Van Gordon Creek or San Simeon Creek, the proposed Project will be in compliance with this subsection. If grading is required, compliance with this subsection will be dependent on receiving authorization to grade within the 100-foot riparian buffer, as discussed below. Measures will be put in place to ensure that the proposed Project will be in compliance with this subsection.

Riparian Setbacks (23.07.174d)

Subsection 23.07.174(d) discusses a required setback from riparian vegetation. In rural areas, such as where the proposed Project is located, this setback is required to be a minimum of 100 feet from the upland edge of riparian vegetation. However, this subsection also allows certain permitted uses within this setback, including pipelines, and for the minimum setback to be adjusted, given that the following findings can first be made:

- Alternative locations and routes are infeasible or more environmentally damaging; and
- Adverse environmental effects are mitigated to the maximum extent feasible; and
- The adjustment is necessary to allow a principal permitted use of the property and redesign of the proposed development would not allow the use with the standard setbacks; and
- The adjustment is the minimum that would allow for the establishment of a principal permitted use.

One alternative of the proposed Project contains multiple laydown yards, sections of pipeline, multiple LIWs, and a monitoring well that, as designed, are within 100 feet of the upland extents of Van Gordon Creek and San Simeon Creek. Under a second alternative, the LIWs and associated pipeline would be removed and replaced with the Well 9P7 discharge pipeline that is pre-existing and is located within the riparian corridor, discharging directly into Van Gordon Creek. Because it cannot yet be shown that alternative locations and routes that are outside of the riparian setback are not feasible, the proposed Project is currently expected to violate this subsection. The Project proponent will need to demonstrate alternative pipeline routes will be more environmentally damaging or will be infeasible for the purposes of the Project in order to demonstrate compliance with this provision.

8.7.2 California Coastal Act of 1976

San Simeon Creek

San Simeon Creek traverses the southern portion of the Project site. San Simeon Creek is designated as an ESHA by the NCAP, the 1998 NCAP Update, and by the definition in Section 30107.5 of the Coastal Act (Refer to Exhibit 8). Several protected species are known to occur and/or breed in this creek, including at the minimum steelhead, tidewater goby, California red-legged frog, western pond turtle, and two-striped garter snake. The proposed Project would not be sited within San Simeon Creek, but would be located near to it and in some areas within 100 feet of it. Development in the vicinity of this resource must demonstrate compliance with Sections 30231 and 30240 of the Coastal Act as noted above.

Section 30231

Under this section of the Coastal Act, the Project proponent must demonstrate that the proposed Project will retain the biological productivity and quality of coastal streams (i.e. San Simeon Creek) and, where possible, restore them to better conditions. The proposed Project is not located within the creek or within its upland terrestrial extent and is not expected to result in any direct impacts as a result of construction. However, the Project could result in indirect impacts to San Simeon Creek.

One of the methods suggested by Section 30231 for maintaining the biological integrity of water bodies is “preventing [the] depletion of ground water supplies and substantial interference with surface waterflow.” The purpose of the proposed Project is to extract groundwater from the San Simeon Creek aquifer through an existing well located in the center of a series of percolation ponds, to treat the extracted water, and to inject 75% of it (300 gpm) back into the ground approximately 0.33 mile northeast of the extraction point for subsequent re-extraction by municipal water supply wells, and to return the remaining 25% of the treated water (100 gpm) for recharge into the creeks and lagoon either a) via three LIWs located approximately 0.3 mile southwest of the extraction well and within 100 feet of the San Simeon Creek riparian vegetation, or b) via an existing discharge pipe that feeds directly onto the surface of Van

Gordon Creek. Without implementation of an adaptive management program including biological and hydrologic monitoring, it is unknown what effect the removal and subsequent reinjection of this water may have on the groundwater supply and surface water. At this time, it is unclear whether 100 gpm of water returned back into the creek and lagoon system would be sufficient to retain or improve upon the biological productivity and quality of San Simeon Creek. It is possible that a larger volume of water may be required to maintain high-quality stream habitat, in which case an adaptive management plan that allows for flexibility in groundwater return levels up to 150 gpm based on stream conditions is recommended. It is unknown if the proposed Project will be in compliance with Section 20231 for San Simeon Creek, however, the adaptive management program will be developed to ensure that the program will either be in compliance or adjusted to become compliant.

Section 30240

Because the proposed Project is not located within San Simeon Creek, Section 30240a will not apply. However, under 30240b, the Project proponent must demonstrate that the proposed Project will be sited and designed to prevent significant impacts to the creek and will be compatible with the continuance of the habitat. The Project is located within 100 feet of the upland extent of the riparian vegetation, and is currently designed to avoid direct impacts to the vegetation and the streambed. Construction may result in sedimentation, but it is assumed that standard mitigation (e.g. BMPs) would reduce or eliminate the potential for sedimentation to enter the streambed. Based on the locations of the proposed pipeline and injection wells in relation to San Simeon Creek, it is not expected that removal of any riparian vegetation would be necessary during construction of the Project. Light tree trimming may be necessary in the immediate construction area to help facilitate construction of the pipeline, but this would likely be mitigated through vegetation replacement or re-vegetation if considered a loss. The proposed lagoon injection wells where treated water would be injected back into the creek and the lagoon would result in additional ground impacts.

It is not expected that the proposed Project would have any direct significant impacts to the creek. As discussed above for Section 30231, it is possible that the Project may have indirect adverse impacts to the creek through depletion of groundwater. However, there is not enough hydrologic information yet to make the determination of whether implementation of the proposed Project would result in an average annual net surplus or net deficit of the aquifer's water budget. If the proposed Project could demonstrate that implementation would be likely to maintain an average net surplus, it could be argued that the proposed Project would be compatible with the continuance of this habitat. The proposed Project would not be located within the resource and would not result in the destruction or adverse modification of it. However, the Coastal Commission generally requires a habitat setback to prevent impacts that could degrade the resources; this setback, as with the CZLUO, is generally 100 feet. The LIW alternative does not comply with this, as it is located within 100 feet of the upland extent of this ESHA. Therefore, if the proposed Project utilized the LIW alternative, it would violate Section 30240b for San

Simeon Creek. If the Project utilized the discharge pipeline alternative, it would be outside of 100 feet from the San Simeon Creek corridor.

San Simeon Creek Lagoon

San Simeon Creek Lagoon is located on the downstream end of San Simeon Creek. San Simeon Creek Lagoon is described as a stillwater wetland by the 1998 NCAP Update and is subsequently designated in the same document as an ESHA (Refer to Exhibit 8). As mapped by RBF in 2014, San Simeon Creek Lagoon is believed to extend to an area approximately 230 feet upstream (east) of Van Gordon Creek Road and approximately 100 feet downstream (west) of the confluence of San Simeon Creek and Van Gordon Creek, where the sides of the creek narrow slightly due to natural rock formations. Depending on the time of year and the water level in relation to the sandbar, the area may variably be a freshwater lagoon or a fresh/saltwater estuary. This area is used for spawning and/or rearing habitat by multiple species of fish, most significantly steelhead and tidewater goby. The proposed Project would not be sited within San Simeon Creek Lagoon, but would be located near to it. Development in the vicinity of this resource must demonstrate compliance with Sections 30231 and 30240 of the Coastal Act as noted above.

Section 30231

Under this section of the Coastal Act, the Project proponent must demonstrate that the proposed Project will retain the biological productivity and quality of wetlands and estuaries (i.e. San Simeon Creek Lagoon) and, where possible, restore them to better conditions. The proposed Project is not located within the creek or within its upland terrestrial extent and is not expected to result in any direct impacts as a result of construction. However, the Project could result in indirect impacts to the lagoon.

As described in Section 7.1, the proposed Project could result in a net deficit of groundwater resources, but that is currently unknown with available hydrologic data. During dry periods, especially during poor rainfall years, this could result in a premature reduction in both groundwater levels and the extent of the lagoon. During particularly wet years a potential reduction in average groundwater levels may be less significant, as during wet years the lagoon may extend over much of San Simeon State Beach. In dry years, such as 2014, the lagoon may be significantly reduced in size; during RBF's 2014 habitat assessment, the extent of the lagoon on the beach was only a fraction of what is displayed in available historical imagery since 1994. In situations like this, a premature reduction in water levels and subsequent closure of the sandbar could result in decreased habitat quality for those species that depend on the lagoon. For instance, steelhead smolts attempting to migrate to sea could become stranded in the lagoon if water levels recede too soon. Without additional hydrologic studies, it is difficult to know how water levels and subsequent productivity in this lagoon would be affected by implementation and operation of the proposed Project. More information on the connection

between groundwater, the surface water in San Simeon Creek and San Simeon Creek Lagoon, and the Pacific Ocean is required to better understand potential Project impacts. An adaptive management plan that requires water return levels to the lagoon to be adjusted to up to 150 gpm of water based on site conditions will be implemented as part of this project Although it is not known if the proposed Project will be in compliance with Section 20231 for San Simeon Creek Lagoon, the adaptive management program will be developed to ensure that the program will either be in compliance or adjusted to become compliant.

Section 30240

Because the proposed Project is not located within San Simeon Creek Lagoon, Section 30240a will not apply. However, under 30240b, the Project proponent must demonstrate that the proposed Project will be sited and designed to prevent significant impacts to the lagoon and will be compatible with the continuance of the habitat. The LIW alternative of the Project is located within 100 feet of the upland extent of the riparian vegetation, and is currently designed to avoid direct impacts to the vegetation and the streambed. This does not include any lagoon-related vegetation (e.g. emergent vegetation) but is instead a willow forest related to the general riparian corridor. Construction may result in sedimentation, but it is assumed that standard mitigation (e.g. BMPs) would reduce or eliminate the potential for sedimentation to enter the lagoon. Based on the locations of the proposed pipeline and injection wells in relation to San Simeon Creek Lagoon, it is not expected that removal of any riparian vegetation would be necessary during construction of the Project. Light tree trimming may be necessary in the immediate construction area to help facilitate construction of the pipeline, but this would likely be mitigated through vegetation replacement or re-vegetation if considered a loss. The proposed lagoon injection wells where treated water would be injected back into the creek and the lagoon would result in additional ground impacts. Contrarily, the discharge pipeline alternative would shift construction away from this general area and to another area as discussed in Section 7.3.

It is not expected that the proposed Project would have any direct significant impacts to the lagoon. As discussed above for Section 30231, it is possible that the Project may have indirect adverse impacts to the lagoon through depletion of groundwater. However, there is not enough hydrologic information yet to make the determination of whether implementation of the proposed Project would result in an average annual net surplus or net deficit of the aquifer's water budget. If the proposed Project could demonstrate that implementation would be likely to maintain an average net surplus, it could be argued that the proposed Project would be compatible with the continuance of this habitat. The proposed Project would not be located within the resource and would not result in the destruction or direct adverse modification of it. The Coastal Commission generally requires a habitat setback to prevent impacts that could degrade the resources; this setback, as with the CZLUO, is generally 100 feet. The proposed Project as designed would comply with this, as it is not located within 100 feet of the lagoon. However, because indirect impacts to the lagoon are not known, it is not currently known if the proposed Project as designed would comply with Section 30240b for San Simeon Creek Lagoon.

Van Gordon Creek

Van Gordon Creek is located in the center of the proposed Project, separating the percolation ponds from the brine evaporation pond and the LIW. Van Gordon Creek is designated as an ESHA by the 1998 NCAP Update ("Other Riparian"), and is designated as an ESHA ("Blueline Creeks & Streams") on the San Luis Obispo County "Coastal Zone Environmentally Sensitive Habitats" map available from the County website (Refer to Exhibit 8). This creek is a tributary to San Simeon Creek, converging with it just upstream of the start of San Simeon Creek Lagoon. One alternative of the Project would be sited within Van Gordon Creek for water discharge, whereas the LIW alternative would restrict construction to within 100 feet of Van Gordon Creek but not directly in the creek. Development in the vicinity of this resource must demonstrate compliance with Sections 30231 and 30240 of the Coastal Act as noted above.

Section 30231

Under this section of the Coastal Act, the Project proponent must demonstrate that the proposed Project will retain the biological productivity and quality of coastal streams (i.e. Van Gordon Creek) and, where possible, restore them to better conditions. The proposed Project is not located within the creek or within its upland terrestrial extent and is not expected to result in any direct impacts as a result of construction. However, the Project could result in indirect impacts to Van Gordon Creek.

One of the methods suggested by Section 30231 for maintaining the biological integrity of water bodies is "preventing [the] depletion of ground water supplies and substantial interference with surface waterflow." The purpose of the proposed Project is to extract groundwater from the San Simeon Creek aquifer through an existing well located in the center of a series of percolation ponds, to treat the extracted water, and to inject 75% of it (300 gpm) back into the ground approximately 0.33 mile northeast of the extraction point for subsequent re-extraction by municipal water supply wells. The remaining 25% of the treated water (100 gpm) would either be injected approximately 0.3 mile southwest of the extraction point for recharge into the creeks and lagoon or discharged directly into Van Gordon Creek. Without further hydrologic study, it is unknown what effect the removal and subsequent return of this water may have on the groundwater supply and subsequently on surface water. Because the lagoon injection wells are located downstream of Van Gordon Creek, it is unclear whether 100 gpm of water injected back into the creek and lagoon system would be sufficient to retain or improve upon the biological productivity and quality of this creek, and it is possible that a larger volume of water may be required to maintain high-quality stream habitat. Alternatively, discharging water directly into Van Gordon Creek may help to improve the biological productivity. However, an adaptive management plan will be implemented that will provide up to 150 gpm of water to be returned depending on stream conditions. This should ensure compliance with Section 20231 for Van Gordon Creek.

Section 30240

One alternative would be located within Van Gordon Creek for water discharge, and therefore Section 30240a would apply to this alternative. Under Section 30240a, ESHAs must be protected against disruption of habitat values, and only uses dependent on the ESHAs are allowed within them. Under the discharge pipeline alternative, an existing pipeline would be located within the creek. This pipeline, although it is already permitted for discharges, is not dependent on Van Gordon Creek. However, construction and operation of the pipeline presumably would have already been authorized under the Coastal Act prior to being permitted, and therefore the discharge pipeline alternative is presumed to be in compliance with Section 30240a.

Under Section 30240b, the Project proponent must demonstrate that the proposed Project will be sited and designed to prevent significant impacts to the creek and will be compatible with the continuance of the habitat. Both alternatives are located within 100 feet of the upland extent of the riparian vegetation, and are currently designed to avoid direct impacts to the vegetation and the streambed. Although the discharge pipeline alternative is directly within the streambed, the pipeline is already constructed and intermittently in use, and therefore would not require any additional construction. Upland construction of either alternative may result in sedimentation, but it is assumed that standard mitigation (e.g. BMPs) would reduce or eliminate the potential for sedimentation to enter the streambed. Based on the locations of the proposed pipeline and injection wells in relation to Van Gordon Creek, it is not expected that removal of any riparian vegetation would be necessary during construction of the Project. Light tree trimming may be necessary in the immediate construction area to help facilitate construction of the new pipelines, but this would likely be mitigated through vegetation replacement or re-vegetation if considered a loss. Under the LIW alternative, construction of the proposed lagoon injection wells would result in additional ground impacts. The brine evaporation pond is located very close to Van Gordon Creek but is in a basin below the creek; use of the pond is not expected to directly affect the creek.

It is not expected that the proposed Project would have any direct significant impacts to the creek. As discussed above for Section 30231, it is possible that the Project may have indirect adverse impacts to the creek through depletion of groundwater. However, there is not enough hydrologic information yet to make the determination of whether implementation of the proposed Project would result in an average annual net surplus or net deficit of the aquifer's water budget. If the proposed Project could demonstrate that implementation would be likely to maintain an average net surplus, it could be argued that the proposed Project would be compatible with the continuance of this habitat. This level of information is expected to be obtained from additional hydrologic studying and the development of an adaptive management plan. The proposed Project would not result in the destruction or direct adverse modification of it. However, the Coastal Commission generally requires a habitat setback to prevent impacts that could degrade the resources; this setback, as with the CZLUO, is generally 100 feet. The proposed Project as

designed does not comply with this, as several pipeline features and a monitoring well are located within 100 feet of the upland extent of this ESHA. Therefore, regardless of the chosen alternative, the proposed Project is expected to violate Section 30240b for Van Gordon Creek.

Monterey Pine Forests

A Monterey pine forest is located offsite on the southern end of the survey area, on the southern slopes of San Simeon Creek. This area is designated as an ESHA ("Terrestrial Habitat") on the San Luis Obispo County "Coastal Zone Environmentally Sensitive Habitats" map available from the County website (Refer to Exhibit 8). Monterey pine is designated by the CNPS with the Rare Plant Rank 1B.1, indicating that is rare, threatened, or endangered in California and elsewhere, and is seriously endangered in California. Furthermore, "Monterey Pine Forest" is considered a sensitive habitat by the CNDDB. However, the proposed Project is not expected to have any direct or indirect impacts on the formally-mapped Monterey pine forest ESHA located on the south side of San Simeon Creek. The trees are all located in the upland on slopes and bluffs above the creek and are not expected to be affected by construction and operation of the proposed Project. The proposed Project is expected to be in compliance with Section 30240 of the Coastal Act in protecting this ESHA.

However, a small stand of Monterey pines is located within the percolation ponds, and Well 9P7 is located within but near the southern end of this stand. This is not a mapped ESHA, but may qualify to be considered an ESHA because of the rare status of Monterey pines. For the purposes of this analysis, this area is treated below as if it is an unmapped ESHA—as defined in Section 23.11.030 of the CZLUO—and is given the same analysis as other resources above.

Section 30240

The proposed Project is located both within and adjacent to this small stand of Monterey pines and is thus subject to both Sections 30240a and 30240b. To show compliance with Section 30240a, the Project proponent must demonstrate that the proposed Project will not disrupt the habitat values of these trees and that it is dependent on this resource. While the existing Well 9P7 is located within the stand of trees, it is located near the southern end of them. The Project as designed shows the pipeline exiting the trees to the west and circumventing them to reach the AWTP. The pipeline is not proposed to be constructed through the stand of trees.

To show compliance with Section 30240b, the Project proponent must demonstrate that the proposed Project is designed to prevent effects that may significantly degrade the habitat, and is compatible with the continuance of the habitat. As stated above, the pipeline has been sited to exit and go around the pine stand, rather than through it. While siting the pipeline through the trees could have significant adverse effects and result in degradation of the habitat, siting the pipeline around the stand avoids major direct impacts and is expected to avoid any major habitat degradation. Because the pipeline would have minimal direct effects and would not

cause any significant degradation of this habitat, it can be considered to be compatible with the continuance of the habitat.

CEQA Threshold: *Would the proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan?*

8.8 LOCAL, REGIONAL AND STATE PLANS

The proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. There are currently no Habitat Conservation Plans that pertain to the Project site. The nearby Hearst Ranch Conservation Plan is outside of the Project site. Therefore, the proposed Project would not conflict with the provisions of any local, regional, or state Habitat Conservation Plans.

Section 9 Conclusion and Recommendations

Sensitive Plants

The installation of new extraction and injection facilities within 100 feet of San Simeon Creek and San Simeon Creek Lagoon may affect, directly or indirectly through construction or operation, special-status plant species. There are no aquatic-dependent special-status plant species expected to occur within the Project site. However, the installation of these facilities and/or of the associated pipelines in upland areas could result in impacts to special-status terrestrial plants such as compact cobwebby thistle, Jones' layia, or Monterey pine. Excavation and fill for wells and pipelines could cause changes to soil compaction levels, potentially changing the microhabitat that plants depend upon and changing plant compositions. Construction activity, in general, could result in the spread of fugitive dust throughout the construction area or in the spread of nonnative weed seeds via clothing, tires, or vehicle undercarriages. In addition, vehicle travel and pedestrian foot traffic could result in the trampling of plant species. Surveys for sensitive plants could be required to document the absence of sensitive plants. Only one sensitive plant species was observed during RBF's 2014 habitat assessment, Monterey pine. While construction will occur in the percolation ponds in direct proximity to a small stand of this species, based on Project designs the construction impacts are expected to be minimal.

Sensitive Wildlife

The installation of new extraction and injection facilities within 100 feet of San Simeon Creek, San Simeon Creek Lagoon, and Van Gordon Creek has the potential to affect several special-status wildlife species, including federally listed species occurring in these aquatic habitats. One federally endangered species, tidewater goby, was observed offsite during the habitat assessment and others such as steelhead and California red-legged frog have been observed in the past and are expected to be present.

While direct impacts to special-status wildlife species are expected to be negligible during construction, indirect operational impacts may occur as the result of pumping 400 gpm of groundwater from and only returning 100 gpm to the San Simeon Creek aquifer. If the proposed Project results in a water budget deficit, it could result in quicker reduction in stream levels during dry periods. Therefore, an adaptive management program is recommended that would allow flexibility in water injection levels up to 150 gpm depending on stream conditions. While a perennial section of San Simeon Creek is known to be present upstream of the confluence with Steiner Creek, the lower reaches are intermittent and are generally only inundated from late fall to late spring or early summer. Early reduction in water levels could result in a premature sandbar closure at San Simeon Creek Lagoon. This could reduce the amount of habitat for tidewater goby, which is only found in the lagoon habitat. Additionally, premature sandbar

closure could restrict the ability of adult steelhead to migrate from the ocean back into San Simeon Creek, and likewise restrict the ability of smolts to migrate from the creek into the lagoon and out to the ocean. In San Simeon Creek itself, because CRLF can breed as late as late April, early drops in water levels could possibly affect the ability of CRLF eggs to hatch. CRLF typically attaches its eggs to floating vegetation or vegetation rooted in the creek substrate; drops in water level could cause egg masses to desiccate. Tadpoles in turn could be lost if the creek dries too quickly. Western pond turtles and two-striped garter snakes would be less likely to be lost, but an early drop in water levels could force them to move to new sections of the creek or to shift their natural history (i.e. activity periods) to better fit their changing environment. Further hydrologic and water quality analyses are needed to determine if impacts will occur and to quantify any identified impacts. These studies would be essential components of the recommended adaptive management program.

Migratory Bird Treaty Act and Fish and Game Code

Nesting birds are protected pursuant to the Migratory Bird Treaty Act and Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, nesting bird clearance surveys need to be conducted prior to any vegetation removal or development that may disrupt the birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered “take” and is potentially punishable by fines and/or imprisonment.

If ground-disturbing activities or removal of any trees, shrubs, or any other potential nesting habitat are scheduled within the avian nesting season (nesting season generally extends from February 1 - August 31, but can vary from year to year based upon seasonal weather conditions), a pre-construction clearance survey for nesting birds should be conducted within 10 days prior to any ground disturbing activities to ensure that no nesting birds will be disturbed during construction. As long as development does not cause direct take of a bird or egg(s) or disrupt nesting behaviors, immediate protections would not be required. The biologist conducting the clearance survey should document a negative survey with a report indicating that no impacts to active avian nests will occur.

If an active avian nest is discovered during the pre-construction clearance survey, construction activities might have to be rerouted, a no-work buffer[2] might have to be established around the nest, or delayed until the young have fledged. If an active nest is observed it is recommended that a biological monitor be present to delineate the boundaries of the buffer area and to monitor

[2] The size of the buffer shall be determined by the biologist in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. Typically these buffers range from 250 to 500 feet from the nest location.

the nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the qualified biologist has determined that young birds have successfully fledged or the nest has otherwise become inactive (i.e. failed), a monitoring report shall be prepared and submitted to the Community of Cambria for review and approval prior to initiating construction activities within the buffer area. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until the written authorization is received by the applicant from CDFW.

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Appendix A Sensitive Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

Sensitive Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Wildlife Species				
Ammodrammus savannarum grasshopper sparrow	Fed: None CA: CSC	Occur in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	No	**Low**. There is marginal nesting and foraging habitat for this species, particularly on the eastern side of the project site.
Antrozous pallidus pallid bat	Fed: None CA: CSC	Mostly found in desert habitats. Favors rocky outcrops near a source of water for roosting. Also found roosting in caves, rock crevices, mines, hollow trees, and buildings.	No	**Presumed absent**. There is no suitable habitat for this species.
Buteo regalis ferruginous hawk	Fed: None CA: WL	Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Nests in foothills or prairies; on low cliffs, buttes, cut banks, shrubs, trees, or in other elevated structures, natural or human-made. Requires large, open tracts of grasslands, sparse shrub, or desert habitats.	No	**Moderate**. There is suitable nesting and foraging habitat. This species is a winter resident.
Corynorhinus townsendii Townsend's big-eared bat	Fed: None CA: CCE	Species is found in all but subalpine habitats, and may be found at any season throughout its range. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting.	No	**Presumed absent**. There is no suitable habitat for this species.
Danaus plexippus monarch butterfly	Fed: None CA: None	Occurs in open fields and meadows dominated by milkweed. In winter, species can be found on the coast of southern California in Eucalyptus groves and at high altitudes in central Mexico.	No	**Presumed absent**. There is no suitable habitat for this species.
Emys marmorata western pond turtle	Fed: None CA: CSC	Requires basking sites such as partially submerged logs, rocks, matts of floating vegetation, or open mud banks. Normally associate with permanent ponds, lakes, streams, irrigations ditches or permanent pools along intermittent streams.	No	**High**. There is suitable habitat for this species in San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon, and it has been previously documented on multiple occasions within the survey area.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Eucyclogobius newberryi tidewater goby	Fed: **END** CA: CSC	Inhabit the fresh-saltwater interface (brackish) where salinity is less than 10 to 12 parts per thousand. Typically found at the upper edges of tidal bays near the entrance of freshwater tributaries and in coastal lagoons. These areas provide relatively shallow, and still, but not stagnant, water.	Yes	**Present**. This species was observed during the habitat assessment in San Simeon Creek Lagoon.
Falco mexicanus prairie falcon	Fed: None CA: WL	Inhabits dry, open terrain such as plains, grasslands, and marshes. Terrain can be flat or hilly, though breeding occurs on cliffs. May forage far from its typical nesting habitat or roosts, including to ocean shores.	No	**Moderate.** There is suitable foraging habitat but no suitable nesting habitat.
Myotis thysanodes fringed myotis	Fed: None CA: None	Roosts and colonizes in caves, mines, buildings, or other types of crevices. Can otherwise be found in a large number of habitat types, though the most optimal ones include pinyon-juniper, valley foothill hardwood, and hardwood-conifer areas.	No	**Moderate**. There is suitable roosting habitat within the survey area, particularly on the south side of San Simeon Creek.
Myotis volans long-legged myotis	Fed: None CA: None	Colonizes under bark and in hollow trees, as well as in crevices or buildings. Usually roosts in trees during the day and caves and mines at night. Typically found within woodland and forest habitats that are above 4,000 feet in elevation.	No	**Low**. There is suitable diurnal roosting habitat but the project area is far outside of this species' preferred elevation range.
Myotis yumanensis Yuma myotis	Fed: None CA: None	Roosts in buildings, mines, caves, or crevices and also has been observed roosting in abandoned swallow nests and under bridges. Distribution is closely tied to bodies of water, which it uses as foraging sites and sources of drinking water. Open forest and woodlands are optimal habitat.	No	**Moderate**. There is suitable roosting habitat within the survey area, particularly on the south side of San Simeon Creek.
Oncorhynchus mykiss irideus steelhead – south/central California coast DPS	Fed: **THR** CA: CSC	Found in streams with gravelly bottoms. This distinct population segment is found from Santa Cruz County south to, but not including, the Santa Maria River. Adults spawn in coastal watersheds, while the young stay in freshwater or estuarine habitats for one to three years prior to migrating to the sea. After one to four years of maturing in the ocean, fish will return to their natal waters to spawn in freshwater.	No	**High**. There is suitable habitat for this species within San Simeon Creek and San Simeon Creek Lagoon and it has been previously documented on multiple occasions within the survey area.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Rana boylii foothill yellow-legged frog	Fed: None CA: CSC	Found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types.	No	**Moderate**. There is suitable habitat for this species within San Simeon Creek.
Rana draytonii California red-legged frog	Fed: **THR** CA: CSC	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamside's with plant cover. Most common in lowlands or foothills. Breeds in permanent or ephemeral waters sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.	No	**High**. There is suitable habitat for this species in San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon. There is also suitable upland dispersal habitat in the percolation ponds. It has previously been documented in the hundreds in San Simeon Creek.
Taricha torosa Coast Range newt	Fed: None CA: CSC	Found in both aquatic and terrestrial habitats, but typically in coastal drainages between San Diego and Mendocino Counties. Will migrate over 1 kilometer to reach breeding habitat in ponds, reservoirs, and slow-moving streams.	No	**Moderate**. There is suitable habitat for this species in San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon
Thamnophis hammondii two-striped garter snake	Fed: None CA: CSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	No	**High**. There is suitable habitat for this species within San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon. It has been documented at this site in the past.
Plant Species				
Abies bracteata bristlecone fir	Fed: None CA: None CNPS: 1B.3	Occurs in rocky areas within lower montane coniferous forest, broadleafed upland forest, and chaparral. From 591 to 5,249 in elevation.	No	**Presumed absent**. The site is below the known elevation range of this species.
Allium hickmanii Hickman's onion	Fed: None CA: None CNPS: 1B.2	Found in sandy loam, damp ground, and vernal swales within closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland, and cismontane woodland. It is most often found in grassland. From 16 to 656 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Arctostaphylos cruzensis Arroyo de la Cruz manzanita	Fed: None CA: None CNPS: 1B.2	Occurs in sandy soils in a variety of habitat types including broadleafed upland forest, coastal bluff scrub, closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland. From 197 to 1,017 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Arctostaphylos hookeri* ssp. *hearstiorum Hearsts' manzanita	Fed: None CA: **END** CNPS: 1B.2	Typically found in sandy loam on terraces within chaparral, coastal prairie, coastal scrub, and valley foothill grassland. May also occur on stabilized dunes or on serpentine soils. From 180 to 656 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Baccharis plummerae* ssp. *glabrata San Simeon baccharis	Fed: None CA: None CNPS: 1B.2	Occurs in coastal scrub in areas where the habitat overlaps with grasslands. From 295 to 1,230 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Calochortus fimbriatus late-flowered mariposa lily	Fed: None CA: None CNPS: 1B.2	Found in dry, open coastal woodland and chaparral on serpentine soils. May also occur in riparian woodlands. From 902 to 6,250 feet in elevation.	No	**Presumed absent**. The site is below the known elevation range of this species.
Calochortus obispoensis San Luis mariposa lily	Fed: None CA: None CNPS: 1B.2	Most often found in serpentine grassland, but can also be found in chaparral and coastal scrub. From 164 to 2,395 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Calochortus simulans La Panza mariposa lily	Fed: None CA: None CNPS: 1B.3	Occurs in decomposed granite within valley and foothill grassland, cismontane woodland, chaparral, and lower montane coniferous forest. From 1,296 to 3,609 feet in elevation.	No	**Presumed absent**. The site is below the known elevation range of this species.
Calystegia subacaulis* ssp. *episcopalis Cambria morning-glory	Fed: None CA: None CNPS: 4.2	Found in chaparral and cismontane woodland from 197 to 1,640 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Carex obispoensis San Luis Obispo sedge	Fed: None CA: None CNPS: 1B.2	Usually found in transition zones on sand, clay, or serpentine soils, often in seeps. Associated with closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. From 33 to 2,690 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Castilleja densiflora* var. *obispoensis San Luis Obispo owl's-clover	Fed: None CA: None CNPS: 1B.2	Occurs in valley and foothill grassland and in meadows and seeps, sometimes on serpentine soils. From 33 to 1,312 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Ceanothus hearstiorum Hearsts' ceanothus	Fed: None CA: Rare CNPS: 1B.2	Found in maritime chaparral, coastal prairie, grassland, and coastal scrub. May co-occur with Arroyo de la Cruz manzanita. From 246 to 804 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Ceanothus maritimus maritime ceanothus	Fed: None CA: Rare CNPS: 1B.2	Occurs in coastal bluff scrub, chaparral, and valley and foothill grassland, but usually at the edges of coastal sage scrub or scattered throughout grassland. Some populations grow on serpentine soils. From 33 to 492 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Chorizanthe pungens* var. *pungens Monterey spineflower	Fed: **THR** CA: None CNPS: 1B.2	Found growing in sandy soils in coastal dunes, chaparral, cismontane woodland, and coastal scrub. From 0 to 492 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Cirsium fontinale* var. *obispoense San Luis Obispo fountain thistle	Fed: **END** CA: **END** CNPS: 1B.2	Occurs in serpentine seeps in chaparral and cismontane woodland from 115 to 1,198 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Cirsium occidentale* var. *compactum compact cobwebby thistle	Fed: None CA: None CNPS: 1B.2	Found on dunes and in clay soils in chaparral and grassland. May also occur in coastal prairies and coastal scrub. From 16 to 492 feet in elevation.	No	**Moderate**. There is suitable habitat for this species to occur, especially on the eastern and western ends of the survey area. This species was previously documented in a 1991 survey on a bluff overlooking San Simeon State Beach, in the northwestern section of the survey area.
Delphinium parryi* ssp. *blochmaniae dune larkspur	Fed: None CA: None CNPS: 1B.2	Occurs in maritime chaparral and coastal dunes from 0 to 656 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Delphinium parryi* ssp. *eastwoodiae Eastwood's larkspur	Fed: None CA: None CNPS: 1B.2	Found in serpentine soils in openings within chaparral and valley and foothill grassland. From 246 to 1,640 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Dudleya blochmaniae* ssp. *blochmaniae Blochman's dudleya	Fed: None CA: None CNPS: 1B.1	Occurs in rocky, clay, or serpentine soils within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. From 16 to 1,476 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Eryngium aristulatum* var. *hooveri Hoover's button-celery	Fed: None CA: None CNPS: 1B.1	Found in alkaline depressions, vernal pools, roadside ditches, and other wet places near the coast. From 10 to 148 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Galium californicum* ssp. *luciense Cone Peak bedstraw	Fed: None CA: None CNPS: 1B.3	Occurs in forest duff or gravelly talus of broadleafed upland forest, lower montane coniferous forest, and cismontane woodland in areas dominated by pine and oak. Usually in partial shade. From 2,871 to 5,003 feet in elevation.	No	**Presumed absent**. The site is below the known elevation range of this species.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Galium hardhamiae Hardham's bedstraw	Fed: None CA: None CNPS: 1B.3	Found in serpentine soils in closed-cone coniferous forest. Often co-occurs with Sargent's cypress. From 1,280 to 3,199 feet in elevation.	No	**Presumed absent**. The site is below the known elevation range of this species.
Horkelia cuneata* var. *sericea Kellogg's horkelia	Fed: None CA: None CNPS: 1B.1	Occurs in closed-cone coniferous forest, coastal scrub, coastal dunes, and chaparral in sandy openings. From 33 to 656 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Layia jonesii Jones' layia	Fed: None CA: None CNPS: 1B.2	Found in clay or serpentine soils within chaparral and valley and foothill grassland from 16 to 1,312 feet in elevation.	No	**Moderate**. There is suitable habitat for this species to occur, particularly on the eastern side of the survey area.
Malacothamnus palmeri* var. *involucratus Carmel Valley bush-mallow	Fed: None CA: None CNPS: 1B.2	Occurs on serpentine soils on talus hilltops and slopes within cismontane woodland and chaparral. Requires burns. From 98 to 3,609 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Malacothamnus palmeri* var. *palmeri Santa Lucia bush-mallow	Fed: None CA: None CNPS: 1B.2	Found in chaparral on dry, rocky slopes. Usually found near summits but may occasionally be found growing in canyons down to sea level. From 197 to 1,198 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Microseris paludosa marsh microseris	Fed: None CA: None CNPS: 1B.2	Occurs in closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland. From 16 to 984 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Monardella sinuata* ssp. *sinuata southern curly-leaved monardella	Fed: None CA: None CNPS: 1B.2	Occurs in sandy soils in coastal dunes, coastal scrub, chaparral, and cismontane woodland from 0 to 984 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Monolopia gracilens woodland woolythreads	Fed: None CA: None CNPS: 1B.2	Found in sandy to rocky soils within grassy openings in chaparral, valley and foothill grasslands, cismontane woodland, broadleafed upland forests, and north coast coniferous forest. Often seen on serpentine soils after burns. From 328 to 3,937 feet in elevation.	No	**Low**. There is marginal habitat for this species to occur.
Pedicularis dudleyi Dudley's lousewort	Fed: None CA: Rare CNPS: 1B.2	Occurs in deep, shady woods of older coast redwood forests, including chaparral, north coast coniferous forest, and valley and foothill grassland. From 197 to 2,953 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Pinus radiata Monterey pine	Fed: None CA: None CNPS: 1B.1	Found on dry bluffs and slopes within closed-cone coniferous forest and cismontane woodland. From 82 to 607 feet in elevation.	Yes	**Present**. There is a small stand of Monterey pine in the center of the percolation ponds and a thicket of them on the south side of San Simeon Creek.
Streptanthus albidus* ssp. *peramoenus most beautiful jewel-flower	Fed: None CA: None CNPS: 1B.2	Occurs on serpentine outcrops on ridges and slopes, typically associated with chaparral, valley and foothill grassland, and cismontane woodland. From 394 to 2,395 feet in elevation.	No	**Presumed absent**. There is no suitable habitat.
Triteleia ixioides* ssp. *cookie Cook's triteleia	Fed: None CA: None CNPS: 1B.3	Found on streamsides and in wet ravines on serpentine soils and serpentine seeps. Associated with cismontane woodland and closed-cone coniferous forest. From 492 to 2,297 feet in elevation.	No	**Presumed absent**. The site is below the known elevation range of this species.
Sensitive Habitats				
Monterey Pine Forest	CDFW Sensitive Habitat	Only three natural stands occur in California, one of which is in Cambria. This community is dominated by Monterey pine (up to 80%), with coast live oak usually the next most abundant tree. Understories are variable. The canopy may be nearly 100 feet tall. Limited to well-drained, sandy soils within the limits of summer marine fog incursion.	Yes	**Present**. There is a Monterey pine forest located on the south side of San Simeon Creek. This is in the survey area but not within the boundaries of the project site. There are isolated Monterey pines located in the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed Onsite**	**Potential to Occur**
Valley Oak Woodland	CDFW Sensitive Habitat	Usually found below 2,000 feet in the Sacramento and San Joaquin valleys adjacent to the Sierra Nevada foothills or in the Coast Range valleys between Lake County and western Los Angeles County. Typically consists of relatively open woodland with a grassy understory and an open canopy typically less than 30-40% canopy cover. Valley oak is typically the only tree present within the community. Occurs on deep, well-drained alluvial soils, usually in valley bottoms.	No	**Absent**.

U.S. Fish and Wildlife Service (USFWS) - Federal
END- Federal Endangered
THR- Federal Threatened

California Department of Fish and Wildlife (CDFW) - California
END- California Endangered
CCE- California Candidate Endangered
CSC- California Species of Concern
WL- Watch List
Rare

California Native Plant Society (CNPS)
California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
4 Plants of Limited Distribution – A Review List

Threat Ranks
0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Appendix B Site Photographs

Photograph 1: Facing northwest into a small stand of Monterey pines located in the center of the percolation ponds. An existing water extraction well proposed for use with this project is located just to the left of the open tree in the center.

Photograph 2: Facing southwest from the northeastern corner of the proposed advanced water treatment plant site that would treat water extracted from the well in Photograph 1. This area consists of a disturbed, ruderal field immediately adjacent to percolation ponds.

Photograph 3: Facing north from eastern side of Van Gordon Creek. The proposed pipeline leaving the advanced water treatment plant is currently sited on the east side of this road, in the uplands above the creek.

Photograph 4: Facing south. After treatment, 300 gpm of potable water would be sent to a proposed injection well in an existing large well extraction field. After being reinjected, the water would be available to be extracted for use in Cambria. San Simeon Creek is on the other side of the vegetation.

Photograph 5: Facing south. After treatment, 100 gpm of water would be sent along a proposed pipeline passing through a ruderal field. This area is currently used as a right-of-way for a distribution line.

Photograph 6: Facing south. After treatment, 100 gpm of water would be sent along the proposed pipeline in Photograph 5 to this existing well, where it would be injected back into the ground for recharge.

Photograph 7: Facing north. One alternative for disposing of unusuable brine left over from the water treatment is to send it to an open evaporation pond. This pond is currently a ruderal area with scrubby and non-native vegetation.

Photograph 8: Facing east. A second alternative for disposing of unusuable brine left over from the water treatment is to send it via an existing pipeline to be discharged into the ocean.

Photograph 9: Facing west. Much of the upper reaches of San Simeon Creek within the survey area were dry during the habitat assessment, with occasional small pools.

Photograph 10: Facing west. The lower reaches of San Simeon Creek are wetted at the time of the habitat assessment.

Photograph 11: Facing west. San Simeon Creek Lagoon extended a short distance past State Route 1 during the habitat assessment. The closed sandbar is visible in the background.

Appendix C Flora and Fauna Compendium

Flora Compendium

Scientific Name	Common Name
Anagallis arvensis	scarlet pimpernel
Artemisia douglasiana	mugwort
Avena fatua	wild oat
Baccharis pilularis	coyote brush
Brassica nigra	black mustard
Bromus catharticus	rescue grass
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess
Carduus pycnocephalus	Italian thistle
Conium maculatum	poison hemlock
Convolvulus arvensis	field bindweed
Cyperus eragrostis	tall cyperus
Equisetum telmateia ssp. *braunii*	giant horsetail
Erodium sp.	filaree
Eschscholzia californica	California poppy
Festuca perennis	Italian rye grass
Foeniculum vulgare	fennel
Geranium dissectum	wild geranium
Helminthotheca echioides	bristly ox-tongue
Hirschfeldia incana	shortpod mustard
Hordeum brachyantherum	meadow barley
Hordeum murinum	mouse barley
Hotia macrostachya	California hemp
Lotus corniculatus	Bird's foot trefoil
Lupinus sp.	lupine
Malva parviflora	cheeseweed
Medicago polymorpha	bur clover
Mentha sp.	wild mint
Narcissus sp.	narcissus
Phalaris aquatic	canary grass
Pinus radiate	Monterey pine
Plantago sp.	plantain
Raphanus raphanistrum	wild radish
Rubus sp.	blackberry
Rubus sp.	raspberry
Rumex sp.	dock
Salix lasiandra	Pacific willow

Scientific Name	Common Name
Salix lasiolepis	arroyo willow
Sambucus nigra	Mexican elderberry
Senecio vulgaris	common groundsel
Silybum marianum	milk thistle
Sonchus asper	sowthistle
Taraxacum officinale	dandelion
Toxicodendron diversilobum	poison oak

Fauna Compendium

Scientific Name	Common Name
Amphibians	
Pseudacris sierra	Sierran chorus frog
Birds	
Agelaius phoeniceus	red-winged blackbird
Anas platyrhynchos	mallard
Aphelocoma californica	western scrub-jay
Ardea alba	great egret
Ardea herodias	great blue heron
Bombycilla cedrorum	cedar waxwing
Buteo jamaicensis	red-tailed hawk
Buteo lineatus	red-shouldered hawk
Butorides virescens	green heron
Callipepla californica	California quail
Calypte anna	Anna's hummingbird
Carduelis psaltria	lesser goldfinch
Cathartes aura	turkey vulture
Chamaea fasciata	wrentit
Charadrius vociferus	killdeer
Colaptes auratus	northern flicker
Corvus brachyrhynchos	American crow
Cyanocitta stelleri	Steller's jay
Egretta thula	snowy egret
Empidonax difficilis	Pacific-slope flycatcher
Euphagus cyanocephalus	Brewer's blackbird
Fulica americana	American coot
Geothlypis trichas	common yellowthroat
Haemorhous mexicanus	house finch
Icterus bullockii	Bullock's oriole
Larus californicus	California gull
Larus occidentalis	western gull
Melanerpes formicivorus	acorn woodpecker
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Mergus merganser	common merganser
Molothrus ater	brown-headed cowbird
Myiarchus cinerascens	ash-throated flycatcher
Oreothlypis celata	orange-crowned warbler
Passerina amoena	lazuli bunting
Petrochelidon pyrrhonota	cliff swallow
Phalacrocorax auritus	double-crested cormorant
Pheucticus melanocephalus	black-headed grosbeak
Picoides nuttallii	Nuttall's woodpecker
Pipilo maculatus	spotted towhee
Piranga ludoviciana	western tanager

Poecile rufescens	chestnut-backed chickadee
Psaltriparus minimus	bushtit
Quiscalus mexicanus	great-tailed grackle
Selasphorus sasin	Allen's hummingbird
Setophaga petechial	yellow warbler
Sialia Mexicana	western bluebird
Spinus tristis	*American goldfinch*
Stelgidopteryx serripennis	northern rough-winged swallow
Sturnus vulgaris	European starling
Tachycineta thalassina	violet-green swallow
Troglodytes aedon	house wren
Turdus migratorius	American robin
Vireo gilvus	warbling vireo
Wilsonia pusilla	Wilson's warbler
Zenaida macroura	mourning dove

Fish

Eucyclogobius newberryi	tidewater goby
Gasterosteus aculeatus	threespined stickleback

Mammals

Odocoileus hemionus	mule deer

Reptiles

Sceloporus occidentalis	western fence lizard
Thamnophis elegans terrestris	coast garter snake