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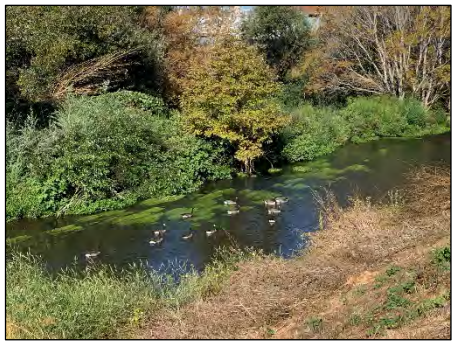

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Microsoft San José City Data Center 4
PG&E Reconductoring
Biological Resources Report

Project #4658-04

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List of Abbreviated Terms

AMMs	avoidance and minimization measures
APMs	applicant proposed measures
Bay Area HCP	PG&E Bay Area Habitat Conservation Plan
BMPs	best management practices
BO	Biological Opinion
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
EFH	Essential Fish Habitat
ESU	Evolutionarily Significant Unit
FESA	Federal Endangered Species Act
FMP	Fisheries Management Plan
FPs	field protocols
GPS	global positioning system
HCP	habitat conservation plan
HMMP	habitat mitigation and monitoring plan
kV	Kilovolt
LSAA	Lake and Streambed Alteration Agreement
MBTA	Migratory Bird Treaty Act
MBZ	Map Book zone
MM	Mitigation Measure
MMPA	Marine Mammal Protection Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
OHW	ordinary high water
OPGW	optical ground wire
PG&E	Pacific Gas & Electric
Porter-Cologne	Porter-Cologne Water Quality Control Act
Refuge	Don Edwards San Francisco Bay National Wildlife Refuge
RWQCB	Regional Water Quality Control Board
SCVHA	Santa Clara Valley Habitat Agency

SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TSP	tubular steel pole
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
Valley Water	Santa Clara Valley Water District
VegCAMP	Vegetation Classification and Mapping Program
VHP	Santa Clara Valley Habitat Plan

Table of Contents

Section 1. Introduction 1
1.1 Reconductoring Activities Overview 1
1.1.1 Existing Newark-Trimble 115 kV Power Line 1
1.2 Description of Reconductoring Activities 2
1.2.1 Guard Structures 2
1.2.2 Snub Poles 5
1.2.3 Line Replacement 5
1.2.4 Potential Tower and Pole Replacements 6
1.2.5 Potential Tower Modifications 8
1.2.6 Microwave Towers 8
1.2.7 Foundation Improvements 8
1.2.8 Pull Sites 9
1.2.9 Staging Areas 9
1.2.10 Helicopter Use 9
1.2.11 Access Roads 10
1.2.12 Erosion and Sediment Control and Pollution Prevention during Construction 10
1.2.13 Cleanup and Post-Construction Restoration 10
1.2.14 Construction Workforce and Equipment 11
1.2.15 Transmission Line Operation and Maintenance 12
1.3 Habitat Conservation Plan Coverage 12
Section 2. Methods 14
2.1 Background Review 14
2.2 Site Visits 15
2.2.1 Habitat Mapping 15
Section 3. Regulatory Setting 26
3.1 Federal Laws and Regulations 26
3.1.1 Clean Water Act 26
3.1.2 Rivers and Harbors Act 27
3.1.3 Federal Endangered Species Act 28
3.1.4 Magnuson-Stevens Fishery Conservation and Management Act 30
3.1.5 Federal Migratory Bird Treaty Act 30
3.2 State Laws and Regulations 31
3.2.1 Porter-Cologne Water Quality Control Act 31
3.2.2 California Endangered Species Act 32
3.2.3 California Environmental Quality Act 33
3.2.4 California Fish and Game Code 35
3.2.5 State Water Resources Control Board Stormwater Regulation 36
3.3 Local Laws and Regulations 37
3.3.1 City of San José Tree Ordinance 37
3.3.2 City of Santa Clara Tree Ordinance 38
3.3.3 City of Fremont Tree Ordinance 39
Section 4. Environmental Setting 40
4.1 General Survey Area Description 40
4.2 Land Cover/Biotic Habitat Types 43
4.2.1 Tidal Brackish Marsh 43
4.2.2 Tidal Creek/Slough 44
4.2.3 Diked Salt Marsh 45

4.2.4 Salt Panne 47
4.2.5 Managed Pond 48
4.2.6 Other Ponds/Sloughs 49
4.2.7 Freshwater Marsh 50
4.2.8 Non-tidal Stream 50
4.2.9 Vernal Pools 51
4.2.10 Seasonal Wetlands 52
4.2.11 California Annual Grassland 53
4.2.12 Ruderal Levee Slope 55
4.2.13 Mixed Riparian Forest and Woodland 55
4.2.14 Urban-Suburban 57
4.2.15 Coastal Scrub 58
4.3 Wildlife Movement 58

Section 5. Special-Status Species and Sensitive Habitats 60
5.1 Special-Status Plant Species 63
5.2 Special-Status Animal Species 69
5.3 Sensitive Natural Communities, Vegetation Alliances, and Habitats 88
5.3.1 Sensitive Natural Communities 88
5.3.2 Sensitive Vegetation Alliances 89
5.3.3 CDFW Riparian Habitat 89
5.3.4 Sensitive Habitats (Waters of the U.S./State) 89
5.3.5 Nonnative and Invasive Species 89

Section 6. Impacts and Mitigation Measures 90
6.1 PG&E Compliance with Existing Operations & Maintenance Activity Permits, Approvals, and CEQA Documents 91
6.1.1 PG&E's Bay Area HCP 91
6.1.2 PG&E's Section 404 Regional General Permit 40 95
6.1.3 PG&E's Waste Discharge Requirements/401 Water Quality Certification 98
6.1.4 PG&E's Regional General Permit 40 NMFS Biological Opinion 105
6.1.5 PG&E's Regional General Permit 40 USFWS Biological Opinion 108
6.1.6 PG&E's CDFW Incidental Take Permit and Final Environmental Impact Report 110
6.2 Impacts on Special-Status Species 112
6.2.1 Impacts on Special-Status Plants (Less than Significant) 112
6.2.2 Impacts on the Vernal Pool Tadpole Shrimp (Less than Significant) 114
6.2.3 Impacts on the Crotch's Bumble Bee and Monarch Butterfly (Less than Significant) 115
6.2.4 Impacts on Water Quality, Special-Status Fish, and Essential Fish Habitat (Less than Significant) 116
6.2.5 Impacts on the California Tiger Salamander (Less than Significant) 119
6.2.6 Impacts on the Northwestern Pond Turtle (Less than Significant) 120
6.2.7 Impacts on the California Ridgway's Rail and California Black Rail (Less than Significant) 121
6.2.8 Impacts on the Western Snowy Plover (Less than Significant) 123
6.2.9 Impacts on the Burrowing Owl (Less than Significant) 125
6.2.10 Impacts on Other Nesting Birds (Less than Significant) 126
6.2.11 Impacts on the Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew (Less than Significant) 128
6.2.12 Impacts on Nonbreeding Special-Status Animals (Less than Significant) 130
6.2.13 Impacts due to Bird Collisions and Electrocutions (Less than Significant) 131
6.3 Impacts on Sensitive Communities 132
6.3.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (Less than Significant) 132
6.4 Impacts on Wetlands (Less than Significant) 133
6.5 Impacts on Wildlife Movement (Less than Significant) 135
6.6 Impacts due to Conflicts with Local Policies (Less than Significant) 136

6.6.1 Impacts Due to the Removal of Ordinance-Sized Trees (Less than Significant) 136
6.7 Impact due to Conflicts with an Adopted Habitat Conservation Plan (No Impact) 137
6.8 Cumulative Impacts (Less than Significant) 137
Section 7. References 139

Figures

Figure 1. Vicinity Map 3
Figure 2. Biological Resources Survey Area 4
Figure 3. Land Cover Map 16
Figure 4. CNDDB-Mapped Records of Special-Status Plants 61
Figure 5. CNDDB-Mapped Records of Special-Status Animals 62

Tables

Table 1. Anticipated Construction Equipment 11
Table 2. Soil Type, Texture, Drainage Classification, and Hydric Soil Status for Soil Types Occurring within the Survey Area 41
Table 3. Land Cover Types/Biotic Habitats within the Survey Area 43
Table 4. Special-Status Plant Species, Their Status, and Potential for Occurrence within the Survey Area 64
Table 5. Special-Status Animal Species, Their Status, and Potential for Occurrence within the Survey Area 70
Table 6. Applicable Bay Area HCP Avoidance and Minimization Measures for Reconductoring Activities 92
Table 7. Applicable RGP 40 Conditions to the Reconductoring Activities 95
Table 8. Applicable WDR and CWA Section 401 Measures to the Reconductoring Activities 98
Table 9. Applicable Regional General Permit 40 NMFS Biological Opinion Avoidance and Minimization Measures to the Reconductoring Activities 106
Table 10. Applicable Regional General Permit 40 USFWS Biological Opinion Avoidance and Minimization Measures to the Reconductoring Activities 108
Table 11. Applicable CDFW Incidental Take Permit Final Environmental Impact Report Applicant Proposed Measures, Avoidance and Minimization Measures, Best Management Practices, and Field Protocols to the Reconductoring Activities 110

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Section 1. Introduction

This report describes the biological resources present along Pacific Gas and Electric Company's (PG&E's) Microsoft San José Data Center 04 and 06 Reconductoring Work Areas in Santa Clara and Alameda Counties, California, as well as the potential biological impacts of proposed reconductoring activities and measures necessary to reduce these impacts to less than significant levels under the California Environmental Quality Act (CEQA). This assessment is based on the project maps and description provided to H. T. Harvey & Associates by David J. Powers & Associates and Stantec through March 28, 2024. This report supplements and amplifies the Biological Resources report prepared by H. T. Harvey & Associates addressing the remaining components of the Microsoft San José Data Center 04 and 06 Project (Project or SJ04), dated September 9, 2022.

1.1 Reconductoring Activities Overview

PG&E proposes to reinforce the electric transmission system in Santa Clara and Alameda Counties by replacing the conductors (a process referred to as "reconductoring") on approximately 12 miles of the Newark-Trimble 115 kilovolt (kV) line (Figures 1 and 2). Although detailed design has not been completed, it is likely that PG&E will also determine the need to replace or modify individual structures along this line to support the heavier conductors.

1.1.1 Existing Newark-Trimble 115 kV Power Line

PG&E's Newark-Trimble 115 kV Power Line is located in established transmission corridors within the Cities of Fremont, Santa Clara and San Jose. The vast majority of the line, which is co-located on the same structures with a second line (circuit), is located adjacent to one or more other single- and double-circuit transmission lines. A portion of the line crosses a creek, river, and other bay-related water features and salt marsh. Another portion of the line is within a highly urbanized environment.

The Newark-Trimble 115 kV Power Line extends from PG&E's existing Newark Substation, located west of the intersection of Auto Mall Parkway and Nobel Drive in the City of Fremont, to the Trimble Substation located at 44467 Component Drive in the City of San Jose. The line is entirely above ground and supported on lattice steel towers or steel monopole structures referred to as tubular steel poles (TSPs).

The existing 115 kV line leaves the Newark Substation to the south and then travels east in a transmission corridor with other, parallel transmission lines. The transmission lines are supported on lattice steel towers located approximately 800-1000 feet apart. The Newark-Trimble line is the northerly of the two lines. Both lines turn to the southeast and cross Coyote Creek, where they turn directly south. The Newark-Trimble line is located to the east of the other existing double-circuit transmission lines. The lines again cross Coyote Creek and enter Santa Clara County, cross a body of water into the City of San Jose, and bear to the southwest eventually running parallel to Grand Boulevard. The two lines separate on the north side of the Guadalupe River near the Guadalupe Trail, where the Newark-Trimble 115 kV line bears slightly to the east and crosses

the Guadalupe River. The line then continues southwesterly across a railroad line with a sharp turn to the southeast near America Center Court.

At this turn, the 115 kV Newark-Trimble line joins another double-circuit electric line located to its south and is supported on TSPs. The line runs parallel to the southern side of an existing railroad line and Lafayette Boulevard and continues southeasterly across State Route 237. The line makes a sharp turn to the southwest at Silicon Valley Power (SVP) Northern Receiving Station. The line travels along the southern end of the SVP Northern Receiving Station in a transmission corridor and, at the southwestern corner, turns sharply to the southeast. This portion of the line is in a transmission corridor within a residential area and is supported on lattice steel towers. The line crosses Montague Expressway and then turns northeast just south of the intersection of Norman Avenue and Leonard Court in an industrial parking lot. The line continues northeast within Laurie Avenue and then in a dedicated transmission corridor until it crosses De La Cruz Avenue, where it turns sharply to the southwest. The line continues within Edward Avenue until it crosses the Guadalupe River and West Trimble Road, continuing across the southwestern portion of the Project Site. The line turns sharply to the northeast at the southwest corner of the Project Site. The line continues northeast supported on TSPs located in an existing parking lot and through Component Drive, past Orchard Parkway, until it turns into the south side of Trimble Substation.

1.2 Description of Reconductoring Activities

The design work to reconductor the 115kV Newark-Trimble Line is ongoing and will include estimating the loads from the new conductor as well as the capacity of the existing towers and poles to handle those loads based on the latest design criteria. This may mean that some of these towers and poles will need to be modified or replaced. PG&E will replace the existing 715 all aluminum conductor with a higher-capacity conductor. Preliminary analysis based on reasonably available information indicates that the existing structures may be able to support the new conductor. Based on the foregoing, for purposes of a conservative analysis, the following is a description of the assumed activities and steps that PG&E would likely employ to accomplish the reconductoring and thus will be included in this project description for purposes of conducting the Project's CEQA analysis. For purposes of this analysis, we have assumed that an area 200 feet long by 100 feet wide around each support structure could be disturbed. The total estimated disturbance is therefore approximately 40 acres.

1.2.1 Guard Structures

Temporary wood poles will be used as guard structures at locations where they are required, typically at busy road crossings, trails, or other utility lines. Guard structures typically consist of a pair of temporary vertical wood poles that are direct buried with a horizontal cross-arm or netting. Guy wires may be installed to provide tension support for netting. Guard structures are installed as a safety precaution to prevent the conductor from falling to the ground should it be dropped or sagged excessively during reconductoring. These structures will typically extend approximately 30-50 feet aboveground and approximately 5-7 feet below ground.

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Figure 1. Vicinity Map
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Figure 2. Survey Area
Microsoft San José City Data Center 4 PG&E Reconductoring (4658-04)
March 2024

In lieu of installing temporary wood poles as guard structures, bucket or line trucks may be staged at crossings to hold the conductor and prevent it from falling, minimize ground disturbance or to accommodate other construction-related needs.

The guard structure designed for the SR 237 crossing will include netting to provide additional protection against falling or sagging conductor. The poles used for netted guard structures will be guyed for stability. It is anticipated that a combination of temporary lane closures and rolling breaks will be required to install the nets onto the guard structures.

To prevent the conductor from sagging onto other utility lines or roads, temporary guard structures will be installed as needed at crossings of electric lines, recreation trails, and roadways. Two, 2-pole or 3-pole guard structures with netting will be placed on each side of SR 237. When netting is used, temporary guy wires will be installed to support the additional load on the wood pole structures. Equipment needed to install the wood poles will likely operate from existing disturbed areas, such as road shoulders. It is estimated that installation of each guard structure pole will disturb approximately 100 square feet, accounting for the augured diameter plus stockpiled spoils. Guard structure poles will be installed in disturbed roadsides or developed areas where possible. K-rail will be placed along SR 237 shoulders to isolate the guard structures from vehicle traffic. Construction personnel will be stationed at trail crossings to temporarily hold or redirect recreationists to prevent contact with conductor during pulling operations.

1.2.2 Snub Poles

Snub poles are temporary wood poles used to facilitate pulling operations. Approximately two temporary snub poles may be required at each pull site where the conductor cannot be attached directly to the structure because of structure design. Snub poles typically extend approximately 30-50 feet aboveground and approximately 5-7 feet below ground. Snub poles will be removed upon completion of each wire pull.

1.2.3 Line Replacement

During Reconductoring Activities, the existing power lines will be taken out of service. To replace a conductor with a new conductor, the existing conductor will be detached from its support structure and temporarily lifted. Rollers then will be installed at the conductor's attachment point and the conductor will be placed onto the rollers. The rollers will allow the existing conductor to be pulled through each structure until the new conductor is ready to be pulled up to the final tension position. Installing rollers and detaching the existing conductor will be accomplished using a helicopter to transport workers and materials to each tower.

A sock line will then be attached to the existing conductor, and a line truck with a drum puller and empty conductor reel will pull the old conductor onto the reel where it will be collected for salvage. The pulling through each structure will be done under controlled tension to keep the conductor elevated and away from obstacles. As a safety precaution during conductor removal, guard structures will be placed where the conductor

crosses public roads, recreations trails, or other utility lines to prevent injury or damage if the conductor were to inadvertently fall.

Reel stands mounted on a line truck will feed the new conductor along the rollers at each structure while maintaining tension in the line to prevent contact with the ground or other obstacles. After the conductor is pulled into place, conductor sags will be adjusted to required tensions. This sequence will occur three times per circuit. The conductor will then be clamped to the end of each new insulator as the rollers are removed, and new vibration dampers and other accessories will be installed.

1.2.4 Potential Tower and Pole Replacements

If structures located on land must be replaced, they will be installed with typical ground-based equipment, such as cranes, flatbed trucks, and line trucks, and possibly helicopters. Structures will typically be delivered to the work site in sections by tractor-trailer and assembled at ground level using a crane and cribbing.

Tower installation: If new towers must be installed, they may be installed using the drilled pier method. Each tower will require four foundations. Drilled pier foundations will have a diameter of approximately 6 feet and will range between approximately 20 and 30 feet deep. This technique will require an area of approximately 100 by 100 feet (0.3 acre) at each location. Matting will be used to provide both a stable work area and access to the work area, as needed. A drilled foundation is constructed by boring a hole into which concrete is poured and anchor bolts are set. Excavation for the foundation for each leg will take approximately 2 days per tower leg if conditions are dry (eight days total per tower), or three to four days per tower leg if groundwater is encountered (up to 16(?) days total per tower). Drilling fluids will be disposed of using a mud recycler. Excess spoils will be hauled off site for disposal or used elsewhere on the Project Site as fill, as appropriate. If dewatering is necessary during excavation, water will be discharged to the surface in compliance with applicable laws and regulations or discharged to a portable tank or other container and disposed off-site in compliance with any applicable state and federal regulatory standards.

TSP installation: If new TSPs are required, the holes will measure approximately 6 feet wide and 30 feet deep. Excavated soils will be feathered in around the pole site and stabilized. A plastic sleeve may be placed in the hole to prevent cave-in; the plastic sleeve will not be removed prior to pole installation. Plywood and plastic coverings will be used to cover the excavated holes until pole installation activities begin.

The holes for TSPs will typically be drilled and excavated using a crawler-mounted augur. The excavator will set up adjacent to the existing pole and the new pole site. Line trucks mounted with augers will be used where poles are located in or adjacent to pull sites, staging areas, existing access roads, developed property, and where there is relatively level, open terrain.

Although drilled piers are the preferred method for tower foundation it is possible that site specific soil conditions may require installation of piles. In the event piles are required, pile types include wood, steel, and concrete piles. Concrete piles would be cast in place using a hollow steel pile as the casing or form. Installations

would occur by helical pile driving, vibratory hammer pile driving, and impact hammer pile driving. Helical pile driving is a relatively new method of pile installation where large piles are screwed into the soil instead of being driven with a hammer. The type of pile installation utilized at each reconductoring area will be determined by the site characteristics (e.g., soil or substrate type) and/or the availability of pile type.

The majority of any pile-driving activities required for tower repair/replacements and foundation repairs/replacements will occur within muddy, fine materials, and soft habitat that range from clay (very fine) to silt to sand (relatively coarse). A barge mounted vibratory or impact hammer, or a combination of the two, would be used to drive any piles. A helical pile driver or impact hammer may be utilized to install piles to their final depth. Piles would range from 16 to 72 inches in diameter. If an impact hammer is used, up to 2,000 strikes may occur per day.

When 24-inch diameter piles or smaller are used to repair foundations at a single tower, approximately 16 piles are installed and pile driving would last between approximately 16 and 24 days. When 60-inch diameter piles are used to repair foundations at a single tower, four piles are installed and pile driving would typically take between approximately 6 and 15 days. Installation of 72-inch piles would be similar to 60-inch diameter piles.

Pole sites that are not accessible by vehicles due to the absence of access roads and presence of steep terrain will typically be excavated by hand. Crews and equipment will be transported by helicopter to a nearby clearing or will access the pole site on foot from the nearest established access road. Equipment will include standard digging tools or portable equipment, as well as a compressor and jackhammer. It may be necessary for crews to establish a small pad for the compressor to make it stable. Crews will use the jackhammer and other portable equipment to excavate a hole for the new pole.

New TSPs will be set in a concrete-pier foundation. A line truck will be used to place foundation forms, anchor bolts, and rebar. A cement truck will be used to deliver and pour concrete for the foundation form. Once the concrete has set, the form will be removed and gravel placed around the base. A crane will then be used to install the new TSP on the foundation. After the poles are set, any additional hardware will be added to the cross-arms using a utility task vehicle with a worker-lift attachment.

Tower removal: Once the existing conductors for both circuits are transferred to the new structures, crews can begin disassembling and removing the existing lattice towers. To remove the top section, a helicopter or crane will be rigged to the top of the tower and sections will be unbolted or cuts will be made at the desired removal point. The structure will be lifted and lowered to the ground where it will be cut into smaller sections and either transported to a laydown area or directly to a recycling facility. To remove the lower section, the legs will be cut off just above the foundations and a boom truck will remove the remaining sections. Existing foundations will be removed, including all concrete and steel, unless cutting them off below ground surface will reduce environmental impacts. The excavation resulting from footing removal will be filled in with soils excavated from the new foundation sites.

1.2.5 Potential Tower Modifications

Tower modifications may be necessary. If necessary, they may consist of installing Optical Ground Wire (OPGW) peaks to support the new OPGW, cage-top extensions to increase conductor clearance over open water or other structures, and structural body modifications to support the additional load from the new conductor. The OPGW peaks are typically 4.5-6-foot lattice extensions mounted to the top of the tower, and the cage-top extensions are typically 16-foot lattice extensions with cross arms bolted to the top of the tower. The tower body modifications will entail changing out and adding braces to the lower cage portion of the tower.

Installing OPGW peaks and cage-top extensions will be accomplished using a medium-duty helicopter to transport crews and materials to tower locations. The existing towers will be prepared to accommodate the extensions by installing any necessary braces or additional plates at connection points. The OPGW peaks and cage-top extensions will be pre-assembled at staging areas and transported to the individual towers by helicopter where crews will bolt the peaks and extensions onto the existing towers. Most of the body modifications will entail changing out and adding braces to the lower cage portion of the tower.

1.2.6 Microwave Towers

PG&E will likely install two microwave towers to help fulfill the Reconductoring Activities' telecommunication and system protection requirements. One microwave telecommunication tower is proposed to be located at the SJC04 Component Switching Station on the Data Center Site and one at the Zanker Road Substation at the City of San Jose/Santa Clara Regional Water Treatment Facility (Figure 2). The towers will be installed adjacent to the control enclosures at each location. The towers are expected to be approximately 80-90 feet in height and consist of three-leg, self-supporting lattice steel towers on top of 20-foot by 20-foot slab foundations. An approximately 4-foot diameter microwave transmitter will be installed near the top of each tower, connected by communication and power conduits. Field verification and line-of-sight path surveys may affect the ultimate tower dimensions but any changes would likely result in a smaller footprint given the conservative assumptions relied upon herein.

1.2.7 Foundation Improvements

Foundation work at towers, if necessary, may consist of installing Tubex soil displacement piles adjacent to each existing tower footing for a total of 8 piles per tower. The installation starts with screwing in an approximately 16-inch diameter pile, 80 to 100-feet-deep, using a track mounted drill rig. Steel casing is advanced by the drill rig and grout is injected into the void created by the pile casing as the drill progresses. Once the pile is installed to depth, a steel rebar cage is lowered into the casing and the casing is filled with concrete. Any groundwater that accumulates within the pile casing will be dewatered into a baker tank or equivalent for testing, then disposed of in accordance with the applicable Storm Water Pollution Prevention Plan (SWPPP) and applicable state and federal laws and regulations. With the Tubex pile system, there are no spoils generated during installation; the soil is displaced laterally and compacted as the drill bit is advanced. No backfill will be needed for this work, and any incidental drill spoils will be stockpiled on plastic for testing, then removed from the Reconductoring Work Areas for transport to an approved disposal facility.

Once the Tubex piles are in place, a horizontal concrete pile cap will structurally tie the new piles to the existing tower footings. The new concrete pile cap will be formed above the ground surface; no excavation will be required to tie the new piles to the existing foundations.

To provide access and a stable work area around towers in marshlands, access routes and tower work areas will be established by placing timber mats or equivalent protective matting over the ground surface. Towers within marshlands will require approximately 0.3 acre of matted work area around the base of the towers. Limited grading may be needed to establish reconductoring work areas and access, but no grading will occur within marshlands.

If water is present when foundation work is planned, it may be necessary to construct a temporary cofferdam around the perimeter of the work area to isolate foundation work from open water. Cofferdams may consist of water-filled bladders (e.g., aqua dams), sandbags wrapped in plastic, or other similar means of controlling water from entering the work area. Once the cofferdam is in place, the work area will be dewatered in accordance with the applicable SWPPP.

1.2.8 Pull Sites

When conductors are strung between towers, pull sites are used to raise the conductors to the proper ground clearance height and to the proper line tension. Pull sites will have a footprint of approximately 0.2-0.6 acre within previously disturbed or developed areas. A temporary wood pole will be installed at each pull site to serve as a snub pole during reconductoring. Pull sites will be used to stage conductor pulling trucks and conductor reel trucks.

1.2.9 Staging Areas

Temporary staging areas will be the main base of operations during Reconductoring Activities construction and will be used for a variety of purposes, including storage of construction materials and equipment as they arrive on site, as helicopter landing zones, for parking of vehicles and equipment, and as a meeting area for project management and work crews.

1.2.10 Helicopter Use

Access to several of the towers is difficult due to marshland and open-water habitat; use of a helicopter will facilitate delivery of materials and crews without the need to access every tower from the ground. Helicopters will be used to remove and install the conductors, to set the cage-top extensions and OPGW peaks, and transport laborers and materials to the towers. Two light-duty helicopters (Hughes 500 or similar) will be used to transport crew members and materials, and to remove and install conductors. A medium- or heavy-duty helicopter (Bell Ranger UE205 or similar) will be used to install the OPGW peaks and to install the cage-top extensions. Helicopters will fly directly from the landing zone to the alignment, and will follow the alignment to each tower site. At the end of each day, helicopters will return to a local commercial airport or another

appropriately equipped facility. Helicopters will not transport loads over roads or habitable structures. Temporary landing zones with designated areas for helicopter take-offs and landings will be established within the staging areas. Dust suppressants or water will be applied, as needed, to control dust at the landing zone. Helicopters are anticipated to primarily refuel at nearby commercial airports; however, a fuel truck may be available at staging areas to support refueling if needed. Spill prevention measures will be in place for any onsite helicopter refueling in compliance with the applicable SWPPP.

Construction workers using helicopters are required to be certified for helicopter safety, and must produce a certification card to the pilot before they can fly. Personnel and pilots will attend a daily tailboard meeting at the landing zone that covers safety topics for the day, including the route to be taken and work locations to be visited. Helicopter flight plans will be filed with the local Federal Aviation Administration office regulating the local air traffic control plan if required.

1.2.11 Access Roads

Reconductoring work areas will be accessed using a combination of public roads, existing paved and gravel roads, and new matted temporary access routes across marshlands. No new access roads are anticipated to be necessary to complete the Reconductoring Activities, no or minimal grading is anticipated, and no permanent access roads are proposed. Equipment will access tower work areas within marshlands by placing wooden timber mats onto the existing surface to create an approximately 10-foot-wide access route. A combination of matting and steel plates will be utilized to provide equipment access at grade changes (such as when accessing mudflats or marshlands from upland areas).

1.2.12 Erosion and Sediment Control and Pollution Prevention during Construction

Construction of the Reconductoring Activities will require ground-disturbing activities associated with tower foundation work and establishment of work areas. Because these activities will result in disturbance of more than one acre, PG&E will obtain coverage under the State Water Resource Control Board (SWRCB) General Permit for Storm Water Discharges Associated with Construction Activity Order No. 2009-0009-DWQ. To obtain coverage under the permit, PG&E will develop and submit permit registration documents—including a Notice of Intent, SWPPP, risk assessment, site map, certification, and annual fee—to the SWRCB prior to initiating construction activities.

PG&E will implement the SWPPP during construction of the Reconductoring Activities to prevent the discharge of sediment and other pollutants resulting from construction of same. The SWPPP will outline implementation of best management practices (BMPs) for each activity that has the potential to degrade surrounding water quality through erosion, sediment runoff, and discharge of other pollutants.

1.2.13 Cleanup and Post-Construction Restoration

Crews will be required to maintain clean work areas and will be instructed that no debris may be left behind at any stage of the Reconductoring Activities. Packing crates, spare bolts, and construction debris will be picked

up and hauled away for recycling or disposal during construction. Conductors removed from the Reconductoring Work Areas will be taken to appropriate disposal facilities to be reused, recycled, or disposed of in accordance with applicable law. PG&E will conduct a final survey to ensure that cleanup activities have been successfully completed.

Work areas will generally be established by either matting over existing vegetation, or mowing, but certain portions of the Reconductoring Activities will be located within critical habitat, which would likely require restoration of Reconductoring Work Areas. PG&E will follow its existing permit conditions as described in Section 6.1 should restoration be required.

1.2.14 Construction Workforce and Equipment

Project construction will include but may not be limited to a foundation crew, helicopter crew, tower crew, line crew, environmental inspector, and biological monitor. Approximately 15 construction workers will be at the Reconductoring Work Areas on a typical work day; however, because work activities may occur concurrently along the , up to approximately 25 workers may be somewhere on the Reconductoring Work Areas at any time. Multiple crews may be deployed to meet a tight construction schedule.

Construction will typically take place between 7 a.m. and 7 p.m., six days per week. Because construction will progress quickly, construction activities are not expected to take place near any one structure location for more than a few days, with the exception of foundation modifications that could take somewhat longer. Nighttime construction is not anticipated except for certain construction procedures that cannot be interrupted because of safety considerations, such as reconductoring over highway crossings, or to take advantage of line clearances during off-peak hours.

Table 1. Anticipated Construction Equipment

Type of Equipment	Use
Bucket truck	Lift and transport workers
Skid steer	Remove excavation spoils
Concrete truck	Mix and deliver concrete
Pickup truck	Transport personnel, tools, and materials
Compressor	Operate tools
Crawler dozer	Pulling lines and sagging conductors
Drill rig	Excavate foundation holes
Rough terrain forklift	Lift and transport heavy construction items; set crane mats
Generator	Provide temporary power
Light-duty helicopter	Use for pulling operations; also transport crew and materials

Type of Equipment	Use
Medium- or high-duty helicopter	Set cage-top extensions and OPGW peaks
Man lift	Lift crews to structures
Mobile offices	Use as supervision and clerical office
Line truck w/ puller	Pull line in stringing operation
Line truck w/ wire reel	Transport reels of conductor
Line truck w/ tensioner	Hold tension against a pulling line during the stringing phase
Tractor trailer (semi-truck)	Haul materials, equipment, tools, etc.
Boom truck	Lift materials
Water truck	Provide dust control

1.2.15 Transmission Line Operation and Maintenance

No material changes in maintenance and operation activities for the Newark-Trimble 115 kV Power Line would occur compared to existing activities after completion of the Reconductoring Activities. The line will continue to be inspected annually or as needed when driven by an event, such as an emergency. The current PG&E facility inspection process involves three types of inspections: (1) ground inspections; (2) aerial inspections; and (3) climbing, if ground inspections indicate such need. Maintenance of the line is now and will continue to be generally conducted on an as-needed basis, when something is discovered in need of repair during inspections, or in response to an emergency.

1.3 Habitat Conservation Plan Coverage

The Reconductoring Work Areas are located within the Plan Area for the *PG&E Bay Area Operations & Maintenance Habitat Conservation Pla*n (Bay Area HCP) (ICF 2017), which PG&E began implementing in 2017. For the purposes of this report, we have assumed that the Reconductoring Activities will be considered a covered activity under the Bay Area HCP. Five special-status species that could potentially be impacted by the Reconductoring Activities – the Contra Costa goldfields (*Lasthenia conjugens*), vernal pool tadpole shrimp (*Lepidurus packardi*), California tiger salamander (*Ambystoma californiense*), California Ridgway's rail (*Rallus obsoletus obsoletus*), and salt marsh harvest mouse (*Reithrodontomys raviventris*) – are covered species under the Bay Area HCP. Therefore, all applicable HCP conditions (discussed in Section 6.1.1 below) relating to these species are considered part of the project description as applicant-proposed measures rather than as mitigation measures.

Limited portions of the Reconductoring Work Areas that fall within the limits of San José are located within the Santa Clara Valley Habitat Plan (VHP) permit area. However, PG&E is not a permittee under the VHP; instead, PG&E has existing approvals for impacts on biological resources under a variety of existing permits

and other approvals. Therefore, no components of the Reconductoring Activities are considered covered activities under the VHP, and VHP conditions do not apply to the Reconductoring Activities.

Section 2. Methods

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed the project description and maps provided by David J. Powers & Associates and Stantec through March 28, 2024; aerial images (Google LLC 2023); a U.S. Geological Survey (USGS) topographic map; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (2023); the *370 W. Trimble Road Planned Development Rezoning Initial Study/Addendum to the Final Program Environmental Impact Report for the North San José Development Update and the Final Program Environmental Impact Report for the Envision San José 2020 General Plan* (City of San José 2017); the City of San José's General Plan *Envision San José 2040* (City of San José 2023); the City of Fremont's General Plan 2030 (City of Fremont 2010); habitat and species information from the VHP (ICF International 2012) and Bay Area HCP (ICF 2017); the PG&E *Nesting Bird Management Plan* (PG&E et al. 2015); the U.S. Fish and Wildlife Service's (USFWS) *Intra-Service Biological Opinion on the Issuance of a Section 10(a)(1)(B) Incidental Take permit to the Pacific Gas and Electric Company for the Pacific Gas and Electric Company Bay Area Operations & Maintenance Habitat Conservation Plan* (USFWS 2017); the USFWS's *Final Programmatic Formal Consultation for the Pacific Gas and Electric Company's (PG&E) Bay Area Operation and Maintenance (O&M) Program in Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, San Mateo, Solano, and Sonoma Counties, California* (USFWS 2021); the CDFW's *Pacific Gas and Electric Company Bay Area Operations & Maintenance Incidental Take Permit Environmental Impact Report Volume 2. Final EIR* (CDFW 2022); the Refuge's *Warm Springs Seasonal Wetland Unit 2017 Annual Report* (Kakouros and Loredo 2017), *Warm Springs Seasonal Wetland Unit 2019 Annual Report* (Kakouros and Loredo 2020), *2020 Activities Involving Vernal Pool Tadpole Shrimp and the California Tiger Salamander at Don Edwards San Francisco Bay NWR* (Loredo 2020), *2021 Activities Involving Vernal Pool Tadpole Shrimp and the California Tiger Salamander at Don Edwards San Francisco Bay NWR* (Loredo 2021), and *2022 Activities Involving Vernal Pool Tadpole Shrimp and the California Tiger Salamander at Don Edwards San Francisco Bay NWR* (Loredo 2023); *Microsoft San José Data Center SJC04 and SJC06 Crotch's Bumble Bee Survey Report* (H. T. Harvey & Associates 2023); and other relevant reports, scientific literature, and technical databases. For the purposes of this report, the *project vicinity* is defined as the area within a 5-mile radius surrounding the survey area for the Reconductoring Activities.

In addition, for plants, we reviewed all species on current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B lists occurring in the project region, which is defined as the *Milpitas, California* USGS 7.5-minute quadrangles and surrounding eight quadrangles (*Newark, Niles*, *La Costa Valley*, *Mountain View*, *Calaveras Reservoir*, *Cupertino*, *San José West*, and *San José East*) (CNPS 2023). In addition, we queried the CNDDB (2023) for natural communities of special concern that occur along the Reconductoring Work Areas, and we reviewed records of birds reported in nearby areas, such as at the Refuge, in tidal channels, along the Guadalupe River Trail, and the field located east of the intersection of Disk Drive and Grand Boulevard in San José on eBird (Cornell Lab of Ornithology 2023) and on the South-Bay-Birds List Serve (2023).

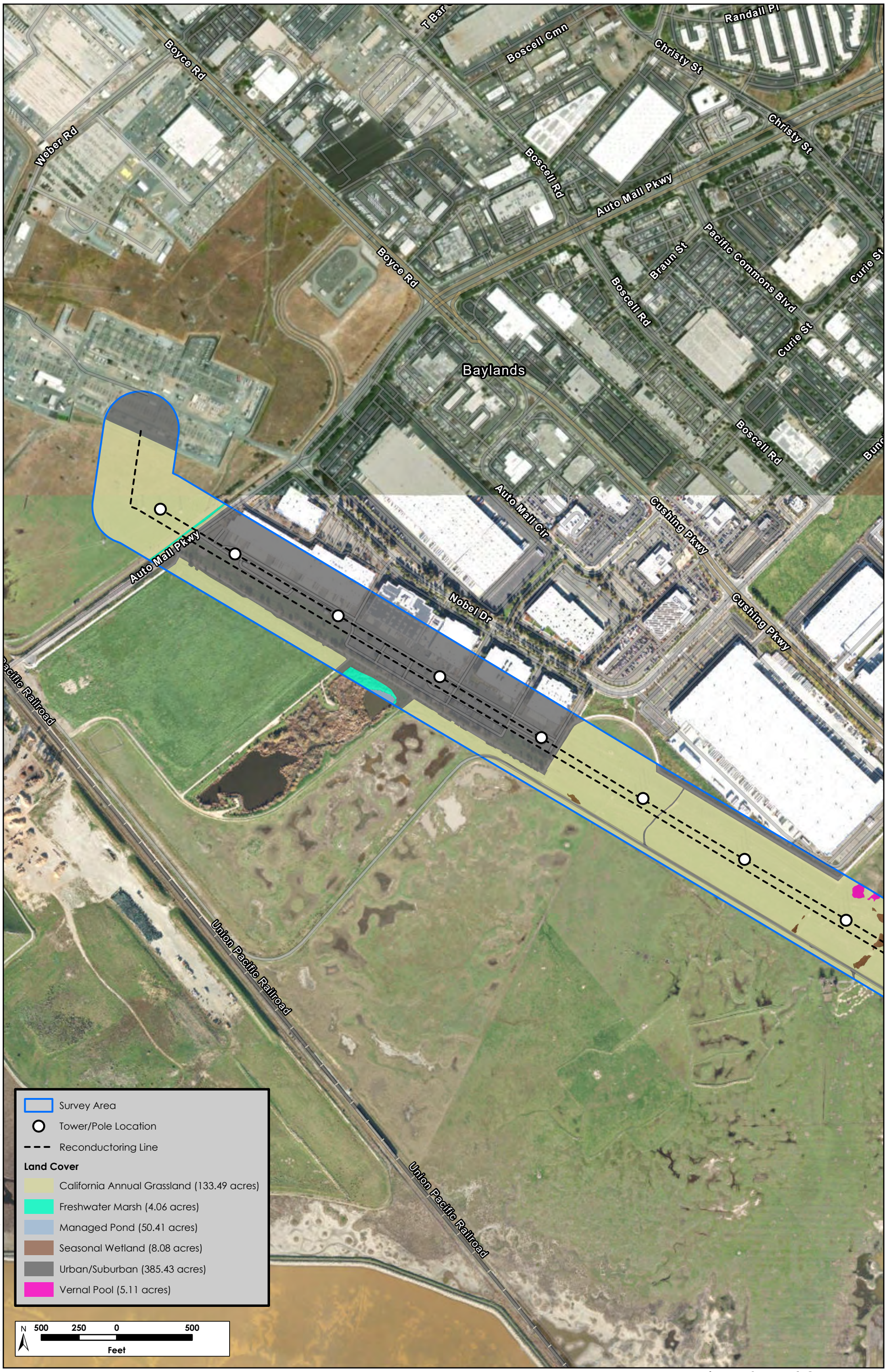
2.2 Site Visits

H. T. Harvey & Associates ecologists Dani Christensen, B.S., Vanessa Morales, B.A., and Katherine Marlin, M.S. conducted reconnaissance-level surveys of the Reconductoring Work Areas on September 8, 11, 27, and 28, and October 30, 2023. The *survey area* included the Reconductoring Work Areas, which includes the towers, power lines, and associated physical infrastructure, as well as a 250-foot buffer on either side of the existing power lines, as access allowed. Due to access and site constraints, we were only able to visually assess the New Chicago Marsh, Pond A18, and marsh surrounding Newby Island Landfill from nearby levee roads. The purpose of these surveys was to provide an impact assessment specific to the proposed construction of the Reconductoring Activities, as described above. Specifically, surveys were conducted to (1) assess existing biotic habitats and plant and animal communities in the survey area, (2) assess the survey area for its potential to support special-status species and their habitats, and (3) identify potential jurisdictional and sensitive habitats, such as waters of the U.S./state and riparian habitat. D. Christensen conducted a focused survey for (1) suitable burrowing owl roosting and nesting habitat (i.e., burrows of California ground squirrels [*Otospermophilus beecheyi*]) within the survey area and (2) evidence of previous raptor nesting activity (i.e., large stick nests).

Where the Reconductoring Work Areas crossed waterbodies such as the Guadalupe River, Coyote Creek, Artesian Slough, and Mud Slough, V. Morales and K. Marlin mapped the limits of the riparian canopy and the top of bank using a combination of a Geode sub-meter global positioning system (GPS) in the field and desktop review of recent satellite imagery (Google LLC 2023). In addition, they conducted targeted surveys for lesser saltscale (*Atriplex minuscula*), Congdon's tarplant (*Centromadia parryi* var. *congdonii*), San Joaquin spearscale (*Atriplex joaquiniana*), Point Reyes salty bird's beak (*Chloropyron maritimum* ssp. *hispidum*), Hall's bush-mallow (*Malacothamnus hallii*), and California seablite (*Suaeda californica*), plant species that may have been detectable at the time of the survey, within the survey area (aside from portions of New Chicago Marsh, Pond A18, and marsh surrounding Newby Island Landfill that were not accessible on foot) during the four surveys. The survey area is shown on Figure 3.

2.2.1 Habitat Mapping

Biotic habitats were mapped in the field using a Geode GPS unit capable of submeter accuracy. Final habitat mapping utilized a combination of GPS data and desktop review of recent aerial imagery (Google LLC 2023). Habitat mapping for this CEQA evaluation does not supersede modeled habitat for covered species as defined by the USFWS in PG&E's Bay Area HCP.



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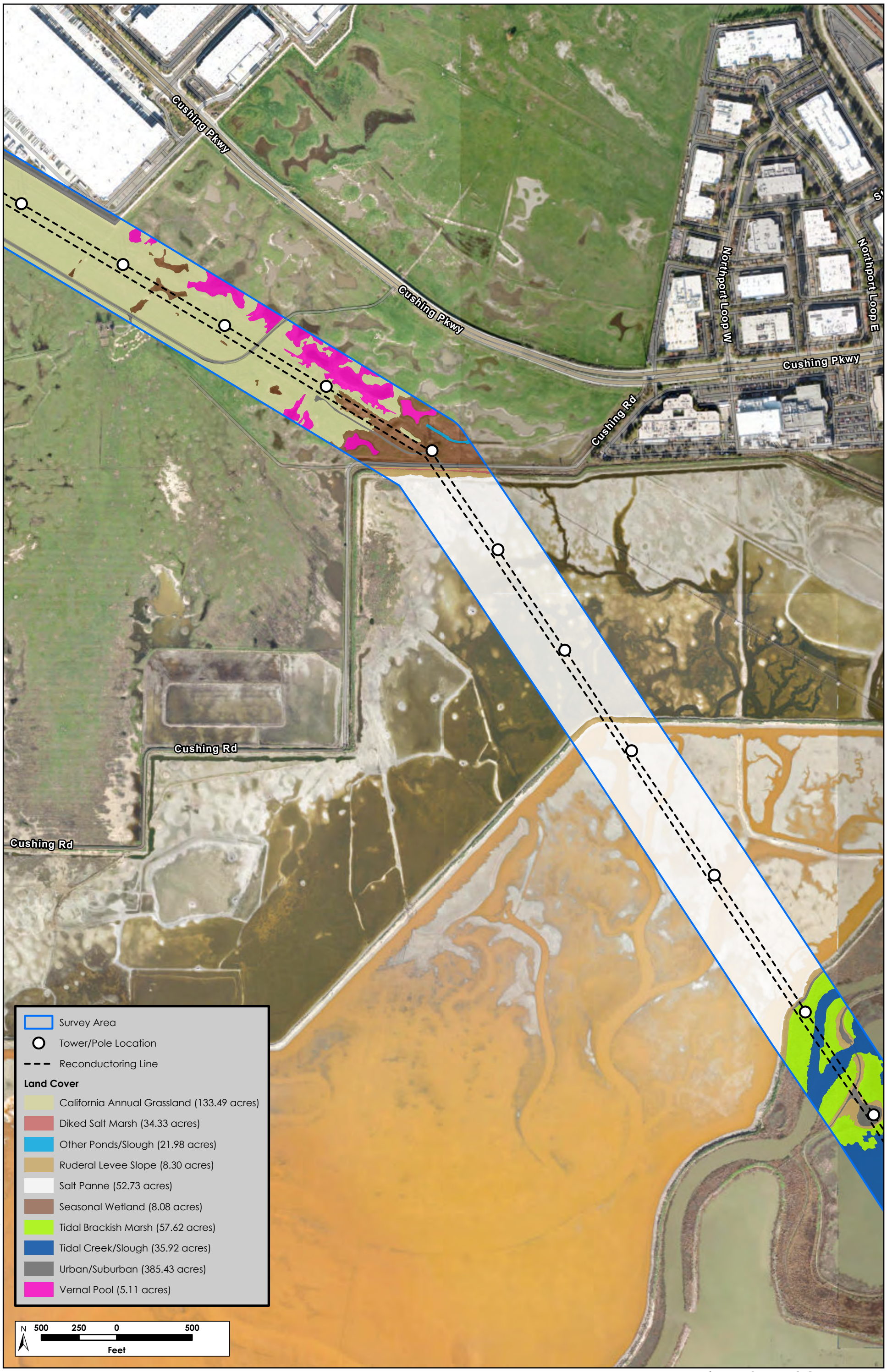
H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 3. Land Cover Map
Microsoft San José City Data Center 4 PG&E Reconductoring (4658-04)
March 2024



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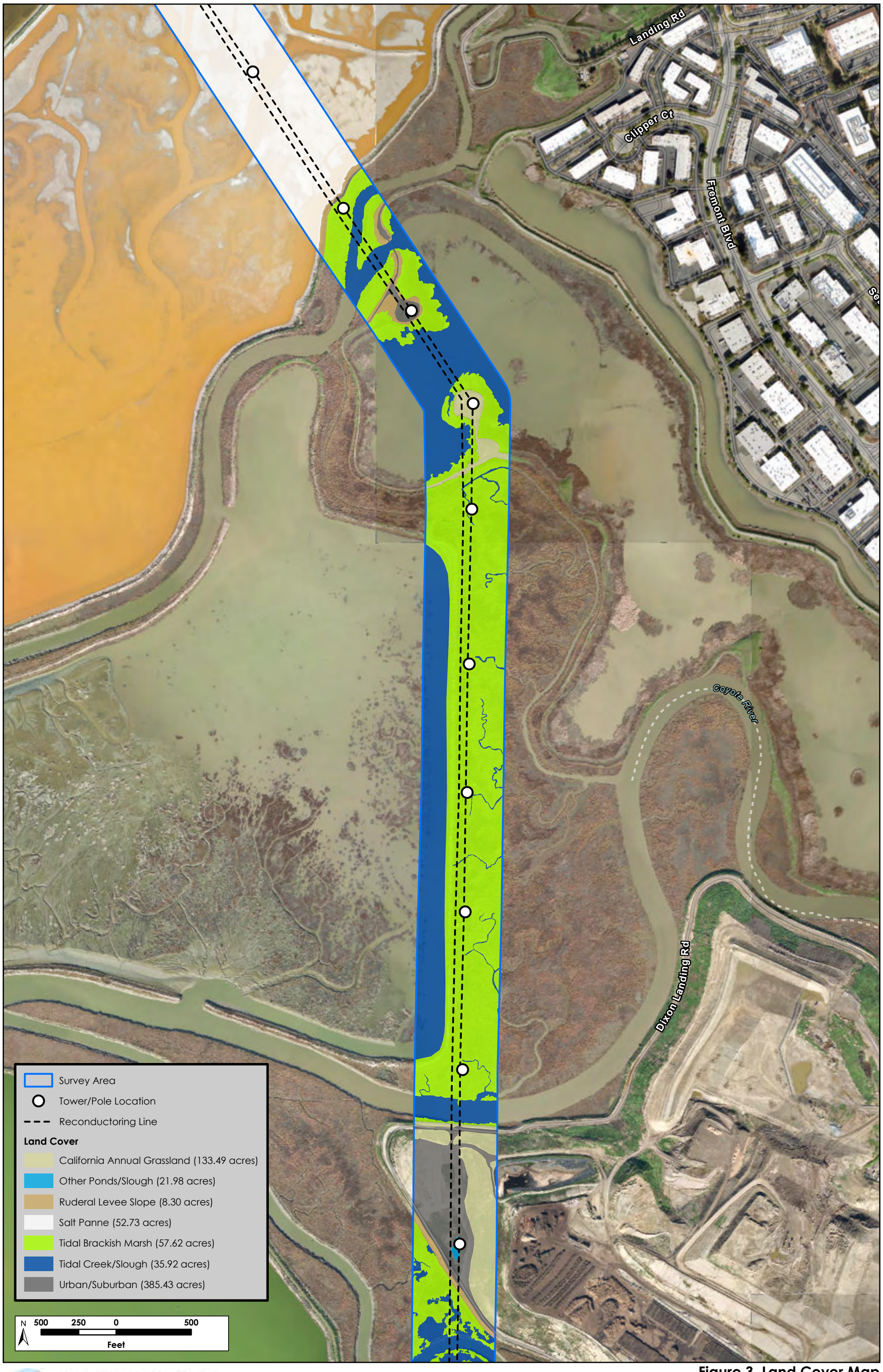

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Figure 3. Land Cover Map
Microsoft San José City Data Center 4 PG&E Reconductoring (4658-04)
March 2024

Survey Area
Tower/Pole Location
Reconductoring Line

Land Cover

- Brackish Marsh (4.82 acres)
- California Annual Grassland (133.49 acres)
- Coastal Scrub (1.95 acres)
- Diked Salt Marsh (34.33 acres)
- Managed Pond (50.41 acres)
- Other Ponds/Slough (21.98 acres)
- Ruderal Levee Slope (8.30 acres)
- Tidal Brackish Marsh (57.62 acres)
- Tidal Creek/Slough (35.92 acres)
- Urban/Suburban (385.43 acres)

N 500 250 0 500
Feet

Dixon Landing Rd
Mud Slough
Mud Slough

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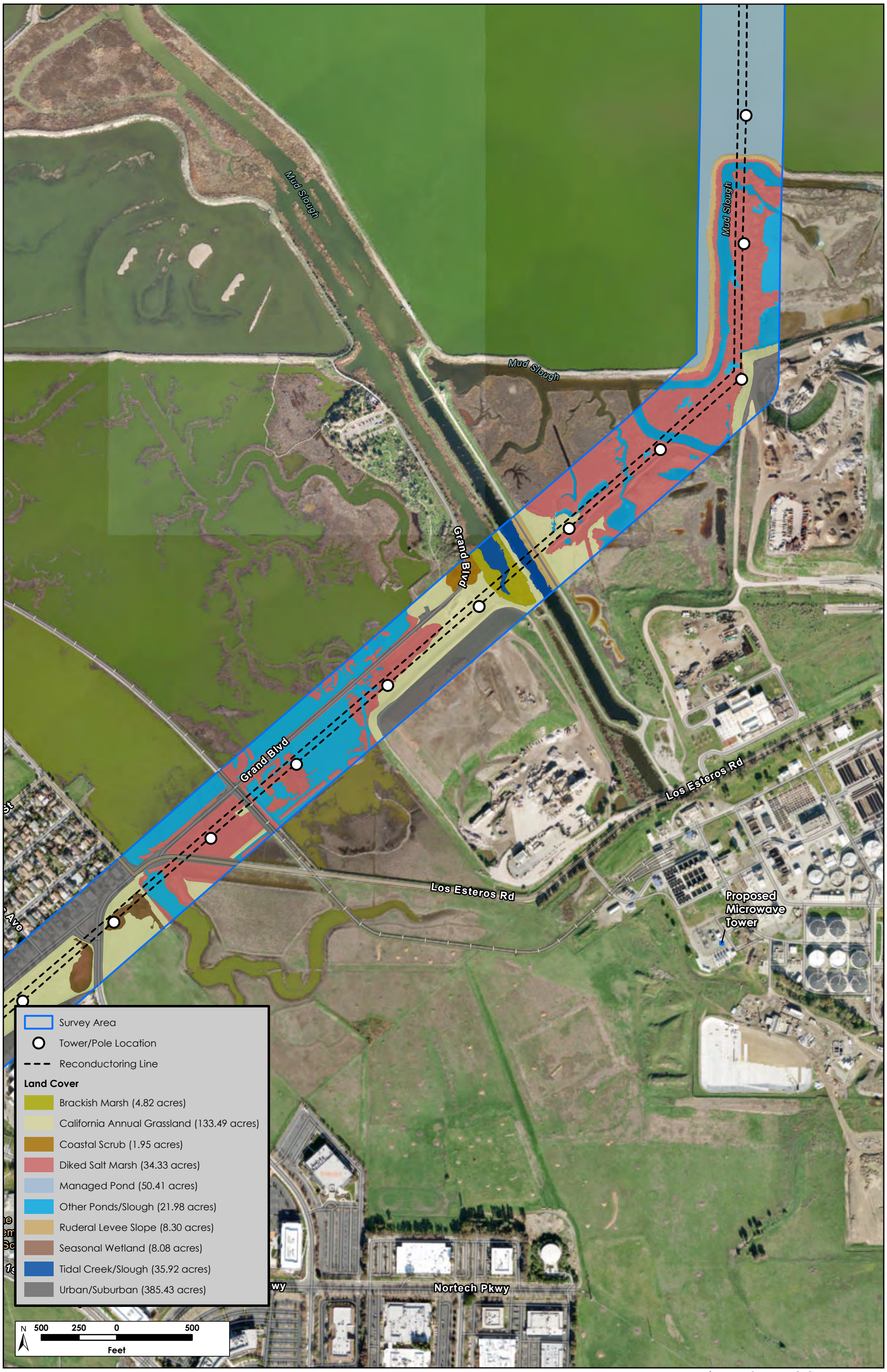

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March 2024

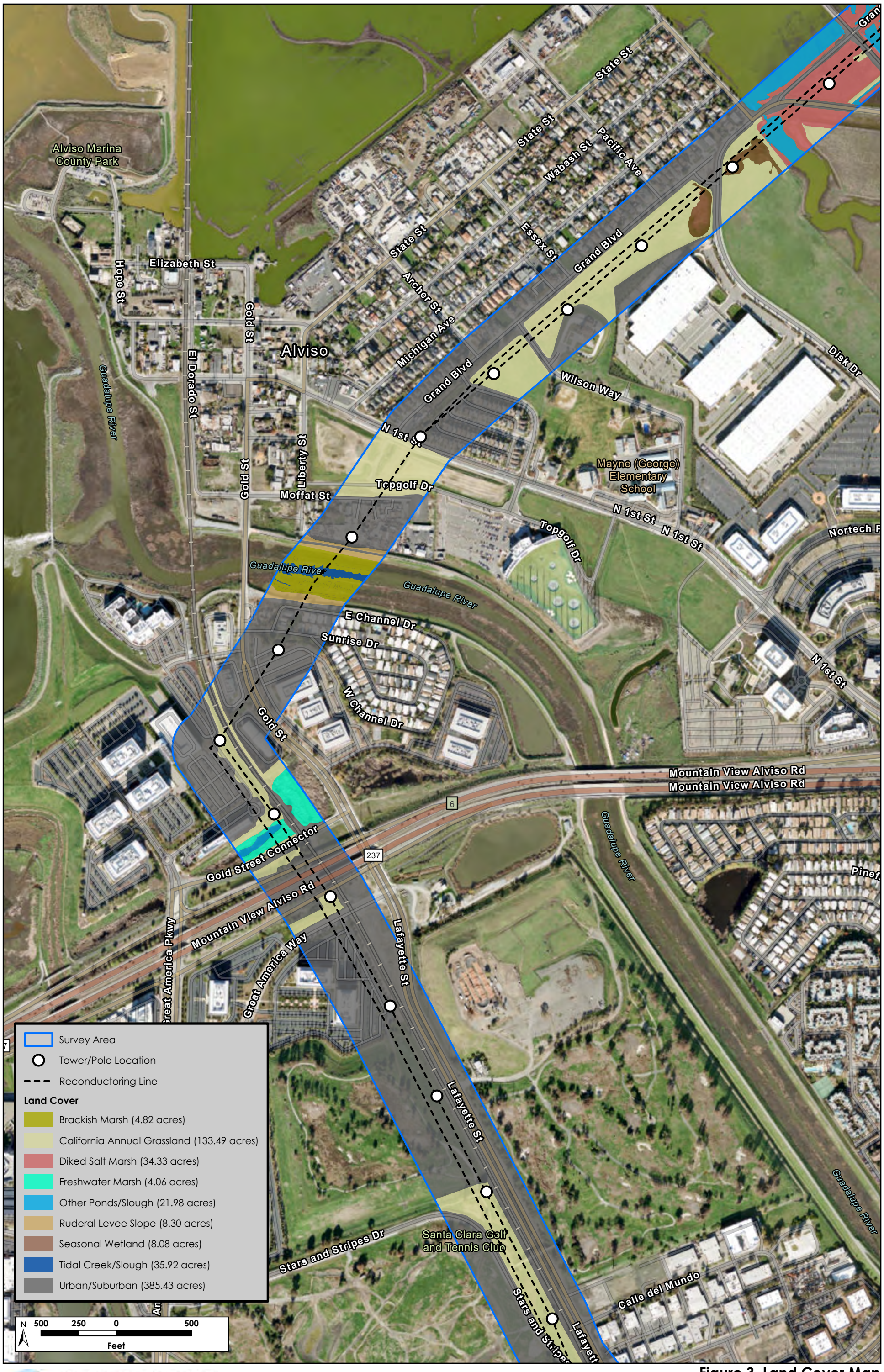

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Figure 3. Land Cover Map
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March 2024

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Ecological Consultants

Figure 3. Land Cover Map
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March 2024

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Figure 3. Land Cover Map
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March 2024

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Ecological Consultants

Figure 3. Land Cover Map
Microsoft San José City Data Center 4 PG&E Reconductoring (4658-04)
March 2024

Section 3. Regulatory Setting

Biological resources along the Reconductoring Work Areas are regulated by a number of federal, state, and local laws, regulations and ordinances, as described below.

3.1 Federal Laws and Regulations

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, U.S. Army Corps of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) mark, which is defined in Title 33, Code of Federal Regulations, Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may be subject to USACE jurisdiction. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 Code of Federal Regulations Part 328.3 as "the line of intersection of the land with the water's surface at the maximum height reached by a rising tide." If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark or high tide line to the outer edges of the wetlands.

On December 30, 2022, the U.S. Environmental Protection Agency and Department of the Army (the agencies) announced a final "Revised Definition of 'Waters of the United States'" rule founded upon the pre-2015 definition of "waters of the United States." This rule was formally adopted in January 2023. To determine jurisdiction for tributaries, adjacent wetlands, and additional waters, the January 2023 rule relies on the longstanding approach of applying two standards. Certain types of waters are jurisdictional under the final rule if they meet either the relatively permanent standard or significant nexus standard. Following adoption of the new revised definition, the May 25, 2023 Supreme Court decision in *Sackett v. Environmental Protection Agency* further affected what can be claimed as waters of the U.S. Rule changes to the January 2023 revised rule consistent with this decision were formally adopted in September 2023, and restrict which wetlands can be considered "adjacent" to relatively permanent features that connect to traditional navigable waters. Broadly, wetlands outside of relatively permanent waters connecting to other waters of the U.S. must be connected via a "continuous surface connection" to those relatively permanent waters to be considered adjacent and therefore waters of the U.S. regulated under the CWA.

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the

absence of Section 401 Water Quality Certification. The SWRCB is the state agency (together with the Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

Project Applicability: The survey area supports wetland and aquatic habitats in a number of locations. The Guadalupe River and Coyote Creek are considered waters of the U.S. based on the presence of an OHW mark, regular flow, and direct hydrologic connectivity to the San Francisco Bay, and wetlands associated with the Guadalupe River and Coyote Creek occur within the OHW mark. Extensive areas of wetland and aquatic habitats either currently or historically connected to tidal waters, but now diked, occur in the vicinity of New Chicago Marsh; Ponds A18, A19, A22, and A23; South Coyote Slough; and the Warm Springs Marshes (Figure 3), and these wetland and aquatic habitats are also likely to be considered waters of the U.S. by the USACE. Isolated seasonal wetlands and vernal pools within the survey area, such as in the Warm Springs Seasonal Wetland area, and wetlands/waters without an obvious surface connection to other relatively permanent waters (such as the pond at Pacific Commons Linear Park) (Figure 3), may not be considered waters of the U.S. by the USACE. USACE verification of a formal delineation of wetlands and other waters would be necessary to determine exactly which features are and are not considered waters of the U.S.

Because the Reconductoring Activities will result in direct and indirect impacts to wetlands and waters subject to the CWA, Section 404 approval from the USACE would be required for the Reconductoring Activities. PG&E would perform the proposed Reconductoring Activities under its programmatic approvals for operations and maintenance activities regulated by the CWA, including USACE Regional General Permit (RGP) 40 and Section 401 Water Quality certification WDID #SB21039IN.

3.1.2 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the creation of any obstruction to the navigable capacity of waters of the U.S., including discharge of fill and the building of any wharfs, piers, jetties, and other structures without Congressional approval or authorization by the Chief of Engineers and Secretary of the Army (33 U.S.C. 403).

Navigable waters of the U.S., which are defined in 33 CFR, Part 329.4, include all waters subject to the ebb and flow of the tide, and/or those which are presently or have historically been used to transport commerce. The shoreward jurisdictional limit of tidal waters is further defined in 33 CFR, Part 329.12 as "the line on the shore reached by the plane of the mean (average) high water." It is important to understand that the USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of bay habitat, and that there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR, Part 329.9, a waterbody that was once navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce as a result of changed conditions and/or the presence of obstructions. Historical Section 10 waters may occur behind levees in areas that are not currently exposed to tidal or muted-tidal influence and meet the following criteria: (1) the area is presently at or below the mean high water line; (2) the area was historically at or below mean high water in its "unobstructed, natural state"; and (3) there is no evidence that the area was ever above mean high water.

As mentioned above, Section 404 of the CWA authorizes the USACE to issue permits to regulate the discharge of dredged or fill material into waters of the U.S. If a project also proposes to discharge dredged or fill material and/or introduce other potential obstructions in navigable waters of the U.S., a Letter of Permission authorizing these impacts must be obtained from the USACE under Section 10 of the Rivers and Harbors Act.

Project Applicability: The survey area overlaps with current Section 10 Waters, as portions of the Reconductoring Work Areas are located within the jurisdictional limit of tidal waters (below mean high water). Such areas include Mud Slough (Figure 3b); Pond A19, Coyote Creek, and South Coyote Slough (Figure 3c); Artesian Slough (Figure 3e); and the lower Guadalupe River (Figure 3f). In addition, the survey area overlaps with historical Section 10 Waters, as portions of the survey area are located behind levees that are presently below mean high water. Such areas include portions of Ponds A22 and A23 (Figure 3b), Pond A18 (Figure 3d), and likely portions of New Chicago Marsh and other channels in the vicinity of Pond A18 and New Chicago Marsh (Figure 3e).

USACE RGP 40 provides Rivers and Harbors Act Section 10 coverage for PG&E's Bay Area Operation and Maintenance Program, including repairing and replacing facilities, structures, and access roads and electrical transmission and distribution reconductoring projects, such as the Reconductoring Activities at hand.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or *take*, which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." *Take* can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as *take* even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from *take* under the FESA only if they occur on federal lands.

The USFWS and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA but may become listed in the near future and are often included in their review of a project.

Project Applicability: Suitable habitat is present within the survey area for two federally listed rare plant species: Contra Costa goldfields and California seablite. Contra Costa goldfields may be present in the survey area, as focused surveys took place outside this species' blooming period, but California seablite was determined to be absent based on negative survey results in the areas that were accessible.

Multiple federally listed wildlife species occur in the survey area in various habitats. The federally endangered California Ridgway's rail and salt marsh harvest mouse occur within certain marsh habitats in the survey area. The federally endangered vernal pool tadpole shrimp and federally threatened California tiger salamander occur

in vernal pools and seasonal wetlands in the Warm Springs Unit of the Refuge, and the California tiger salamander may also be found in adjacent grasslands. The federally threatened western snowy plover (*Charadrius nivosus nivosus*) is found year-round within salt pannes and open areas of diked salt marshes in the survey area, where they breed, roost, and forage. The federally endangered California least tern (*Sternula antillarum browni*) does not breed near the survey area, but it may occur in small numbers as a forager and post-breeding migrant from April through August, in open waters that support fish. The federally threatened Central California Coast Evolutionary Significant Unit (ESU) of the steelhead (*Oncorhynchus mykiss*) is known to occur in the survey area in tidal areas of Coyote Slough and the lower Guadalupe River and non-tidal sections of the Guadalupe River further upstream. The federally threatened Southern Distinct Population Segment of the green sturgeon (*Acipenser medirostris*) and federal candidate longfin smelt (*Spirinchus thaleichthys*) occur in tidal waters of the bay, potentially including lower Guadalupe River and Coyote Slough. The monarch butterfly (*Danaus plexippus*), a candidate for listing under FESA, could breed in the survey area if milkweed (*Asclepias* spp.) is present, but it is more likely to occur as a migrant. The northwestern pond turtle (*Actinemys marmorata*), federally proposed as threatened, may be found in fresh to brackish portions of the Guadalupe River, as well as in other parts of the survey area where freshwater ponds are present.

PG&E's Bay Area HCP provides a comprehensive framework for conserving sensitive habitats and for preserving protected species (ICF 2017). It is a 30-year permit issued by the USFWS to allow PG&E to comply with FESA more efficiently. The Bay Area HCP covers the nine counties that surround the San Francisco Bay, including Alameda, Santa Clara, San Mateo, San Francisco, Contra Costa, Marin, Sonoma, Napa, and Solano. Within these counties, the plan areas include PG&E gas and electric transmission and distribution facilities, rights-of-way (including standard buffers), lands owned by PG&E and/or subject to PG&E easements, access routes, and mitigation areas acquired to mitigate for impacts resulting from covered activities (ICF 2017).

The Bay Area HCP was developed in collaboration with state and federal resource agencies, allowing PG&E to more effectively protect threatened and endangered species and their habitats, streamline permitting for operations and maintenance activities, avoid project delays and reduce costs associated with environmental permitting and mitigation, achieve compliance with species protection laws, partner with local stakeholders in support of habitat and species conservation efforts, and preserve open space and scenic landscapes. The Bay Area HCP protects 18 wildlife species and 13 plant species and the habitats where they are found for 33 routine operations and maintenance activities (ICF 2017). The HCP includes a number of AMMs to minimize impacts on sensitive habitats and covered species during performance of covered activities, and PG&E has identified "hot zones" where certain covered species are known to occur and where AMMs specific to those species will be implemented. Thus, any incidental take coverage for the vernal pool tadpole shrimp, California tiger salamander, California Ridgway's rail, salt marsh harvest mouse, and Contra Costa goldfields by the Reconductoring Activities is already provided by the Bay Area HCP.

In addition, USFWS's Biological Opinion (BO) for RGP 40 (USFWS 2021) addresses federally listed, USFWS-regulated species that are not covered under the Bay Area HCP but that may be impacted by the Reconductoring Activities, including California least tern and western snowy plover. NMFS's BO for RGP 40

(NMFS 2023) provides coverage for the incidental take of Central California Coast steelhead and green sturgeon. The northwestern pond turtle is not currently listed under FESA. If the northwestern pond turtles is listed under FESA at some point in the future, incidental take approval for that species may need to be obtained for the Reconductoring Activities, but otherwise, PG&E's Bay Area HCP and the USFWS and NMFS BOs for RGP 40 currently provide the incidental take approval necessary for the Reconductoring Activities.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of Fisheries Management Plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by NMFS.

Project Applicability: San Francisco Bay is designated as EFH for the Pacific Coast Salmon, Coastal Pelagics, and Pacific Groundfish FMPs. All tidal aquatic habitats associated with the San Francisco Bay within and adjacent to the survey area, including the Guadalupe River and Coyote Creek, are considered EFH under these FMPs, and a number of fish species managed per these FMPs occur in tidal waters within and surrounding the survey area. In addition, the Pacific Fisheries Management Council has designated EFH for the Pacific Coast Salmon FMP within non-tidal portions of the Guadalupe River, also located within the survey area, due to the presence of Central Valley Fall-run Chinook salmon (*Oncorhynchus tshawytscha*) ESU. If any EFH will be impacted by the Reconductoring Activities, then during 404 permitting, the USACE will consult with NMFS regarding any measures recommended to minimize impacts to EFH and FMP-managed fish species.

NMFS's BO for RGP 40 (NMFS 2023) provides a list of conservation recommendations for EFH, and no further NMFS coordination is necessary for the Reconductoring Activities' potential effects on EFH.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and it prohibits the possession of all nests of protected bird species whether they are active or inactive. An *active* nest is defined as having eggs or young, as described by the USFWS in its June 14, 2018 memorandum "Destruction and Relocation of Migratory Bird Nest Contents". Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

Project Applicability: All native bird species that occur in the survey area are protected under the MBTA. Native birds nest widely throughout the survey area, including on the towers in the Reconductoring Activities.

Examples of birds that have nested or have the potential to nest on these towers include red-tailed hawks (*Buteo jamaicensis*), common ravens (*Corvus corax*), double-crested cormorants (*Nannopterum auritum*), and peregrine falcons (*Falco peregrinus*). During implementation of the Reconductoring Activities, PG&E will implement measures in its *Nesting Bird Management Plan* (PG&E et al. 2015) to avoid impacts on nesting birds.

3.2 State Laws and Regulations

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the state include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. In these new guidelines, as revised April 6, 2021, riparian habitats are not specifically described as waters of the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The *Procedures* describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state, as well as areas requiring permit authorization from the RWQCBs to impact.

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that a proposed project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the state require Water Quality Certification even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These laws and regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: All wetlands and other waters described in Section 3.1.1 as being regulated by USACE under Section 404 of the CWA would also be considered waters of the state by the RWQCB. In addition, the RWQCB could potentially regulate some features that would not be considered waters of the U.S., such as

wetlands that lack a continuous surface connection to navigable waters, the banks of Coyote Creek and Guadalupe River between OHW and the top of bank, and levee slopes from the hinge point to wetlands below. Because the Reconductoring Activities will impact waters of the state, a Section 401 Water Quality Certification (and possibly Porter-Cologne Waste Discharge Requirements) would be necessary.

PG&E's Water Quality Order No. WQ 2023-0022-DWQ Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certification WDID # SB21039IN (SWRCB 2023) provide programmatic coverage for operations and maintenance activities conducted by PG&E in the nine counties surrounding the San Francisco Bay, including in Alameda and Santa Clara counties where the Reconductoring Activities will occur. Thus, these existing approvals cover the Reconductoring Activities' impacts on waters of the state.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in *take* of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of *take* under the California Fish and Game Code. The CDFW, however, has interpreted *take* to include the "killing of a member of a species which is the proximate result of habitat modification."

Project Applicability: The survey area does not contain suitable habitat for any state-listed or candidate plant species.

Multiple state-listed animal species occur in the survey area in various habitats. The state candidate Crotch's bumble bee (*Bombus crotchii*) may occur in the survey area in small numbers as a forager, and nesting could possibly occur where suitable burrows are present. The state endangered California Ridgway's rail and salt marsh harvest mouse and state threatened California black rail (*Laterallus jamaicensis coturniculus*) are found within certain marsh habitats in the survey area. The state threatened California tiger salamander occurs in seasonal wetlands in the Warm Springs Unit of the Refuge, and it may also be found in adjacent grasslands. The state threatened tricolored blackbird roosts and forages in the survey area where freshwater and brackish marshes and grasslands are present, and it could possibly breed in marsh habitat at the pond located at Pacific Commons Linear Park. The state endangered California least tern does not breed near the survey area, but it may occur in small numbers as a forager and post-breeding migrant from April through August, in open waters that support fish. The state threatened longfin smelt occurs in tidal waters of the bay, potentially including the lower Guadalupe River and Coyote Slough. The state threatened Swainson's hawk (*Buteo swainsoni*) and bank swallow (*Riparia riparia*) may be found in the survey area as migrants during migration and winter but are not expected to breed in the survey area. The state endangered bald eagle (*Haliaeetus leucocephalus*) may be found in the survey area as a forager where there is open water supporting fish and/or waterfowl and at the Warm Springs Unit of the Refuge, but it is not expected to breed in the survey area due to the lack of suitable trees for nesting.

CDFW's 2022 PG&E Bay Area Incidental Take Permit (ITP #2081-2015-031-03) covers PG&E's Bay Area operations and maintenance and minor new construction activities, and establishes a comprehensive approach to avoid, minimize, and fully mitigate impacts on covered species and habitat (CDFW 2022). It is a 30-year permit issued by the CDFW to allow PG&E to comply with FESA and CESA more efficiently. The Bay Area ITP covers the nine counties that surround the San Francisco Bay, including Alameda, Santa Clara, San Mateo, San Francisco, Contra Costa, Marin, Sonoma, Napa, and Solano. Within these counties, the plan areas include PG&E gas and electric transmission and distribution facilities, rights-of-way, certain land adjacent to rights-of-way, lands owned or obtained by PG&E and/or subject to PG&E easements, access routes, and conservation areas acquired to provide compensatory mitigation for impacts resulting from covered activities (CDFW 2022).

The ITP streamlines incidental take permitting for continued long-term operations and maintenance of PG&E electrical and natural gas facilities. It allows completion of operations and maintenance activities and minor new construction in a manner that minimizes impacts on three covered species, the California tiger salamander, Alameda whipsnake (*Masticophis lateralis euryxanthus*), and California freshwater shrimp (*Syncaris pacifica*) (CDFW 2022).

With implementation of avoidance and minimization measures (AMMs) and BMPs, take (as defined by CESA) of other state-listed species, including the longfin smelt, California Ridgway's rail, California black rail, California least tern, Swainson's hawk, bank swallow, bald eagle, tricolored blackbird, and salt marsh harvest mouse, is not expected to occur, and take of the Crotch's bumble bee is highly unlikely.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document, consider, and disclose the environmental implications of their actions and to refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Resources Agency promulgated guidelines for implementing CEQA known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the FESA and the CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Guidelines Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the CNPS Inventory of Rare and Endangered Plants. The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed – review list.
- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA Guideline's Section 15380 criteria, and adverse effects to these species may be considered significant. Impacts on plants that are listed by the CNPS on CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2023). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and

Mapping Program's (VegCAMP's) currently accepted list of vegetation alliances and associations (CDFW 2023).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the Reconductoring Activities in the context of this biological resources report. Reconductoring Activities impacts are discussed in Section 6 below.

In addition, CEQA analysis was performed on the ITP that was issued by CDFW for PG&E Bay Area operations and maintenance activities, including reconductoring. The ITP EIR, which covers operations and maintenance activities in the nine counties that surround the San Francisco Bay (including Alameda and Santa Clara), includes an assessment of impacts and identification of applicable field protocols (FPs), BMPs, AMMs, and applicant proposed measures (APMs). Applicable FPs, BMPs, AMMs, and APMs included in the ITP Final EIR are incorporated into the Reconductoring Activities. Thus, CDFW's CEQA analysis for issuance of the ITP covers the proposed Reconductoring Activities.

3.2.4 California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as "a body of water that follows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Using this definition, CDFW extends its jurisdiction to encompass riparian habitats that function as a part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction over a stream's bed and bank. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, CDFW regulates any project proposed by any person that will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds." California Fish and Game Code Section 1602 requires an entity to notify CDFW of any proposed activity that may modify a river, stream, or lake. If CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Certain sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered *take* by the CDFW. Raptors (e.g., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered *take* by the CDFW.

Project Applicability: CDFW jurisdiction under Section 1602 of the California Fish and Game Code would extend within the channels and up to the top of bank of the Guadalupe River and Coyote Creek within the survey area. No work with respect to the Reconductoring Activities is proposed within the top of bank of the Guadalupe River channel, but there will be impacts from the Reconductoring Activities on marsh riparian habitat along lower Coyote Creek that is subject to CDFW jurisdiction. Therefore, a CDFW LSAA may be required for the Reconductoring Activities.

Most native bird, mammal, and other wildlife species that occur in the survey area and in the immediate vicinity are protected under the California Fish and Game Code. Impacts as a result of the Reconductoring Activities on these species are discussed in Section 6.

3.2.5 State Water Resources Control Board Stormwater Regulation

Construction Phase. Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with state requirements to control the discharge of stormwater pollutants under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ or 2022-0057-DWQ, due to conditions in the Order for PG&E's Bay Area Operations and Maintenance 2022-022-DWQ, as amended and administratively extended). Prior to the start of construction/demolition for the Reconductoring Activities, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Pollution Prevention Plan must be developed and maintained during the Reconductoring Activities and it must include the use of best management practices (BMPs) to protect water quality until the Reconductoring Work Areas are stabilized.

Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors. Additionally, the Construction General Permit does not extend coverage to projects if stormwater discharge-related activities are likely to jeopardize the continued existence of, or result in take of, any federally listed endangered or threatened species.

Post-Construction Phase. In many Bay Area counties, including Alameda County and Santa Clara County, projects must also comply with the California RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2015-0049, as amended). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design that prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site.

Project Applicability. The Reconductoring Activities will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit. Therefore, construction-phase activities for the Reconductoring Activities would not result in detrimental water quality effects on biological or regulated resources.

3.3 Local Laws and Regulations

3.3.1 City of San José Tree Ordinance

The City of San José regulates the planting, removal, and maintenance of certain trees in the city. The City provides tree protection under the Municipal Code Section 13.28 (street trees, hedges, and shrubs), 13.32 (tree removal controls), and 13.44.220 (damaging park property). The Municipal Code details permit requirements for tree related work, including removal, pruning, and planting. Removal and pruning of street trees (located within the public right-of-way between the curb and the sidewalk) requires permitting by the City of San José. Replacement trees are required for the removal of ordinance-size street trees. A single trunk tree qualifies as an ordinance-size tree if it measures 38 inches or more in circumference at 4.5 feet above ground (approximately 12 inches diameter at breast height). A multi-trunk tree qualifies as ordinance-size if the combined measurement of each trunk circumference (at 4.5 feet above ground) adds up to 38 inches or more. As part of the permit application, it is required that the planning division be contacted with regard to the replacement of ordinance-size trees.

Removal of trees on private commercial, and industrial properties is also subject to tree removal permitting by the City of San José. A permit is required to remove a tree of "any size" from a commercial and industrial property. A separate "permit adjustment application" is required to be filed for non-ordinance-sized trees that will be removed from commercial and industrial properties. As part of the permit application, it is required that

the City's planning division be contacted with regard to the replacement of trees on private commercial and industrial properties.

Project Applicability: Ordinance-sized trees are present in portions of the survey area located within the City of San José. Although PG&E is not subject to local laws and regulations such as this tree ordinance, the Project owner (Microsoft) intends to comply with applicable provisions of the City's tree ordinance. Therefore, it is anticipated that the Project owner will perform a tree survey for relevant portions of the Project Site in order to (1) identify any trees that may potentially need to be trimmed or removed for some portion of Project implementation, and (2) confirm on-site Project activities that will be incorporated as PDFs by the Project Owner to feasibly minimize tree impacts. The Project owner would then comply with the City of San José's tree replacement guidelines and policies for any trees that need to be removed or trimmed.

3.3.2 City of Santa Clara Tree Ordinance

The City of Santa Clara encourages the preservation of the City's urban forest to promote the health, safety, and welfare of the City by regulating the installation, maintenance, removal, and management of trees and plants in public and private places. The City provides tree protection under the Municipal Code Section 12.35 (trees and shrubs). The Municipal Code details permit requirements for tree related work, including removal, pruning, and planting. Removal of trees within the street right-of-way is subject to tree removal permitting by the City of Santa Clara. Street trees are located in the public right-of-way between the curb and the sidewalk. Pruning, removal, relocation, and/or replacement of street trees is illegal without a permit issued by the City. Replacement trees are required for the removal of any street trees, and as part of the permit application, it is required that the planning division be contacted with regard to replacement.

Removal of certain trees on private commercial, and industrial properties is also subject to tree removal permitting by the City of Santa Clara. A permit is required for removal of any designated heritage trees; specimen trees measuring 12 inches or more in circumference at 4.5 feet above ground of the following species on private property: California buckeye (*Aesculus californica*), big leaf maple (*Acer macrophyllum*), deodar cedar (*Cedrus deodara*), blue atlas cedar (*Cedrus atlantica "Glauca*"), western sycamore (*Platanus racemose*), coast redwood (*Sequioa sempervirens*), California bay (*Umbellularia californica*), and the following oak (*Quercus*) species: coast live oak (*Q. agrifolia*), valley oak (*Q. lobata*), black oak (*Q. kelloggii*), blue oak (*Quercus douglasii*), and interior live oak (*Q. wislizenii*); approved development trees; a private tree which has a trunk with a diameter of 38 inches or more measured at 4.5 feet above natural grade; or a multi-branched private tree which has major branches below 4.5 feet above the natural grade with a diameter of 38 inches or more measured just below the first major trunk fork.

Project Applicability: Ordinance-sized trees are present in portions of the survey area located within the City of Santa Clara. Although PG&E is not subject to local regulations such as this tree ordinance, the Project owner intends to comply with applicable provisions of relevant tree ordinances. Therefore, if required to do so under Santa Clara's tree ordinance to implement the Project, it is anticipated that the Project owner will perform a tree survey in order to (1) identify any trees that may potentially need to be trimmed or removed for some

portion of project implementation, and (2) identify any on-site Project activities that may be necessary to feasibly minimize tree impacts. To the extent required thereunder, the Project owner would then comply with the City of Santa Clara's tree replacement guidelines and policies for any trees that need to be removed or trimmed.

3.3.3 City of Fremont Tree Ordinance

The City of Fremont regulates the planting, removal, preservation, and maintenance of certain trees in the City. The City provides tree protection under Municipal Code Chapters 12.30 (Maintenance of Street Trees and Sidewalks) and 18.215 (Tree Preservation Ordinance). The Municipal Code details permit requirements for tree-related work, including removal, pruning, and planting. Removal of trees of any size within the street right-of-way are subject to tree removal permitting by the City of Fremont. Street trees are defined as having the tree base located wholly or partially within a public street or right-of-way and any tree adjacent to a public street or right-of-way approved by the City to satisfy the requirement to plant street trees. Pruning or removal of street trees is illegal without a permit issued by the City. Replacement trees are required for the removal of ordinance-size street trees at a 1:1 ratio and consisting of planting of a 24-inch box replacement tree. As part of the permit application, it is required that the planning division be contacted with regard to the replacement of ordinance-size trees.

Removal of certain trees on private, commercial, and industrial properties is also subject to permitting by the City of Fremont, although trees removed or damaged by a public utility to the extent that such removal or damage is necessary for building or maintaining the public utility's facilities are exempt from permit requirements (Municipal Code Section 18.215.050). A single trunk tree qualifies as an ordinance-size tree if it measures 18 inches or more in circumference at 4.5 feet above ground (approximately 12 inches diameter at breast height), and if it is a native tree or tree of exceptional adaptability to the Fremont area, it qualifies as an ordinance-size tree if it measures 10 inches or more in circumference at 4.5 feet above ground. A multi-trunk tree qualifies as ordinance-size if the combined measurement of each trunk circumference (at 4.5 feet above ground) adds up to 18 inches or more.

Project Applicability: Protected trees are present in the survey area in Fremont. Pruning and/or removal of trees located on private commercial, and/or industrial properties in connection with the Reconductoring Activities are exempt from the City's tree ordinance, as these actions are related to building and maintaining PG&E's facilities. However, trees on public properties (e.g., street trees) would be subject to ordinance requirements. Although PG&E is not subject to local regulations such as this tree ordinance, the Project owner intends to comply with applicable provisions of relevant tree ordinances. Therefore, if required to do so under Fremont's tree ordinance to implement the Project, it is anticipated that the Project owner will perform a tree survey in order to (1) identify any trees that may potentially need to be trimmed or removed for some portion of project implementation, and (2) identify any on-site Project activities that may be necessary to feasibly minimize tree impacts. To the extent required thereunder, the Project owner would then comply with the City of Fremont's tree replacement guidelines and policies for any trees that need to be removed or trimmed.

Section 4. Environmental Setting

4.1 General Survey Area Description

The survey area corresponds to the 12-mile power line segment and a 250-foot buffer on either side of the existing power lines that constitute the Reconductoring Work Areas. It is situated in the *Niles* and *Milpitas, California* USGS 7.5-minute quadrangles. There is little natural topographic variation in the survey area, with elevations ranging from approximately 0 to 15 feet North American Vertical Datum of 1988.

Climate conditions in the survey area include a 30-year average of approximately 14.7 inches of annual precipitation, and an average temperature range from 50ºF to 69ºF (PRISM Climate Group 2023). Relative to the 30-year climate normals, the survey area has experienced wetter than normal conditions during the 2022/2023 wet season prior to the September 2023 survey. From October 2022 through April 2023, the region received on average 23.71 inches of precipitation, which is approximately 169% of the 30-year average for this time period (14.02 inches; 1991–2020) (PRISM Climate Group 2023).

The Natural Resource Conservation Service (2023) maps 27 soil units in the survey area. These soil units are described below in Table 2.

Table 2. Soil Type, Texture, Drainage Classification, and Hydric Soil Status for Soil Types Occurring within the Survey Area

Soil Symbol	Soil Name	Soil Texture	Drainage Classification	Landform	Hydric Status
101	Urban land, 0 to 2 percent slopes, basins	Not listed	Not listed	Basin floors	No
102	Urban land, 0 to 2 percent slopes, alluvial fans	Not listed	Not listed	Basin floors, alluvial fans	No
110	Xerorthents, trash substratum, 0 to 2 percent slopes	Loam	Well drained	Basin floors	No
112	Xerorthents, trash substratum, 15 to 30 percent slopes	Loam	Well drained	Marshes, basin floors	No
120	Aquic Xerorthents, bay mud substratum, 0 to 2 percent slopes	Very gravelly sandy loam	Poorly drained	Marshes	No
121	Aquic Xerorthents, bay mud substratum 2 to 5 percent slopes	Very gravelly sandy loam	Poorly drained	Marshes	No
123	Urban Land-Xerorthents anthropogenic fill complex, 0 to 2 percent slopes	Sandy clay loam	Poorly drained	Flood plains, alluvial fans	No
125	Marvin silt loam, saline-alkali	Clay	Somewhat poorly drained	Stream terraces	Yes
133	Pescadero clay, drained	Clay	Poorly drained	Rims	Yes
134	Pescadero clay, ponded	Clay	Poorly drained	Flood plains	Yes
137	Novato clay, tidally flooded	Clay	Very poorly drained	Marshes	Yes
138	Novato clay, ponded	Clay	Very poorly drained	Tidal flats	Yes
139	Reyes clay, 0 to 2 percent slopes	Clay	Somewhat poorly drained	Tidal flats	Yes
145	Urbanland-Hangerone complex, 0 to 2 percent slopes, drained	Clay	Poorly drained	Basin floors	Yes
150	Urbanland-Embarcadero complex, 0 to 2 percent slopes, drained	Clay	Very poorly drained	Basin floors	Yes
151	Embarcadero silty clay loam, drained, 0 to 2 percent slopes	Clay	Very poorly drained	Basin floors	Yes
155	Novato 0 to 1 percent slopes, tidally flooded	Clay	Very poorly drained	Marshes	Yes

Soil Symbol	Soil Name	Soil Texture	Drainage Classification	Landform	Hydric Status
156	Novato silty clay loam, excessive salinity, 0 to 1 percent slopes, protected	Clay	Very poorly drained	Salt ponds	Yes
157	Novato clay, 0 to 1 percent slopes, protected	Clay	Very poorly drained	Marshes	Yes
160	Urbanland	Silty clay	Poorly drained	Basin floors	Yes
161	Clear Lake silty clay, 0 to 2 percent slopes, drained	Silty clay	Poorly drained	Basin floors	Yes
162	Water	Not listed	Not listed	Not listed	Not listed
165	Urbanland Campbell complex, 0 to 2 percent slopes, protected	Silt loam	Moderately well drained	Alluvial fans	No
166	Campbell silt loam, 0 to 2 percent slopes, protected	Silt loam	Moderately well drained	Alluvial fans	No
169	Urbanland-Elder complex 0 to 2 percent slopes, protected	Fine sandy loam	Somewhat excessively drained	Alluvial fans, streams	No
171	Elder fine sandy loam, 0 to 2 percent slopes, rarely flooded	Fine sandy loam	Somewhat excessively drained	Streams	No
W	Water	Not listed	Not listed	Streams, salt marshes, rivers, mudflats, flood-tidal deltas, drainageways, shorelines, bays (geom.), bay bottoms, lakes	Not listed

4.2 Land Cover/Biotic Habitat Types

Habitats were mapped using Holland (1986) descriptions and/or jurisdictional boundaries with modifications based upon site conditions verified during the 2023 field surveys. The reconnaissance-level surveys identified 15 land cover types in the survey area (Figure 3, Table 3).[1] These land cover types are described in detail in the sections below.

Table 3. Land Cover Types/Biotic Habitats within the Survey Area

Land Cover Type/Biotic Habitat	Acreage (approx. acres)
Tidal Brackish Marsh	4.82
Tidal Creek/Slough	35.92
Diked Salt Marsh	34.33
Salt Panne	52.73
Managed Pond	50.41
Other Ponds/Sloughs	21.98
Freshwater Marsh	4.06
Non-tidal Stream	0.92
Vernal Pools	5.11
Seasonal Wetland	8.08
California Annual Grassland	133.49
Ruderal Levee Slope	8.30
Mixed Riparian Forest and Woodland	6.26
Urban/Suburban	385.43
Coastal Scrub	1.95
Total	753.79

4.2.1 Tidal Brackish Marsh

Vegetation. Tidal brackish marsh (4.82 acres) in the survey area is characterized by wetland vegetation occurring along waterlines and in shallow emergent habitats subject to tidal action, where there is a mixing of salt and fresh water (Photo 1). This habitat occurs within the banks of the downstream portion of the Guadalupe River near Gold Street, South Coyote Slough, Mud Slough, Pond A19, and Coyote Creek, and wherever saltwater from downstream (San Francisco Bay) mixes with freshwater from upstream (i.e., from Coyote Creek, Laguna Creek/Mud Slough, and/or the Guadalupe River) along tidal channels. Dominant vegetation in these marshes includes alkali bulrush (*Bolboschoenus maritimus*), California bulrush (*Schoenoplectus*

[1] Habitat mapping for this CEQA evaluation does not supersede modeled habitat for covered species as defined by the USFWS in PG&E's Bay Area HCP.

californicus) and pickleweed (*Salicornia pacifica*). Other native marsh species found were marsh jaumea (*Jaumea carnosa*), fat-hen (*Atriplex prostrata*), and marsh gumplant (*Grindelia stricta* var. *angustifolia*). Invasive perennial pepperweed (*Lepidium latifolium*) also occurs on the upper banks of the sloughs where the marsh meets ruderal levee slopes. The hydrology of the tidal brackish marsh habitat is perennial and influenced by both freshwater from upstream sources and the San Francisco Bay tidal system. The water continuously flows in these channels and has high turbidity, making the waters gray and opaque during our site visits.

Photo 1. Tidal brackish marsh in the survey area.

Wildlife. Tidal brackish marshes do not support large numbers of animal species due to their structural simplicity, but they do support several species specifically adapted to marsh habitats, and they may include both freshwater and salt marsh wildlife species. The Alameda song sparrow (*Melospiza melodia pusillula*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), and marsh wren (*Cistothorus palustris*) are common breeders in tidal brackish marshes. Freshwater marsh species, such as the red-winged blackbird (*Agelaius phoeniceus*), can also breed in tidal brackish marshes and will occur as foragers in this habitat year-round with tricolored blackbirds, while Virginia rails (*Rallus limicola*) and sora (*Porzana carolina*) occur in this habitat during winter and migration. White-tailed kites (*Elanus leucurus*) are known to nest in trees along Artesian Slough, and California Ridgway's rails and California black rails are known to breed in tidal brackish marsh within the survey area. The salt marsh harvest mouse, and potentially the salt marsh wandering shrew (*Sorex vagrans halicoetes*), occur in brackish marshes with dense vegetation. The California vole (*Microtus californicus*) and western harvest mouse (*Reithrodontomys megalotis*) are common small mammal species that may forage in tidal brackish marshes found in the survey area and breed in adjacent terrestrial habitats. Insects with aquatic larvae, such as brine flies (family Ephydridae) and chironomid midges (family Chironomidae), breed in freshwater or brackish habitats and can occur in large swarms in the spring and summer in the survey area, providing food for aerial foragers such as bats and swallows. Other common foragers in this habitat are the great blue heron (*Ardea herodias*), great egret (*Ardea alba*), and snowy egret (*Egretta thula*). Terrestrial wintering and migrating songbirds, including golden-crowned sparrows (*Zonotrichia atricapilla*), white-crowned sparrows (*Zonotrichia leucophrys*), and Lincoln's sparrows (*Melospiza lincolnii*), forage in the survey area in reeds and other tall vegetation, as well as in adjacent upland habitats.

4.2.2 Tidal Creek/Slough

Vegetation. Tidal creek/slough habitat consists of open water habitat that occupies approximately 35.92 acres within the survey area, occurring within the downstream portions of the Guadalupe River, Coyote Creek, Artesian Slough, Mud Slough, South Coyote Slough, and smaller tidal creeks, often bordered by brackish marshes. These creeks and sloughs are tidally influenced by the San Francisco Bay, but also receive freshwater

inputs from stormwater management systems that they are connected to upstream, and in the case of Artesian Slough, freshwater inputs from the San José-Santa Clara Regional Waste Water Facility. This habitat type consists of the aquatic habitat bordered by tidal brackish marsh habitats, with salinity ranging from mixosaline (fresher than ocean water) to eusaline (as salty as ocean water). Limited vegetation occurs within most of the aquatic habitat due to regular maintenance, salinity, water depth, and/or current. Therefore, the only plant species occasionally observed within the variety of aquatic habitats in the survey area are those associated with adjacent wetland habitats, such as bulrush and pickleweed.

Wildlife. Tidal creek/slough habitat in the survey area supports a variety of benthic invertebrates and fish species. The benthic assemblage in the survey area includes species that are tolerant of variable salinities and temperatures such as oligochaete worms (Annelida), midge larvae (Chironomidae), and cranefly larvae (Tipulidae). Fish species found in these waters include the topsmelt (*Atherinops affinis*), Sacramento sucker (*Catostomus occidentalis*), northern anchovy (*Engraulis mordax*), Pacific staghorn sculpin (*Leptocottus armatus*), and three-spined stickleback (*Gasterosteus aculeatus*). Nonnative striped bass (*Morone saxatilis*), American shad (*Alosa sapidissima*), threadfin shad (*Dorosoma petenense*), common carp (*Cyprinus carpio*), rainwater killifish (*Lucania parva*), and yellowfin goby (*Acanthogobius flavimanus*) also occur here. Alviso Slough and Coyote Creek provide a migratory corridor for anadromous fish, including the Central California Coast steelhead, Central Valley fall-run Chinook salmon, and Pacific lamprey (*Lampetra tridentata*), all of which can spawn in cooler waters farther upstream. Green sturgeon are typically found in the open waters of the Bay, and could possibly travel up either slough into the survey area, although no spawning habitat for this species is present. Furthermore, longfin smelt are known to occur in tidally influenced reaches of Alviso Slough and Coyote Creek and may spawn in these areas in in some years. Sacramento hitch (*Lavinia exilicauda exilicauda*) and southern coastal roach (*Hesperoleucus venustus subditus*) are tolerant of varying stream conditions within the survey area and can be found in the Guadalupe River near West Trimble Road.

Common waterbirds such as mallards (*Anas platyrhynchos*), American coots (*Fulica americana*), and gadwall (*Anas strepera*) forage throughout tidal creeks and sloughs within the survey area while wading birds such as herons and egrets forage along the shoreline. Peregrine falcons and bald eagles also forage in these aquatic habitats.

4.2.3 Diked Salt Marsh

Vegetation. Diked salt marsh habitat occupies approximately 34.33 acres of the survey area (Photo 2) and occurs in New Chicago Marsh, south of Grand Street across New Chicago Marsh, south of Los Esteros Road and Grand Boulevard, and a parcel south of A18 and east of Artesian Slough. Diked salt marshes are cut off from the tidal action of the San Francisco Bay by levees and berms. Therefore, some plant species that rely on tidal action, such as cordgrass (*Spartina foliosa*), are not present. Dominant species in these muted tidal marsh habitats include forbs such as pickleweed, saltgrass (*Distichlis spicata*), and alkali heath (*Frankenia salina*). In most areas, diked salt marsh is topographically flat. Hydrology in these habitats ranges from muted to no tidal influence. For example, the primary source of water for New Chicago Marsh enters a one-way siphon connection to Pond A16. The diked marsh habitat therefore has very little ability to experience flow and ebb tides due to the one-way connection. In addition, water levels in New Chicago Marsh are carefully managed by

the Refuge to promote the establishment of pickleweed and provide habitat for endangered wildlife, such as the salt marsh harvest mouse.

Wildlife. New Chicago Marsh supports the most diverse community of marsh-associated wildlife species in the survey area due to its relatively large size Waterbirds such as the American avocet (*Recurvirostra americana*) and black-necked stilt (*Himantopus mexicanus*) nest in diked salt marsh within New Chicago Marsh. The Canada goose (*Branta canadensis*), killdeer (*Charadrius vociferus*), mallard, northern pintail (*Anas acuta*), and Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*) also nest in this habitat. When water levels draw down low enough, western snowy plovers may occasionally nest in dry, unvegetated areas of New Chicago Marsh (Pearl et al. 2019).

Photo 2. Diked salt marsh habitat in New Chicago Marsh.

Common avian foragers in diked salt marshes during migration and winter include ducks such as the gadwall, green-winged teal (*Anas crecca*), mallard, northern pintail, northern shoveler (*Spatula clypeata*) and ruddy duck (*Oxyura jamaicensis*); shorebirds such as the American avocet, black-necked stilt, greater yellowlegs (*Tringa melanoleuca*), least sandpiper (*Calidris minutilla*), semipalmated plover (*Charadrius semipalmatus*), long-billed dowitcher (*Limnodromus scolopaceus*), western sandpiper (*Calidris mauri*), and willet (*Tringa semipalmata*); and waterbirds such as the California gull (*Larus californicus*), herring gull (*Larus argentatus*), and ring-billed gull (*Larus delawarensis*) (Cornell Lab of Ornithology 2023).

Diked salt marsh within the survey area is also home to the endangered salt marsh harvest mouse, and areas such as New Chicago Marsh are managed to provide habitat for this species. The salt marsh harvest mouse is dependent on dense vegetative cover, usually in the form of pickleweed and other salt-dependent or salt-tolerant vegetation. Common mammal species, including the house mouse (*Mus musculus*), California deer mouse (*Peromyscus maniculatus*), California vole, and nonnative rats are likely to occur in sparse, highly disturbed marsh habitats in the survey area. Due to the relatively high levels of salinity, amphibians do not generally occur in diked salt marsh. However, some reptile species such as the gopher snake (*Pituophis catenifer*) will forage here.

Smaller parcels of diked salt marsh in the survey area support many of the same wildlife species as New Chicago Marsh, including shorebirds, waterfowl, and mammals, and possibly including the salt marsh harvest mouse. The largest of these diked salt marshes, found south of Pond A18, may also support a small number of breeding western snowy plovers in dry, unvegetated areas. However, due to the smaller area and greater amount of disturbance in these marshes, relatively few shorebirds, waterbirds, and waterfowl species are expected to occur in these areas.

4.2.4 Salt Panne

Vegetation. Salt panne habitat (approx. 52.73 acres) occurs in the northern portion of the survey area in Ponds A22 and A23 (Photo 3). Despite being located directly adjacent to tidal brackish marsh along Mud Slough to the south and seasonal wetlands and California annual grasslands in the Warm Springs Unit of the Refuge to the north, no emergent vegetation was observed within the salt pannes in the survey area due to hypersaline conditions that result in inhospitable conditions for vegetation. Small amounts of pickleweed may be found around the perimeters of the salt pannes bordering ruderal levee slopes. Water present in the salt pannes from precipitation and water management turns pink to red during warmer months due to high concentrations of various algae and bacteria adapted to saline conditions.

Photo 3. Salt panne habitat in Pond A23.

Wildlife. Salt panne habitat in Ponds A22 and A23 provide breeding, roosting, and foraging habitat for western snowy plovers, which are resident within these areas year-round, and a portion of both ponds that include the survey area are designated as snowy plover critical habitat by the USFWS. During the spring and summer these ponds support a moderate amount of breeding western snowy plovers, with approximately 4-6% of all nests located in the South San Francisco Bay found in these ponds in recent years (Pearl et al. 2019, 2023). Western snowy plovers lay eggs directly in a simple scrape on suitably dry areas of salt panne. Once the eggs hatch the male and precocial young seek foraging habitat in the salt pannes, where they feed on brine flies (*Ephydra milbrae*), western tanarthrus beetles (*Tanarthrus occidentalis*), and other small invertebrates. Western snowy plovers may also form large post-breeding flocks of up to approximately 200 individuals in Ponds A22 and A23, and smaller flocks may remain in these areas through the winter if salt pannes remain exposed.

Other avian species that nest in these ponds in low numbers include the American avocet, black-necked stilt, Canada goose, killdeer, and mallard. Large flocks of gulls, mostly consisting of California gulls but also including some herring gulls, loaf on A23 during the early spring. During the winter, much of the salt pannes are inundated by precipitation and water management. During this time, waterfowl such as the green-winged teal, mallard, northern pintail, northern shoveler, and ruddy duck may be found foraging in open water in the salt pannes, while shorebirds such as the American avocet, black-necked stilt, greater yellowlegs, least sandpiper, semipalmated plover, western sandpiper, and willet, as well as wading birds such as the great blue heron, great egret, and snowy egret, forage in exposed salt pannes or water of varying depth (depending upon the species). Common ravens, peregrine falcons, red-tailed hawks, and American kestrels (*Falco sparverius*) frequently perch on and hunt from towers located in both ponds.

Aside from birds, wildlife use of the salt panne habitat is limited due to the lack of emergent vegetation in this habitat. The coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), and striped skunk (*Mephitis mephitis*) may hunt in these ponds for bird eggs and chicks. Small fish species such as the three-spined stickleback and topsmelt may enter A22 during late fall and/or winter when a water control structure on Mud Slough is opened to allow shallow flooding of the pond, but because the structure is only open for a limited timeframe and water is allowed to evaporate completely in the spring and summer, there are no permanent populations of fish in the salt pannes.

4.2.5 Managed Pond

Photo 4. Managed pond habitat in Pond A18.

Vegetation. Managed pond habitat (approx. 50.41 acres) is found in Pond A18 within the survey area (Photo 4). This shallow, artificial pond is separated from tidal waters of the San Francisco Bay by levees. It was designed to extract salts from Bay waters through natural evaporation during the 20th century, and was most recently operated as such by Cargill, Inc. Pond A18 is now managed by the City of San José to support wildlife, with water levels within these ponds managed via two water control structures to allow for muted tidal action and brackish open water habitat. This pond is kept at high water levels throughout the year and may contain filamentous algae during warmer months.

Wildlife. The open, brackish waters of Pond A18 support a variety of wildlife including fish, invertebrates, and birds. Fish species commonly found in the vicinity can be found in A18, such as the three-spined stickleback, longjaw mudsucker (*Gillichthys mirabilis*), inland silversides (*Menidia beryllina*), rainwater killifish, and yellowfin goby. Longfin smelt could possibly enter the pond through one of two water control structures connecting this pond with Artesian Slough. Common invertebrates in this pond include opossum shrimp (Mysida), crangon (*Crangon crangon*), isopods (Isopoda), and clams (Bivalva).

Bird species found on the open water of Pond A18 include the American white pelican (*Pelecanus erythrorhynchos*), Clark's grebe (*Aechmophorus clarkii*), western grebe (*Aechmophorus occidentalis*) ruddy duck, and bufflehead (*Bucephala albeola*). Black skimmers (*Rynchops niger*), Forster's terns (*Sterna forsteri*), and Caspian terns (*Hydroprogne caspia*), which nest on islands in nearby Pond A16, as well as California goals, will forage in Pond A18 year-round. California least terns are a rare seasonal forager on open waters in the South Bay, including in Pond A18. Double-crested cormorants and common ravens nest on electrical towers in Pond A18; during our site visits, at least 18 stick nests were observed on the Pond A18 towers. Both species will reuse nests for multiple years and have been nesting on the towers in Pond A18 since the 1990s. Mammal use of Pond A18 within the survey area is limited to the levees at the north and south ends of the pond. Species that use these areas include the native coyote, striped skunk, various rabbits (*Sylvilagus* sp.), and western harvest mouse, as well as the nonnative house mouse and red fox.

4.2.6 Other Ponds/Sloughs

Vegetation. Other non-tidal ponds and sloughs in the survey area (21.98 acres) include open water areas within diked salt marshes (Photo 5), a pond at Pacific Commons Linear Park, a small pond on the western edge of the Newby Island Landfill, and two ponds along Gold Street. This aquatic habitat differs from the tidal creek/slough habitat discussed above due to its separation from the San Francisco Bay by levee slopes or berms. These ponds/sloughs are mainly found adjacent to wetlands such as diked salt marshes and freshwater marshes; the only pond that is not adjacent to wetlands is the pond at the Newby Island Landfill. Water salinity varies in each pond/slough due to surrounding habitats or management practices. It is expected that most of these waters are mixosaline (fresher than ocean water) to eusaline (as salty as ocean water) in terms of their water chemistry. Limited vegetation occurs within most of the other ponds/sloughs in the survey area due to regular maintenance, high salinities, high water depth, and/or lack of currents. Some of the ponds/sloughs contain filamentous algae and/or common duckweed (*Lemna minor*).

Photo 5. Other non-tidal pond/slough habitat in New Chicago Marsh.

Wildlife. The wildlife species that occur in non-tidal ponds and sloughs in the survey area are those that are typically associated with adjacent habitats, and use non-tidal ponds and sloughs opportunistically. The habitats present adjacent to non-tidal ponds and sloughs in the survey area depend upon water salinity, depth, and a number of other factors, but include tidal brackish marsh, diked salt marsh, and non-tidal freshwater marsh, and many of the species discussed as occurring in these habitats elsewhere in this section can also be found using adjacent non-tidal ponds and sloughs. In addition, the northwestern pond turtle is an obligate aquatic forager, and may be seen foraging in open water or basking on debris in the pond located at Pacific Commons Linear Park in the survey area.

4.2.7 Freshwater Marsh

Vegetation. Freshwater marsh (approx. 4.06 acres) habitat in the survey area is dominated by dense, perennial, emergent monocots (Photo 6). This habitat occurs along and within perennial open fresh water habitats in the survey area, such as the two ponds on Gold Street, a drainage along the north side of Auto Mall Parkway, and the banks of the upstream portion of the Guadalupe River. As described in Holland (1986), this habitat sometimes forms completely closed canopies. This type of marsh is usually permanently inundated, although it may seasonally dry for short periods of time. Hydrology in these habitats is reliant on precipitation and stormwater management to maintain only freshwater, non-tidal inputs. Cattails (*Typha* sp.) dominate the areas of these freshwater marshes almost exclusively, but other wetland species such as rough cocklebur (*Xanthium strumarium*), Himalayan blackberry (*Rubus armeniacus*), and bristly oxtongue (*Helminthotheca echioides*) also occur along the border between freshwater marsh and ruderal upland habitats. The topography in these wetlands is low-lying and flat, allowing water to pool and pond around wetland vegetation for extended periods of time.

Photo 6. Freshwater marsh habitat along Gold Street.

Wildlife. Freshwater marsh emergent vegetation in the survey area supports breeding passerines such as the San Francisco common yellowthroat, marsh wren, and red-winged blackbird. Suitable breeding habitat for tricolored blackbirds is present in this habitat at Pacific Commons Linear Park. Other wildlife found in this habitat include the raccoon, Sierran tree frog (*Pseudacris sierra*), northwestern pond turtle, and nonnative red-eared slider (*Trachemys scripta elegans*).

4.2.8 Non-tidal Stream

Vegetation. Non-tidal stream habitat occupies approximately 0.92 acre within the survey area, and occurs in upstream portions of the Guadalupe River near West Trimble Road (Photo 7).

This habitat type contains perennial fresh water and is primarily bordered by mixed riparian woodland and freshwater marsh vegetation. Limited vegetation occurs within most of the non-tidal stream habitat itself due to regular maintenance (e.g., for flood control), high water depths, and/or the presence of currents. Therefore, the only vegetative species observed within non-tidal stream habitat in the survey area included those associated with adjacent habitats such as algae, common duckweed, cattails, and water primrose (*Ludwigia hexapetala*), and these species were sparsely distributed along the edges of this habitat.

Photo 7. Non-tidal stream habitat in the Guadalupe River.

Wildlife. The wildlife species present in the non-tidal stream habitat in the upper Guadalupe River within the survey area are those typically found in perennial, freshwater non-tidal streams in the vicinity. In addition, northwestern pond turtles are obligate aquatic feeders that can be found foraging in the water and basking on emergent debris such as rocks or logs. Red-eared sliders and other nonnative turtles also occur in these waters. Anadromous fish, including the Central California Coast steelhead, Central Valley fall-run Chinook salmon, and Pacific lamprey, migrate through this habitat in the survey area and spawn in the upper reaches of the Guadalupe River upstream. Sacramento hitch and southern coastal roach also occur here.

Birds such as the belted kingfisher (*Megaceryle alcyon*), mallard, and pied-pilled grebe (*Podilymbus podiceps*) forage in these waters, while wading birds such as herons and egrets forage along the shoreline. Diving ducks such as common merganser (*Mergus merganser*) and other waterbirds are also present in open water of these channels, albeit in low numbers due to the narrow nature of the channel and high levels of human disturbance in adjacent urban areas. Raccoons will hunt for nonnative red swamp crayfish (*Procambarus clarkii*) and signal crayfish *(Pacifastacus leniusculus*) in the water.

4.2.9 Vernal Pools

Vegetation. Vernal pools compose approximately 5.11 acres of the survey area, and are found only in the Warm Springs Unit of the Refuge. Some of these vernal pools may be natural, although many of them were created as mitigation for other projects and are managed by the Refuge. Vernal pools are areas of seasonal wetlands that are covered by shallow water during a variable period of the year from winter to spring, and typically have a restrictive layer like a clay hard pan that prevents infiltration of ponded water into the soils below. Most endemic vernal pool plants are annuals that complete their entire life cycles in a single wet season. Seeds from the prior season germinate once the pools are inundated in the winter. Flowers bloom and set seed in the late spring after pools have dried. During the September-October surveys, these pools were completely dry with soil cracking and a hard clay panne visible. Dominant plants at the time of the surveys included hyssop loosestrife (*Lythrum hyssopifolia*), Bermuda grass (*Cynodon dactylon*), and fiddle dock (*Rumex pulcher*). During the

blooming period, these vernal pools are known to support flatface downingia (*Downwigia pulchella*), alkali heath, and Contra Costa goldfields.

Wildlife. The vernal pools in the survey area support breeding populations of the California tiger salamander, vernal pool tadpole shrimp, and versatile fairy shrimp (*Branchinecta lindahli*) (Kakouros and Loredo 2017, 2020; Loredo 2020, 2021, 2023). During the dry season, adult salamanders find refugia in soil cracks and rodent burrows in the uplands, while the tadpole shrimp and fairy shrimp eggs (called cysts) remain in the vernal pool soil and hatch when wet conditions return. In addition, western toads (*Anaxyrus boreas*) and Sierran chorus frogs may breed in ponds that hold water well into spring. Raptors such as golden eagles, ferruginous hawks (*Buteo regalis*), northern harriers (*Circus hudsonius*), and red-tailed hawks can be found foraging around these vernal pools. Other birds that can forage in these wetlands, especially during wet conditions, include the great blue heron, tricolored blackbird, long-billed curlew (*Numenius americanus*), greater white-fronted goose (*Anser albifrons*), black-necked stilt, and various species of dabbling ducks.

4.2.10 Seasonal Wetlands

Vegetation. Approximately 8.08 acres of seasonal wetlands occur in the survey area (Figure 3, Photo 8). Seasonal wetlands mainly occur in the northern portions of the survey area in the Warm Springs Unit of the Refuge, but also occur in two fields along Grand Boulevard. These wetlands are often found adjacent to California annual grasslands, ruderal levee slopes, or vernal pools, and have small depressions that allow water from precipitation to pool or form areas of saturation during the wet season, or may be located over a shallow groundwater table that rises in the winter months and recedes in the summer months. During the drier portions of the year, these depressions can still be seen containing sparse to no vegetation. These small seasonal ponds and saturated areas allow for the hydrophytic vegetation to grow. Seasonal wetlands in the survey area are distinguished from vernal pools by a lack of a true restrictive clay pan, a typically shorter inundation period than most vernal pools, and the presence of common annual hydrophytes such as curly dock (*Rumex crispus*), bristly ox-tongue, Mediterranean barley (*Hordeum marinum*), rabbitsfoot grass (*Polypogon monspeliensis*), and in some seasonal wetlands, Congdon's tarplant, which was observed in this habitat during site visits.

Photo 8. Seasonal wetland habitat found adjacent to Los Esteros Road and New Chicago Marsh.

Wildlife. Most of the seasonal wetlands in the survey area are so small that the species using them are primarily those associated with adjacent habitats, such as California annual grasslands. The seasonal wetlands near Disk Drive support taller, denser, and more diverse vegetation, and are not expected to support the same species

assemblage endemic to vernal pools in the Warms Springs unit of the Refuge. Sierran chorus frogs, western toads, and invertebrates such as dragonflies and damselflies (Odonata) may breed in inundated areas that hold water well into spring.

Wetlands support migrating and resident waterfowl such as the American wigeon (*Mareca americana*) and Canada goose. Other birds that can forage in wetlands, especially during wet conditions, include the great egret, tricolored blackbird, greater yellowlegs, and killdeer. Raptors associated with grasslands such as the northern harrier, red-tailed hawk, and American kestrel can be found hunting in seasonal wetlands.

4.2.11 California Annual Grassland

Vegetation. California annual grassland (approx. 133.49 acres) is the dominant natural (i.e., non-urban) land cover type in the survey area, and occurs from the Guadalupe River Trail to Orchard Parkway, in between vernal pools and seasonal wetlands within the Warm Springs unit of the Refuge, and in scattered empty lots throughout the survey area (Photo 9).

Photo 9. California annual grassland habitat adjacent to Component Dr.

In many portions of the survey area, annual grasslands are managed, grazed, and/or mown, and vegetation density observed in grasslands during our surveys varied in accordance with the level of recent management. This habitat is dominated by nonnative grasses such as wild oat (*Avena fatua*) and ripgut brome (*Bromus diandrus*), as well as weedy forbs such as wild radish (*Raphanus sativus*), cheeseweed (*Malva parviflora*), broadleaved pepperweed, and tall annual willowherb (*Epilobium brachycarpum*). Large patches of Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), fennel (*Foeniculum vulgare*), and yellow star thistle (*Centaurea solstitialis*) were observed throughout the majority of the grasslands. Sparse coyote brush (*Baccharis pilularis*) and black elderberry (*Sambucus mexicana*) individuals are also present in the grasslands in the southern portion of the transmission lines. These grasslands contained several species ranked by the California Invasive Plant Council (Cal-IPC) (2023) as being moderately or highly invasive, discussed in Section 5.3.5 below.

Wildlife. Wildlife use of grasslands throughout much of the survey area is limited by human disturbance (e.g., due to mowing), the limited extent of the grassland areas, and the isolation of this habitat from more extensive grasslands in the region (i.e., in the Diablo Range to the east). As a result, some of the wildlife species associated with extensive grasslands in the South Bay, such as the grasshopper sparrow (*Ammodramus savannarum*), are absent from the grasslands in the survey area. Many of the wildlife species that occur in grassland areas occur primarily in adjacent developed or riparian areas and use the grasslands in the survey area for foraging. Such species include the house finch (*Haemorhous mexicanus*), bushtit (*Psaltriparus minimus*), and lesser goldfinch (*Spinus*

psaltria), which forage on seeds in grassland areas, and the Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), and Mexican free-tailed bat (*Tadarida brasiliensis*), which forage aerially over grassland habitats for insects.

A large portion of the grasslands found in the survey area are located in the Warm Springs Unit of the Refuge, and these areas are managed for wildlife using cattle grazing. These grasslands potentially support breeding and wintering burrowing owls, foraging tricolored blackbirds and northern harriers, and breeding Bryant's savannah sparrows. Other common passerines in this habitat include the western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), American pipits (*Anthus rubescens*) in the winter, and, in past years, loggerhead shrike (*Lanius ludovicianus*). Multiple Canada goose nests from previous seasons were observed on the ground during the site visits.

The survey area also passes through a SCVHA burrowing owl preserve adjacent to the San José-Santa Clara Regional Wastewater Facility, east of Disk Drive, and south of Los Esteros Road. This property is also managed for wildlife and supports a breeding population of burrowing owls. Portions of this area are mapped as burrowing owl and tricolored blackbird survey areas by the SCVHA.

Burrows of California ground squirrels are present in grasslands throughout much of the survey area. This fossorial mammal species is an important component of grassland communities, providing a prey base for diurnal raptors and terrestrial predators and providing burrows that can be used by burrowing owls and California tiger salamanders. Other rodent species that occur in grassland habitats in the survey area include the Botta's pocket gopher (*Thomomys bottae*), California vole, and deer mouse. Diurnal raptors such as the red-tailed hawk and red-shouldered hawk (*Buteo lineatus*) forage for these small mammals over grasslands during the day, and nocturnal raptors, such as the barn owl (*Tyto alba*), will forage for nocturnal rodents, such as deer mice, at night.

Several reptile species regularly occur in grassland habitats, including the western fence lizard (*Sceloporus occidentalis*), gopher snake, and southern alligator lizard (*Elgaria multicarinata*). Burrows of California ground squirrels provide refuges for these reptile species, as well as common amphibians such as the California tiger salamander, western toad, and Sierran chorus frog that may occur in adjacent aquatic habitats. Mammals such as the native striped skunk, raccoon, and black-tailed jackrabbit (*Lepus californicus*), as well as the nonnative Virginia opossum (*Didelphis virginiana*) and feral cat (*Felis catus*) use the grassland habitats in the survey area for foraging.

4.2.12 Ruderal Levee Slope

Vegetation. Ruderal levee slopes (approx. 8.30 acres) are present in between managed ponds in the northern portions of the survey area within Refuge or City of San José lands (Photo 10). This habitat occurs below the tops of bank and above any wetland, salt panne, or managed pond habitat. These ruderal levee slopes are fairly bare, containing the occasional California annual grassland species and other weedy species such as wild oats, yellow star thistle, short-podded mustard (*Hirschfeldia incana*), pickleweed, and prickly Russian thistle (*Salsola tragus*).

Photo 10. Ruderal levee slope habitat found between ponds A22 and A23.

Wildlife. The ruderal levee slope habitat in the survey area provides limited habitat for wildlife species due to its narrow extent and lack of connectivity with more extensive grassland habitats in the region. Wildlife species that make use of this habitat include common grassland species, such as house mice and western fence lizards, as well as those that occur in adjacent pond habitats (in the case of terrestrial species) or surrounding habitats (in the case of birds) and use these areas opportunistically for foraging. These include resident Canada geese, Bryant's savannah sparrows, and wintering Lincoln's sparrows. Where this habitat is adjacent to tidal brackish marsh, rails and salt marsh harvest mice may seek high-tide refugia in these elevated areas.

4.2.13 Mixed Riparian Forest and Woodland

Vegetation. Mixed riparian forest and woodland habitat (approx. 6.26 acres) was mapped along the Guadalupe River near West Trimble Road in the survey area, in the center of the river and below top of bank (Photo 11). Within these areas, riparian woodland habitat was characterized by a dense overstory of Fremont cottonwood (*Populus fremontii*), California bay, weeping willow (*Salix babylonica*), and red willow (*Salix laevigata*). Understory shrubs include poison oak (*Toxicodendron diversilobum*) and Himalayan blackberry. Herbaceous species in the understory include both common wetland and annual grassland species such as cattails, ripgut brome, stinging nettle (*Uritca dioens*) and poison hemlock (*Conium maculatum*).

Photo 11. Mixed riparian forest and woodland along the Guadalupe River.

Wildlife. Riparian habitats in California generally support exceptionally rich animal communities and contribute a disproportionately high amount to landscape-level species diversity. In addition to providing breeding, foraging, and roosting habitat for a diverse array of animals, riparian communities provide movement corridors for some species, connecting a variety of habitats throughout a region. The riparian habitat along the Guadalupe River is of high value to wildlife, particularly to those species that are tolerant of or associated with the adjacent developed/landscaped areas and grasslands.

Resident bird species that nest and forage in this habitat include the song sparrow (*Melospiza melodia*), lesser goldfinch, Anna's hummingbird (*Calypte anna*), Bewick's wren (*Thryomanes bewickii*), and Nuttall's woodpecker (*Dryobates nuttali*). Black phoebes (*Sayornis nigricans*) and belted kingfishers forage for food over and in the river within the survey area, respectively, using trees as perches from which to hunt and defend territory. Mallards will nest in dense riparian understory vegetation or adjacent grasslands and forage along the river. Woodpeckers and other cavity-nesters such as violet-green swallows (*Tachycineta thalassina*) can use holes in trees for nests. Black-crowned night herons (*Nycticorax nycticorax*) will forage within this habitat year-round, but this species is not known to nest along Guadalupe River near the survey area.

No nests of raptors (e.g., hawks, owls, and falcons) were observed in riparian trees within the survey area or in immediately adjacent areas during the reconnaissance-level survey. However, larger trees in the riparian habitat, especially those with dense foliage that provide concealment from nearby human activity along West Trimble Road, provide potential nesting sites for common raptors such as the red-shouldered hawk, Cooper's hawk (*Accipiter cooperii*), and red-tailed hawk.

In addition to permanent resident and breeding birds, a number of migratory and wintering species occur in the survey area's riparian habitat, including various species of warblers, vireos, flycatchers, and sparrows. During migration, willow, cottonwood, and oak trees provide high-quality foraging habitat for these migrants. Although most of these trees are deciduous, and thus provide poor cover in winter, they still support fairly large numbers of foraging birds during this season. Migrant songbirds, such as the yellow warbler (*Setophaga petechia*), Wilson's warbler (*Cardellina pusilla*), orange-crowned warbler (*Leiothlypis celata*), western tanager (*Piranga ludoviciana*), western flycatcher (*Empidonax difficilis*), and warbling vireo (*Vireo gilvus*), forage on insects in trees and shrubs during spring and fall migration, and some may breed along the Guadalupe River within the survey area. Several other species, including the ruby-crowned kinglet (*Regulus calendula*), yellow-rumped warbler (*Setophaga coronata*), fox sparrow (*Passerella iliaca*), white-crowned sparrow and golden-crowned sparrow, occur as both migrants and winter residents.

Coast garter snakes (*Thamnophis elegans terrestris*) and gopher snakes will forage for insects and amphibians in this riparian habitat, and western fence lizards will also forage for insects. Native northwestern pond turtles and nonnative red-eared sliders occur in this habitat, using basking sites on the shore to regulate temperature and nesting on dry banks and into uplands. Amphibians such as the arboreal salamander (*Aneides lugubris*) occur in the leaf litter in this habitat, and the native Sierran chorus frog is also present. Urban-adapted mammals, such as the native raccoon and striped skunk, as well as the nonnative Virginia opossum, Norway rat (*Rattus*

norvegicus), black rat (*Rattus rattus*), and eastern gray squirrel (*Sciurus carolinensis*), reside in riparian habitat and adjacent habitats in the survey area. No cavities large enough to support colonies of roosting bats were observed within the survey area, although small numbers of individual bats may roost in small cavities and crevices in trees within and adjacent to the survey area.

4.2.14 Urban-Suburban

Vegetation. The majority of the survey area (approx. 358.43 acres) consists of existing developed areas, considered the urban-suburban land cover type. These areas include paved and gravel pedestrian paths, parking lots, associated landscape vegetation, parks, streets, and a turf lawn area (Photo 12, Figure 3). Landscaped vegetation within these areas consists of ornamental trees, shrubs, and groundcovers common to the region, including turf, crepe myrtle (*Lagerstroemia* sp.), strawberry tree (*Arbutus unedo*), London plane (*Platanus* x *hybrida*), rosemary (*Salvia rosemarinus*), and others.

Photo 12. Urban-suburban habitat in Montague Park.

Wildlife. The urban-suburban portions of the survey area serve as wildlife habitat only in a very limited capacity, and most wildlife species that occur in these areas are tolerant of frequent human disturbances. Species that use these areas include the nonnative European starling (*Sturnus vulgaris*), Eurasian collard-dove (*Streptopelia decaocto*), house mouse, and Norway rat, as well as the native raccoon and striped skunk. Western fence lizards commonly occur in urban-suburban areas and may bask on road or parking lot surfaces to raise their body temperature. Yellow-faced bumblebees (*Bombus vosnesenskii*) and western tiger swallowtails (*Papilio rutulus*) can commonly be seen foraging on landscaped floral resources, and monarchs forage on these floral resources as well during migration. During site visits, a few narrow-leaf milkweed (*Asclepias fascicularis*) plants were observed in at least one landscaped portion of the survey area, with a single monarch visiting them.

Bird species including the American crow (*Corvus brachyrhynchos*), Bewick's wren, Anna's hummingbird, California towhee (*Melozone crissalis*), bushtit, and dark-eyed junco (*Junco hyemalis*) will nest and forage in landscape vegetation in the survey area. Large trees in and adjacent to the survey area such as coast redwood (*Sequoia sempervirens*), Canary Island pine (*Pinus canariensis*), and blue gum (*Eucalyptus globulus*) provide potential nesting sites for passerines as well as for raptors such as red-shouldered hawks and Cooper's hawks in these developed areas.

4.2.15 Coastal Scrub

Vegetation. Coastal scrub, which occupies approximately 1.95 acres of the survey area, is dominated by dense shrubs up to 6 feet tall with scattered grassy openings (Photo 13). This habitat is found within a restoration site on the Refuge adjacent to New Chicago Marsh, as well as on a levee on the north side of Pond A18 adjacent to South Coyote Slough. This habitat is located adjacent to California annual grasslands and contains similar forb species as are found in grassland habitats. The dominant woody species within coastal scrub habitat is coyote brush, but various ruderal species, including wild oats, cheeseweed, and black mustard (*Brassica nigra*), among others, also occur in the grassy openings between shrubs.

Photo 13. Coastal scrub habitat adjacent to Los Esteros Road.

Wildlife. Although coastal scrub habitat represents a relatively small portion of the survey area (i.e., uplands near the Refuge Environmental Education Center), it provides habitat for many wildlife species. Example resident avian species include the California scrub-jay (*Aphelocoma californica*), California towhee, and northern mockingbird (*Mimus polyglottos*). During migration, hermit thrush (*Catharus guttatus*) and yellow-rumped, orange-crowned, and yellow warblers forage in this habitat. Common yellowthroats and white-crowned, golden-crowned, and Lincoln's sparrows winter in coastal scrub in the survey area.

Other wildlife species associated with coastal scrub in this area include the gray fox, black-tailed jackrabbit, desert cottontail (*Sylvilagus audubonii*), house mouse, deer mouse, striped skunk, western fence lizard, gopher snake, and yellow-bellied racer (*Coluber constrictor*).

4.3 Wildlife Movement

Wildlife movement within and in the vicinity of the survey area takes many forms and is different for the various suites of species associated with these lands. Bird and bat species move readily over the landscape in the project vicinity, foraging over and within both natural lands and landscaped areas. Mammals of different species move within their home ranges, but also disperse between patches of habitat. Generally, reptiles and amphibians similarly settle within home ranges, sometimes moving to central breeding areas, upland refugia, or hibernacula in a predictable manner, but also dispersing to new areas. Some species, especially among the birds and bats, are migratory, moving into or through the survey area during specific seasons. Aside from bats, there are no other mammal species in the vicinity of the survey area that are truly migratory. However, the young of many

mammal species disperse from their natal home ranges, sometimes moving over relatively long distances in search of new areas in which to establish.

Movement corridors are segments of habitat that provide linkage for wildlife through the mosaic of suitable and unsuitable habitat types found within a landscape while also providing cover. On a broader level, corridors also function as paths along which wide-ranging animals can travel, populations can move in response to environmental changes and natural disasters, and genetic interchange can occur. In California, environmental corridors often consist of riparian areas along streams, rivers, or other natural features.

Due to the density of development in the southern portion of the Reconductoring Work Areas, wildlife species may move through the area using cover and refugia as they find them available. Most dispersal by wildlife species in the region likely occurs along higher-quality habitats, which include the Guadalupe River, Coyote Creek, Artesian Slough, Mud Slough, and along the edge of the Bay to the north.

The Guadalupe River, Coyote Creek, Artesian Slough, and Mud Slough, which eventually drain to the open waters of the San Francisco Bay, and their associated riparian habitats serves as movement corridors for several common and special-status species of birds, fish, mammals, reptiles, and amphibians in the survey area. These riparian corridors provide the necessary aquatic habitat for waterbirds and fish, as well as sufficient vegetative cover preferred by many species when navigating across the landscape. Specifically, migratory passerines, rabbits, striped skunks, raccoons, Sierran chorus frogs, and alligator lizards, amongst other species, are expected to move along these corridors adjacent to and within the survey area. Secondary habitat linkages in the form of levees along ponds and sloughs and public trails (i.e., Warm Springs Trail and Guadalupe River Trail) provide corridors between foraging habitats for species such as coyotes, foxes, sparrows, and reptiles.

In summary, some portions of the Reconductoring Work Areas are not particularly important areas for movement by non-flying wildlife, while other areas, including the Guadalupe River, Coyote Creek, Artesian Slough, and Mud Slough provide a corridor for wildlife species to disperse into local watersheds, upland areas, and the open waters of the San Francisco Bay.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws, regulations and ordinances described in Section 3 above.

For purposes of this analysis, "special-status" plants are considered plant species that meet one or more of the following criteria:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

For purposes of this analysis, "special-status" animals are considered animal species that meet one or more of the following criteria:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).
- Protected by the Marine Mammal Protection Act (MMPA)

Information concerning threatened, endangered, and other special-status species that potentially occur in the survey area was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 4 depicts CNDDB records of special-status plant species in the general vicinity of the survey area and Figure 5 depicts CNDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.

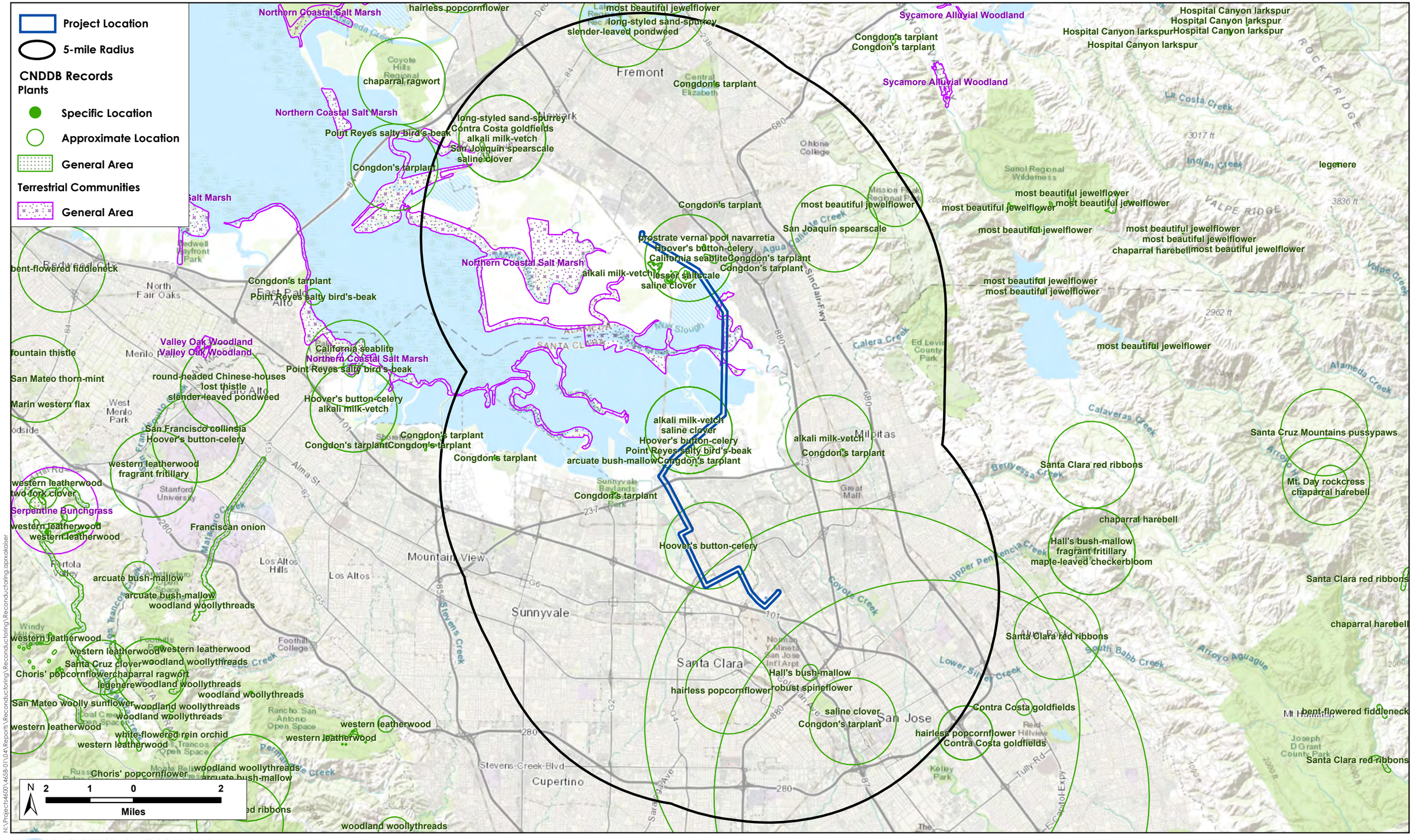

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Figure 4. CNDDB-Mapped Records of Special-Status Plants

Microsoft San José City Data Center 4 PG&E Reconductoring (4658-04)

March 2024

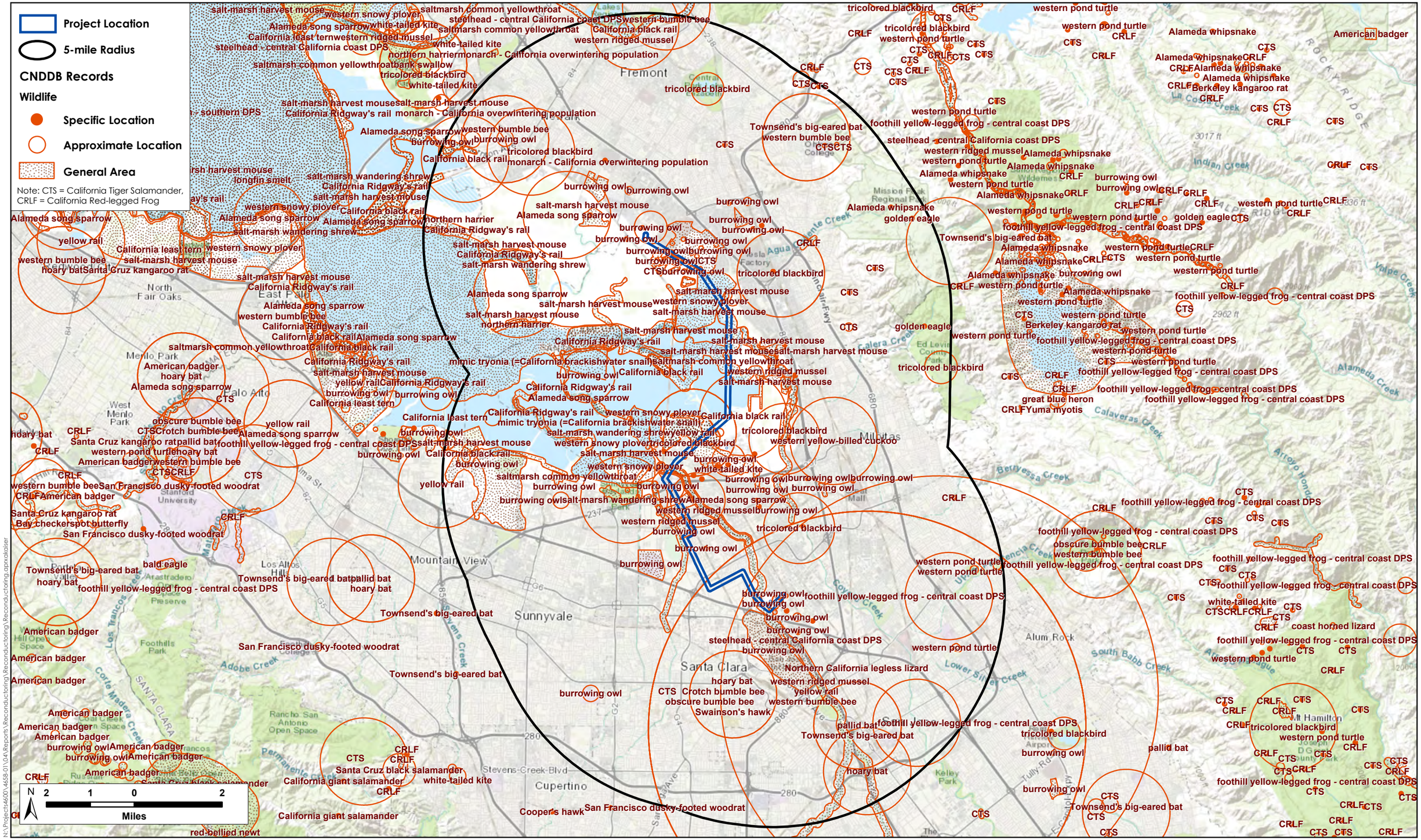

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Figure 5. CNDDB-Mapped Records of Special-Status Animals

Microsoft San José City Data Center 4 PG&E Reconductoring (4658-04)
March 2024

5.1 Special-Status Plant Species

The CNPS (2023) and CNDDB (2023) identify 53 special-status plant species as potentially occurring in at least one of the nine USGS 7.5-minute quadrangles containing or surrounding the survey area (for CNPS) or within the project vicinity (for CNDDB). Of the 53 potentially occurring special-status plant species from the database search, 37 were determined to be absent from the survey area for at least one of the following reasons: (1) absence of suitable habitat types; (2) lack of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range of the survey area; and/or (4) the species is presumed extirpated from the project region. Within the survey area, there are no serpentine or alkaline soils associated with the Diablo Range to the northeast where outcrops of serpentine geology and soils are present.

Suitable habitat, edaphic requirements, and elevation range are present within the survey area for the remaining 16 special-status species: alkali milk-vetch (*Astragalus tener* var. *tener*), brittlescale (*Atriplex depressa*), Contra Costa goldfields, prostrate vernal pool navarretia (*Navarretia prostrata*), California alkali grass (*Puccinellia simplex*), saline clover (*Trifolium hydrophilum*), long-styled sand spurrey (*Spergularia macrotheca* var. *longistyla*), lesser saltscale, Congdon's tarplant, Point Reyes salty bird's beak, San Joaquin spearscale, small spikerush (*Eleocharis parvula*), Hoover's button-celery (*Eryngium aristulatum* var. *hooveri*), Hall's bush-mallow, California seablite, and northern slender pondweed (*Potamogeton pusillus*). The potential for these species to occur in the survey area is discussed in Table 4 below. In addition, Table 4 also addresses several special-status plant species that warrant additional consideration, despite there not being suitable habitat in the survey area, due to their coverage by the Bay Area HCP. These are pallid manzanita (*Arctostaphylos pallida*), Sonoma sunshine (*Blennosperma bakeri*), fountain thistle (*Cirsium fontinale*), Contra Costa wallflower (*Erysimum capitatum* var. *angustatum*), Marin western flax (*Hesperolinon congestum*), Burke's goldfields (*Lasthenia burkei*), Sebastopol meadowfoam (*Limnanthes vinculans*), Antioch Dunes evening-primrose (*Oenothera deltoides* ssp. *howellii*), and white-rayed pentachaeta (*Pentachaeta bellidiflora*).

Based on the results of the site surveys, one special-status plant species, Congdon's tarplant, was confirmed to occur within the survey area. In addition, our habitat assessments determined that alkali milk-vetch, brittlescale, Contra Costa goldfields, prostrate vernal pool navarretia, California alkali grass, saline clover, long-styled sand spurrey, lesser saltscale, San Joaquin spearscale, small spikerush, Hoover's button-celery, and northern slender pondweed can potentially occur in the survey area.

Reconductoring Activities will largely be restricted to previously developed areas and California annual grassland that has been previously disturbed by regular mowing, so not all plants that are or may be present within the survey area would necessarily be within impact areas for the Reconductoring Activities. Potential impacts of the Reconductoring Activities on special-status plants are discussed separately in Section 6.2.1 below.