Santa Clara Valley Habitat Plan
2nd Annual Report
FY2015-2016

SANTA CLARA VALLEY
HABITAT AGENCY

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Acronyms and Abbreviations

AMM	Avoidance and Minimization Measure
CAZ	Conservation Analysis Zone
CDFW	California Department of Fish and Wildlife
Co-Permittees	Cities of San José, Gilroy, and Morgan Hill; County of Santa Clara; Santa Clara Valley Water District; Santa Clara Valley Transportation Authority
Corps	U.S. Army Corps of Engineers
County	County of Santa Clara
County Parks	County of Santa Clara Parks and Recreation Department
EBR	East Bay Region critical habitat unit
GIS	geographic information system
Habitat Agency	Santa Clara Valley Habitat Agency
Habitat Plan	Santa Clara Valley Habitat Plan
HCP	Habitat Conservation Plan
NCCP	Natural Communities Conservation Plan
LAG	Local Assistance Grant
Permit Area	Habitat Plan Permit Area
PSE	Participating Special Entity
RDM	Residual dry matter
Refuge	Don Edwards San Francisco Bay National Wildlife Refuge
Regional Board	Regional Water Quality Control Board
RRG	Aquatic Restoration/Creation Planning and Design Resource Group
SCVWD	Santa Clara Valley Water District
STC	Santa Clara County critical habitat unit
USFWS	U.S. Fish and Wildlife Service
UTC	United Technology Corporation
VTA	Santa Clara Valley Transportation Authority

Executive Summary

This is the second Annual Report for the *Santa Clara Valley Habitat Plan* (Habitat Plan). Prepared by the Santa Clara Valley Habitat Agency (Habitat Agency), it summarizes implementation activities undertaken between July 1, 2015, and June 30, 2016, per the conditions of the Habitat Plan.

The Habitat Plan offers a streamlined permitting process for development activities while protecting, enhancing, and restoring valuable natural resources in Santa Clara County and contributing to the recovery of threatened and endangered species. It provides a regional conservation and development framework that protects natural resources while improving and streamlining the permit process for take coverage of state-listed and federally listed species and impacts on sensitive habitat and resources. Permits issued by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) in 2013 allow the Co-Permittees[1] to comply with the federal Endangered Species Act and California's Natural Community Conservation Planning Act. Over the 50-year permit term, impacts from urban development and rural infrastructure projects will be offset by the creation of a Reserve System managed for the benefit of 18 covered species, as well as the natural communities that they—and hundreds of other species—depend on for habitat.

Covered Activities

The Habitat Plan describes the activities and projects within the Habitat Plan Permit Area (Permit Area) that are covered its permits and for which the Habitat Plan provides avoidance, minimization, and compensation (i.e., conservation) for impacts to covered species and natural communities. During the reporting period, 57 covered projects received coverage under the Habitat Plan: 31 projects private projects, 23 public projects, and 3 Participating Special Entity (PSE) projects. The covered projects consisted of 38 urban development projects, seven rural development projects, eight rural operations and maintenance projects, one in-stream capital project, one in-stream operation and maintenance activity, one conservation strategy implementation projects and one rural capital projects.

The 57 projects resulted in 600.8 acres of permanent impacts and 119.0 acres of temporary impacts, 14 feet of permanent impacts to streams and 840 feet of temporary impacts to streams. Impacts resulting from covered activities were tracked by land cover type, modeled species habitat, and covered plant occurrences. Impacts on aquatic land cover types and streams were tracked by watershed. Impacts on aquatic land cover types during the reporting period five different watersheds—Guadalupe, Pajaro, Uvas, Llagas, and Alamitos Creek. During the reporting period, four occurrences of covered plants were impacted: Coyote ceanothus, Santa Clara Valley dudleya, smooth lessingia, and most beautiful jewelflower.

[1] The Co-Permittees are the County of Santa Clara; the cities of Gilroy, Morgan Hill, and San José; the Santa Clara Valley Habitat Agency; the Santa Clara Valley Water District; and the Santa Clara Valley Transportation Authority.

Land Acquisition

The Habitat Agency enrolled the first site into the Reserve System—Coyote Ridge Open Space Preserve. Coyote Ridge was purchased by the Santa Clara Valley Open Space Authority and enrolled in the Reserve System via conservation easement. The site consists of 1,803 acres running north-south along Coyote Ridge in central Santa Clara County. It is located in the high-priority Conservation Analysis Zones Coyote-4 and Coyote-5 and contributes to critical linkages in the region: Habitat Plan Linkages 6 and 7 and the Bay Area Critical Linkage, Santa Cruz Mountains to Gabilan Range. It supports 12 land cover types, with serpentine bunchgrass grassland as the dominant land cover type, fulfilling 5% of the overall land acquisition requirements. The site contains habitat for 14 covered species and 20 known occurrences of seven covered plants. The site fulfills 36% of the requirements to acquire modeled habitat for Bay checkerspot butterfly, 10% of the modeled habitat requirements for California tiger salamander, and 6% of the requirements for California red-legged frog.

Habitat Restoration and Creation

The Habitat Agency completed its first restoration projects at Calero County Park and continued to make progress on the establishment of a new Coyote ceanothus population. The Calero County Park Pond and Wetland project resulted in the restoration/creation of 0.17 acres of coastal valley freshwater marsh, 0.26 acres of seasonal wetland, and 0.22 acres of pond to benefit California tiger salamander, California red-legged frog, western pond turtle, and Mt. Hamilton thistle. Phase II and III Coyote Ceanothus Creation Pilot Project resulted in successful seeding and planting at four test plots.

Western Burrowing Owl Management

The western burrowing owl management and monitoring plan continues to be a successful undertaking driven by the South Bay Burrowing Owl Survey Network. The 2016 surveys resulted in the documentation of 62 breeding adult burrowing owls and 108 documented fledged young. These numbers are down from the number of adult owls observed in 2015 (74) and below those reported from the early 1990's and 2009, just prior to Habitat Plan publication.

The Habitat Agency entered into a 5-year management agreement with the San José-Santa Clara Regional Wastewater facility over 201 acres. A subset of this acreage, 72 acres, will be placed under conservation easement in the next year. This is the most productive burrowing owl breeding site in the region. Together with the agreement with Don Edwards Wildlife Refuge, a total of 920 acres are under temporary management agreement, 17% of the total required under the Habitat Plan.

In addition to the annual monitoring of the known populations, two additional efforts are underway. The first effort is a habitat assessment of public lands to determine the distribution of high quality burrowing owl habitat. The lands identified from this effort will be surveyed for owls and may also be targeted for future management and/or enhancement actions. The second is a winter banding study that is being conducted to better understand how burrowing owls utilize the Plan Area during the winter months. The locations where owls are identified and banded during the winter months will be monitored during the breeding season. In addition to gaining more information about burrowing owl use of the Plan Area during the winter months, the re-sighting of previously banded birds provides information on movement and dispersal within the Plan Area.

Reserve System Management

The Santa Clara Valley Open Space Authority conducted management activities including mapping sensitive and invasive plant species, treatment of invasive plant species, conservation grazing to achieve residual dry matter (RDM), sampling of ponds and streams, and monitoring of springs and seeps.

Monitoring, Research and Adaptive Management

The monitoring and adaptive management program informs and improves conservation actions in the Reserve System and ensures that the Habitat Plan achieves its biological goals and objectives. Baseline surveys for wildlife and plant were conducted at Coyote Ridge Open Space Preserve. Surveys identify two of six ponds occupied by breeding California red-legged frog and three occupied by California tiger salamander. Survey results were used to identify two restoration projects to expand occupancy by these species. Bay checkerspot butterfly larvae were recorded in serpentine areas across 64 of 71 plots. There were an estimated 200,000 larvae, constituting 25–50% of the entire Bay checkerspot butterfly population on the Coyote Ridge. Adults were observed on all suitable serpentine grasslands across the property. Plant surveys documented over 20 occurrences of seven covered plant surveys across the property.

Researchers in the Plan Area continue to benefit from the CDFW's Natural Communities Conservation Plan (NCCP) Local Assistance Grant (LAG) Program. The LAG program provides state funds for urgent tasks associated with the implementation of approved NCCPs. The grant research activities included *Sycamore Alluvial Woodland Habitat Mapping and Regeneration Studies*, *Winter Burrowing Owl Banding Project*, *Coyote Valley Linkage Assessment Study*, *Alternative Grassland Grazing Monitoring Methods Assessment*, and *Modeling Climate Change Effects on Pond Hydroperiods in the Coyote Valley*.

Stay-Ahead Provision

Stay-ahead requirements are being met for all natural communities and western burrowing owl, except riparian. For natural communities in compliance, compliance ranges from 120% to 10,136% with conservation excess ranging from 0.3 acres to 266.4 acres. For western burrowing owl nesting habitat, stay ahead compliance is at 622% with conservation in excess of 772.2 acres. The Stay-ahead provision is not being met for riparian forest and scrub (43%) with a deficit of 3.3 acres. This will be remedied with the enrollment of Calero County Park and restoration at Joseph D. Grant County Park.

Stay-ahead compliance for plants can be preliminarily assessed based on the initial surveys on Coyote Ridge Open Space Preserve. Coyote ceanothus occurrence creation will offset the removal of 206 plants. Santa Clara Valley dudelya occurrence protection offsets the removal of one occurrence from (4 plants directly impacted and 118 plants indirectly impacted). Reserve System baseline surveys counted 60,000 plants; however, the number of occurrences is still being determined. The Reserve System contains one occurrence of smooth lessingia with 27.5 million plants to offset the removal of a single occurrence of 6 plants. The Reserve System contains two occurrences of most beautiful jewelflower totaling an estimated 3.1 million plants to offset the removal of a single 110-plant occurrence.

Changed and Unforeseen Circumstances

The "No Surprises" Regulation established by USFWS defines changed circumstances as those circumstances affecting a species or geographic area covered by a Habitat Conservation Plan (HCP) that can be reasonably anticipated by the applicant or the USFWS and to which the parties preparing the HCP can plan a response. There were no changed or unforeseen circumstances during this reporting period.

Finances

The Habitat Agency's available revenue, allocated budget, and expenditures varied from what was anticipated by the Habitat Plan. For Years 1–5, the Habitat Plan assumed $9.7 million for its average annual budget. The FY1516 budget was $1.9 million, 20% of the anticipated budget. The drivers of this difference were due to no land acquisition during the reporting period. The Habitat Agency's budget focused on program administration, burrowing owl management and monitoring, and baseline monitoring on Coyote Ridge.

Implementation expenditures were lower than what was estimated in the Habitat Plan. The expenditures were $2 million in FY2015–2016. This was 21%, of what was estimated in the Habitat Plan. Costs increased in this fiscal year from the previous due to the Habitat Agency beginning management and monitoring on Coyote Ridge Open Space Preserve and the restoration project construction at Calero County Park, and expansion of burrowing owl management and monitoring.

The Habitat Agency received $8.3 million in funds during the reporting period from fee and non-fee funding sources. Fee funding totaled $4.8 million (58% of total revenues) across private, public, and PSE projects. Private projects paid $3.2 million across 31 covered projects. Twenty-three public projects paid $1.3 million. Three PSEs contributed $189,000. Non-fee funding totaled $3.5 million (42%). This includes funds from three mitigation only projects ($1.1 million) and four grants ($2.4 million).

Fees are adjusted on an annual basis using an automatic inflation adjustment. From FY2014–2015 to FY2015-2016, land cover, serpentine, and nitrogen deposition fees increased by 5.7%. Burrowing owl and wetland fees increased by 3.6%.

Program Administration

The Habitat Plan permits were issued in July 2013, and with the close of FY2015–2016, the Habitat Agency neared 3 years of Habitat Plan implementation. This period focused on early implementation tasks, such as developing tools and resources for Co-Permittees, private applicants, and PSEs; preparing governing policies and guidance documents; and continuing the momentum of a dedicated Co-Permittee staff, regulators, and private citizens with their participation in governance and technical committees. Major Accomplishments are as follows.

- **Staff**. Terah Donovan was hired as the Principal Program Manager.
- **Financial Policies**. Three financial policies were adopted—*Investment Policy, Fraud Policy,* and *Donations, Contributions, and Scholarships Policy.*
- **Accounting Software.** Black Mountain Solutions was implemented for accounting.

- **Audit.** An audit report for FY1415 found the Habitat Agency to be in good standings.
- **Regional General Permit.** On January 15, 2016, the U.S. Army Corps of Engineers (USACE), San Francisco District, issued a 5-year Regional General Permit (RGP) to the Co-Permittees on January 15, 2016. An application was developed, training held, and first 3 projects permitted.
- **Trainings**. Three trainings were held for Co-Permittee staff on Habitat Plan permitting.
- **Interpretation and Clarification Memorandums**. Interpretations were developed for grading violations and abatements and San Joaquin Kit Fox den treatments to ensure consistent application of requirements across covered projects.
- **Voluntary Contributions and Mitigation Only Agreements**. The Habitat Agency entered into three mitigation only and one voluntary contribution agreement totaling over $1.2M.

Chapter 1
Introduction

Santa Clara Valley Habitat Plan Background

The Santa Clara Valley Habitat Plan (Habitat Plan) provides an effective framework to protect, enhance, and restore natural resources in Santa Clara County while improving and streamlining the environmental permitting process for impacts on threatened and endangered species. The Habitat Plan is a Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP). This means it provides to participants a mechanism for securing both federal Section 10 and state Natural Community Conservation Plan permits for endangered species take coverage. In return, it will conserve 18 covered species (9 wildlife and 9 plants) and the natural communities on which these species rely. The Habitat Plan Permit Area (Permit Area) is 508,669 acres (460,205 acres where most covered activities will occur and 48,464 acres in the expanded study area for burrowing owl conservation), or approximately 60% of the area of Santa Clara County, in the San Francisco Bay Area. The Permit Area includes all of the Llagas, Uvas, and Pajaro watersheds, all of the Coyote Creek watershed except for the Baylands, and a large portion of the Guadalupe watershed. The Permit Area also encompasses small, adjacent areas outside these watersheds (**Figure 1**).

The Habitat Plan grew from a collaborative effort in the early 2000s among four partners—the County of Santa Clara (County), the City of San José, the Santa Clara Valley Water District (SCVWD), and the Santa Clara Valley Transportation Authority (VTA)—as compensation for impacts on endangered and threatened species and their habitats due to several local transportation projects, a research park, and a biological mitigation site. In 2005, these partners were joined by the Cities of Gilroy and Morgan Hill, who recognized the long-term benefits of the Habitat Plan for their communities. The final Habitat Plan was approved and adopted by these entities in 2013; at that time, the Santa Clara Valley Habitat Agency (Habitat Agency) was also formed, and together these seven agencies are referred to as the *Co-Permittees*.

The Habitat Agency is the agency primarily responsible for executing the requirements of the Habitat Plan, the federal and state endangered species permits, and the Implementing Agreement. The Implementing Agreement is a legal document between the Wildlife Agencies—U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW)—and the Co-Permittees to implement the Habitat Plan. The Habitat Agency is a Joint Powers Authority composed of the Cities of Gilroy, Morgan Hill, and San José, and the County.[2]

The County and three cities are responsible for Habitat Plan compliance with respect to private development projects in their jurisdictions, and each Co-Permittee is responsible for ensuring its own public projects are carried out in conformance with the Habitat Plan. The Habitat Agency holds the title to lands or easements it purchases, and it oversees cooperative agreements with land management entities that own and/or manage reserves as part of the Reserve System. The Habitat

[2] The Joint Powers Authority is limited to the four participating jurisdictions because the Joint Exercise of Powers Act requires that a Joint Powers Authority can only exercise powers held by all the participating agencies—and of the six participating agencies, only the four jurisdictions have the authority to adopt the Habitat Plan development fees. However, because all six agencies are responsible for implementing the Habitat Plan, each has a role in the Habitat Agency.

Agency may also provide funding to local land trusts and management agencies for them to purchase land for the Reserve System. The Habitat Agency provides funds for Reserve System management and monitoring to those agencies and organizations with whom it contracts for such services.

The Habitat Agency has two decision-making bodies, the Governing Board and the Implementation Board. The Governing Board is composed of two representatives of each of the four participating jurisdictions, for a total of eight members. Each representative is an elected official from the participating jurisdiction. The Governing Board is responsible for the governance and administration of the Habitat Agency. It may delegate its authority to the Implementation Board except for two duties that must remain with the Governing Board: adoption and modification of Habitat Plan fees and the approval of the Habitat Agency's annual budget. The Implementation Board is represented by all Co-Permittees. The 11-member Implementation Board has two representatives each from the Co-Permittees except for VTA, which, per its request, has one representative. For the Co-Permittees with two representatives, one must be an elected official. The Implementation Board is responsible for reviewing and approving the Annual Report prior to submittal to the Wildlife Agencies.

The Habitat Plan's requirements for the Reserve System are provided below.

- Acquisition, management, and monitoring of 33,652 acres of newly protected lands.
- Improved management and monitoring of an additional 12,844 acres of existing protected lands.
- Restoration of 353 acres of riparian habitats, 75 acres of wetlands, 72 acres of ponds, and 10.4 miles of streams.
- Protection of nine terrestrial and seven aquatic linkages.
- Ongoing research of issues related to the improved management of all Reserve System lands.

Annual Report Overview

The Annual Report provides the Governing Board, Implementation Board, USFWS, CDFW, and the general public the opportunity to review the Habitat Agency's actions and progress toward implementing the Habitat Plan. Annual Reports are prepared by the Habitat Agency over the term of the Habitat Plan to document permit compliance, impacts, conservation actions, management actions, restoration/creation actions, and monitoring results. The Annual Reports summarize the previous fiscal year's implementation activities (July 1 to June 30) and are to be completed by March 15 following the reporting fiscal year.

This is the second Annual Report prepared by the Habitat Agency. This report summarizes implementation actions from July 1, 2015, through June 30, 2016.

The goals of the Annual Report are as follows.

- Provide the information and data necessary for the Co-Permittees to demonstrate to the Wildlife Agencies and the public that the Habitat Plan is being implemented properly and as anticipated.
- Disclose any problems with Habitat Plan implementation so they can be corrected.

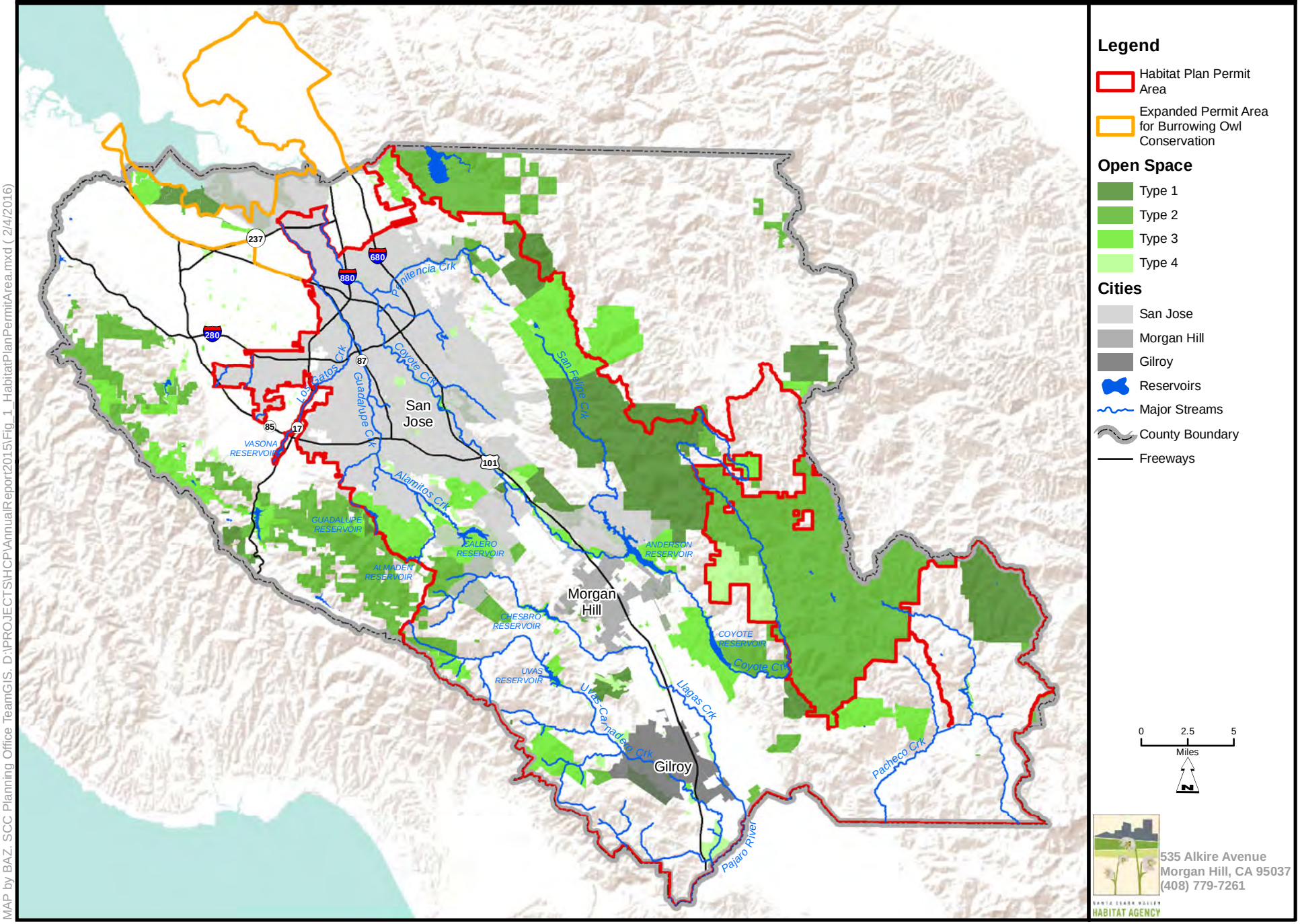
- Document issues with Habitat Plan implementation that may require consultation with the Wildlife Agencies.
- Identify administrative or minor changes to Habitat Plan components required to increase the success of implementation, including the success of meeting conservation measures.

The required elements of the Annual Report as defined by the Habitat Plan are summarized below. Each topic is discussed separately in its own chapter in this Annual Report.

- Chapter 2, *Covered Activities*, describes all projects and activities that occurred during the reporting period for which incidental take authorization was approved, including an accounting of the acreages of impact by project, land cover type, and covered species habitat. This chapter identifies conditions on covered activities applied to each project and reports impacts on riparian and wetland land cover types by watershed.
- Chapter 3, *Land Acquisition*, describes the land acquisitions that occurred during the reporting period, including a summary of land acquisition funding from local, state, and federal sources. This chapter identifies each land acquisition conservation measure implemented during the reporting period and summarizes natural community protection during the reporting period and permit term. In addition, this chapter documents progress toward all acquisition requirements, including land cover types, habitat connectivity, covered plant populations, and aquatic protection.
- Chapter 4, *Habitat Restoration and Creation*, describes natural community creation and restoration conservation measures implemented during the reporting period and summarizes cumulative accomplishments during the permit term, including aquatic restoration/creation by watershed.
- Chapter 5, *Western Burrowing Owl Management and Monitoring*, describes western burrowing owl monitoring efforts, management actions, and research studies untaken during the reporting period, and identifies future management agreements.
- Chapter 6, *Reserve System Management*, describes the Reserve System management planning activities that took place and the tools that were created during the reporting period.
- Chapter 7, *Monitoring, Research, and Adaptive Management*, summarizes the monitoring, research, and adaptive management activities that the Co-Permittees conducted under the Habitat Plan during the reporting period.
- Chapter 8, *Stay-Ahead Provision*, assesses compliance with the Stay-Ahead provision, a set of requirements to ensure that progress toward acquisition of Reserve System lands precedes impacts associated with covered activities. This assessment includes a cumulative summary of impacts and conservation for all land cover types.
- Chapter 9, *Changed and Unforeseen Circumstances*, describes actions taken or anticipated regarding changed circumstances,[3] including remedial actions.

[3] The federal "No Surprises" Rule defines changed circumstances as those circumstances affecting a species or geographic area covered by the HCP that can be reasonably anticipated by the applicant or federal wildlife agencies and that can be planned for.

Figure 1. Santa Clara Valley Habitat Plan Permit Area



MAP by BAZ. SCC Planning Office TeamGIS. D:\PROJECTS\HCP\AnnualReport2015\Fig_1_HabitatPlanPermitArea.mxd (2/4/2016)

Chapter 2
Covered Activities

This chapter describes the activities and projects (covered activities) within the Permit Area that were approved for take authorization pursuant to the Habitat Plan during the reporting period. The *Covered Activities Receiving Take Coverage* section summarizes major activity types and impacts by private, public, and Participating Special Entity (PSE) projects. The subsequent sections summarize impacts on land cover types, including aquatic impacts by watershed, impacts on species modeled and critical habitat, impacts on covered plants, and stream and riparian setback exemptions.

The Habitat Plan requires covered activities to compensate, avoid, and minimize impacts on covered species through a variety of conservation measures. The Habitat Plan allows incidental take coverage for the following covered activities.

- **Urban Development Projects** are projects and activities that occur inside the planning limits of urban growth but outside of in-stream areas, and is intended to be as inclusive as possible to accommodate urban growth and all ground-disturbing activities within designated urban areas.
- **In-Stream Capital Projects** are public infrastructure projects that occur within streams in both urban and rural areas. Activities within streams are those activities or projects that occur in or immediately adjacent to creeks and that may result in impacts on a creek or canal. This category includes activities in the stream channel, along the stream bank, and on adjacent lands at top-of-bank within the riparian corridor.
- **In-Stream Operation and Maintenance Activities** are operations and maintenance activities in the stream channel, along the stream bank, and on adjacent lands at top-of-bank within the riparian corridor, including maintenance of access roads and trails in both urban and rural areas.

Reporting Requirements

- Description of all covered activities implemented during the reporting period categorized by major activity type (per Chapter 2), acreage, and whether the project is public or private.
- Year-to-date and cumulative summaries (i.e., from the start of the permit term) of permanent and temporary impacts on all land cover types. Impacts on riparian and wetland land cover types will also be reported by watersheds.
- Year-to-date and cumulative summaries of impacts associated with projects exempt from fees and/or conditions of the Habitat Plan.
- Accounting of all conditions on covered activities applied to these activities.
- List of all riparian setback exceptions granted each calendar year within the reporting period.
- Year-to-date and cumulative summaries of permanent and temporary impacts on modeled habitat of covered species, and of permanent impacts on covered plant occurrences.
- Year-to-date and cumulative summaries of total impacts on critical habitat of the California red-legged frog, California tiger salamander, and Bay checkerspot butterfly.

- **Rural Capital Projects** are public infrastructure projects outside the cities' planning limits of urban growth.
- **Rural Operation and Maintenance Activities** are rural operations and maintenance activities including utility line or facility operations and maintenance; facility maintenance, including vegetation and infrastructure management; and pond maintenance outside the Reserve System.
- **Rural Development Projects** are those rural projects that occur in accordance with existing general plans at the time of permit issuance. This includes activities that are subject to ministerial or discretionary approval by the County or cities. Most of this type of development is expected to be residential development in areas outside the planning limits of urban growth, which generally occurs in the unincorporated County, but some development may occur within city limits. Specifically, rural residential development is expected to occur on the non-urban hillsides of eastern San José, in the Coyote Valley Urban Reserve and South Almaden Valley Urban Reserve, in Morgan Hill's Southeast Quadrant, and in Gilroy's Hecker Pass Specific Plan area.
- **Conservation Strategy Implementation** are activities that take place within or outside the Reserve System consistent with the Habitat Plan conservation strategy. All conservation actions will take place within the Permit Area and the Expanded Burrowing Owl Conservation Area.

Covered Activities Receiving Take Coverage

A total of 57 projects received take coverage under the Habitat Plan during the reporting period. **Table 1** provides a summary of all the covered activities permitted in the reporting period. The 57 projects resulted in 600.8 acres of permanent impacts, 119.0 acres of temporary impacts, 14 feet of permanent impacts on streams, and 840 feet of temporary impacts on streams (**Table 1**). **Figures 2 and 3** show the locations of private and public covered projects, respectively, in the Permit Area. Of the 57 projects receiving take coverage during the reporting period, 31 projects were private projects, 23 were public projects, and 3 were PSE projects. Covered activities are summarized as follows.

- 38 Urban Development Projects
- 1 In-Stream Operations and Maintenance Activity
- 1 In-Stream Capital Project
- 8 Rural Operations and Maintenance Activities
- 7 Rural Development Projects
- 1 Rural Capital Projects
- 1 Conservation Strategy Implementation Project

All covered activities mitigated impacts through the payment of Habitat Plan fees, which totaled $4,795,486.96 during the reporting period. See Chapter 10, *Finances*, of this Annual Report for details.

Private Projects

During the reporting period, 31 private projects received streamlined permits through the Habitat Plan. These projects included residential housing, water supply, and other economic development activities providing a range of benefits for the communities in the Permit Area. Highlights of these approved projects are provided below.

Residential Housing: The City of San José issued a permit for the iStar Great Oaks Mixed Use Residential project, which includes the development of a 46.8-acre site for residential use, including the construction of public streets and associated infrastructure.

Community Development: The City of Morgan Hill issued a permit for the Butterfield Retirement project, which is a senior congregate care housing project on 4 acres of vacant land. The structure will be 3 stories tall, with a new driveway, parking, and two courtyards.

Commercial Development: The City of Gilroy issued a permit for the development of a new CVS Pharmacy retail store and associated on-site improvements, including parking, landscaping, and site lighting.

Altogether, 31 private projects received take coverage under the Habitat Plan during the reporting period: 27 urban development projects and four rural development projects. These projects resulted in a total of 305.1 acres of permanent impacts and 85.2 acres of temporary impacts on terrestrial and aquatic land cover types.

Public Projects

During the reporting period, 23 public agency projects received streamlined permits through the Habitat Plan (**Table 1**). These projects include water supply, dam maintenance, and other economic development activities providing a range of benefits for the communities in the Permit Area. Highlights of these approved projects are provided below.

Trail Construction: The City of San José constructed a pedestrian/ bicycle trail along the west side of Coyote Creek to link the existing Highway 237 Bikeway pavement and the Tasman Drive undercrossing.

Facility Maintenance: The SCVWD performed maintenance on the Almaden Valley Pipeline for vegetation maintenance for access and fuel reduction. The maintenance also included maintenance of the pipeline infrastructure.

Solar Development: The County of Santa Clara permitted five solar development projects, using PG&E's Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) program. The RES-BCT program (formerly AB 2466) was established by the Legislature effective January 1, 2009 and is codified in Section 2830 of the Public Utilities Code.

Altogether, 23 public projects received take coverage under the Habitat Plan during the reporting period: 10 urban development projects, one in-stream capital projects, one in-stream operations and maintenance projects, one rural capital project, two rural operations and maintenance projects, two rural development projects, and one conservation strategy implementation project. These projects resulted in a total of 293.7 acres of permanent impacts and 28.1 acres of temporary impacts on terrestrial and aquatic land cover types.

Participating Special Entities

Public or quasi-public entities not subject to the jurisdiction of the Co-Permittees may seek coverage under the Habitat Plan to conduct projects or ongoing activities within the Permit Area that could affect listed species and require take authorization from USFWS or CDFW. These organizations, PSEs, may include existing or future school districts, water districts, irrigation districts, transportation agencies, local park districts, geologic hazard abatement districts, or other utilities or special districts that own land or provide public services. PSEs can request coverage under the Habitat Plan. Municipalities that are not Co-Permittees are not eligible to participate using this status. PSE projects have ranged from restoration to the construction of campus buildings and a parking lot.

During this reporting year, three PSEs were approved for take coverage under the Habitat Plan: one urban development, one in-stream capital project, and one conservation strategy implementation project. The PSEs were the Peninsula Corridor Joint Powers Board, Pacific Gas and Electric Company (PG&E), and Santa Clara Valley Open Space Authority. Highlights of these PSEs' approved projects are provided below.

- *Transportation:* The Peninsula Corridor Joint Powers Board will replace the existing Caltrain bridge over Los Gatos Creek in San José. The project will allow for continued Caltrain service during construction.
- *Recreational:* The Santa Clara Valley Open Space Authority is constructing public access improvements within the Sierra Vista Open Space Preserve. The construction includes the expansion of a maintenance yard area, 1-mile multi-use trail, and a clear span pedestrian bridge.
- *Utilities Maintenance:* PG&E is hydrostatically testing (hydrotesting) a 0.98-mile portion of gas pipeline L-300B, known as T-1065. T-1065 begins near Cochrane Road and runs north onto Coyote Ridge.

These projects resulted in a total of 1.9 acres of permanent impacts and 5.7 acres of temporary impacts.

Conditions on Covered Activities

The purpose of conditions on covered activities is to meet regulatory standards to avoid and minimize potential impacts on covered species and sensitive natural communities. Conditions on covered activities include completion of preconstruction surveys, minimization of development footprints, establishment of stream setbacks and fuel management buffers, management of the urban-wildland interface, maintenance of hydrologic conditions, avoidance of direct impacts on extremely rare plants and fully protected wildlife species and covered migratory birds, best management practices for stormwater management, and design requirements for roads outside the urban development area. Each condition is described in detail in Chapter 6 of the Habitat Plan under Section 6.4, *Conditions on Specific Covered Activities*.

Numerous conditions on covered activities at the landscape, natural community, and species levels were applied during the reporting period as shown in **Table 2** and **Table 3**. Of the 57 covered activities implemented during the reporting period, Conditions 1 and 3 applied to every project, wildlife conditions were triggered 25 times, natural community conditions were triggered 16 times,

plants conditions were triggered nine times, and other covered project categories were triggered 19 times (**Table 2**). **Table 3** provides a summary of the species-level measures triggered by covered activities during the reporting period. These measures include habitat surveys, preconstruction surveys, avoidance and minimization measures (AMMs), and construction monitoring.

Impacts on Land Cover Types

Reporting period impacts occurred on terrestrial and aquatic land cover types across four watersheds. There was a total of 600.8 acres of permanent impacts and 119.0 acres of temporary impacts on non-stream land cover types, and 14 feet of permanent impacts and 840 feet of temporary impacts on streams. The majority of permanent impacts occurred in annual grasslands (74.9 acres) and grain and row crops (171.9 acres). To date, grasslands and coyote brush are being impacted at the fastest rate compared to total allowable impacts with are the most impacted with 8% and 28% of total allowable impacts incurred, respectively. **Table 4** summarizes covered activity impacts, tracked by land cover type. Impacts on aquatic land cover types occurred in five different watersheds—Guadalupe, Pajaro, Uvas, Llagas, and Alamitos Creek. Impacts on aquatic land cover types included 0.14 acre of permanent impacts and 0.45 acre of temporary impacts. **Table 5** summarizes impacts on aquatic habitat by watershed.

Impacts on Modeled and Critical Habitat

Table 6 summarizes the impacts on modeled habitat for the reporting period and cumulatively. The largest impacts occurred on California red-legged from secondary habitat (303.3 acres of permanent impacts), tricolored blackbird secondary habitat (291.3 acres of permanent impacts), and Western burrowing owl overwintering habitat (274.3 acres of permanent impacts) (**Table 6**).

Table 7 provides a summary of impacts on critical habitat from covered activities during the reporting period and cumulatively. The largest impacts occurred in Bay checkerspot butterfly Kirby Unite (27.7 acres permanent impacts), California red-legged frog Santa Clara County (STC) Unit 2 habitat (3.7 acres of permanent impacts), California tiger salamander East Bay Region (EBR) Unit 12 (2.5 acres of permanent impacts), and Bay checkerspot butterfly Calero Reservoir Unit (0.8 acres of permanent impacts) **(Table 7).**

Impacts on Covered Plants

A total of 3 covered plant occurrences and 206 coyote ceanothus individual plants have been impacted to date (**Table 8**). During the reporting period, 3 occurrences of covered plants were impacted and 140 coyote ceanothus individuals were removed.

Coyote Ceanothus. *PG&E T-1065 Hydrotest* removed 140 Coyote ceanothus individual plants. In the previous reporting period, *Anderson Dam Phase 1B Geotechnical Investigation* removed 66 Coyote ceanothus individual plants.

Santa Clara Valley Dudelya. *Lands of Musallem* partially impacted an occurrence of Santa Clara Valley dudleya. The occurrence on-site is composed of 9 rock outcroppings with a total of 502 plants. The project botanist observed that the occurrence continues off-site. The project impacted 4

plants directly and an additional 118 plants indirectly impacted (within disturbance buffers). The occurrence was assumed removed as this project and future development in the area is likely to affect its long-term viability. Future projects affecting this occurrence will be tracked; however, no additional occurrence impact will be deducted.

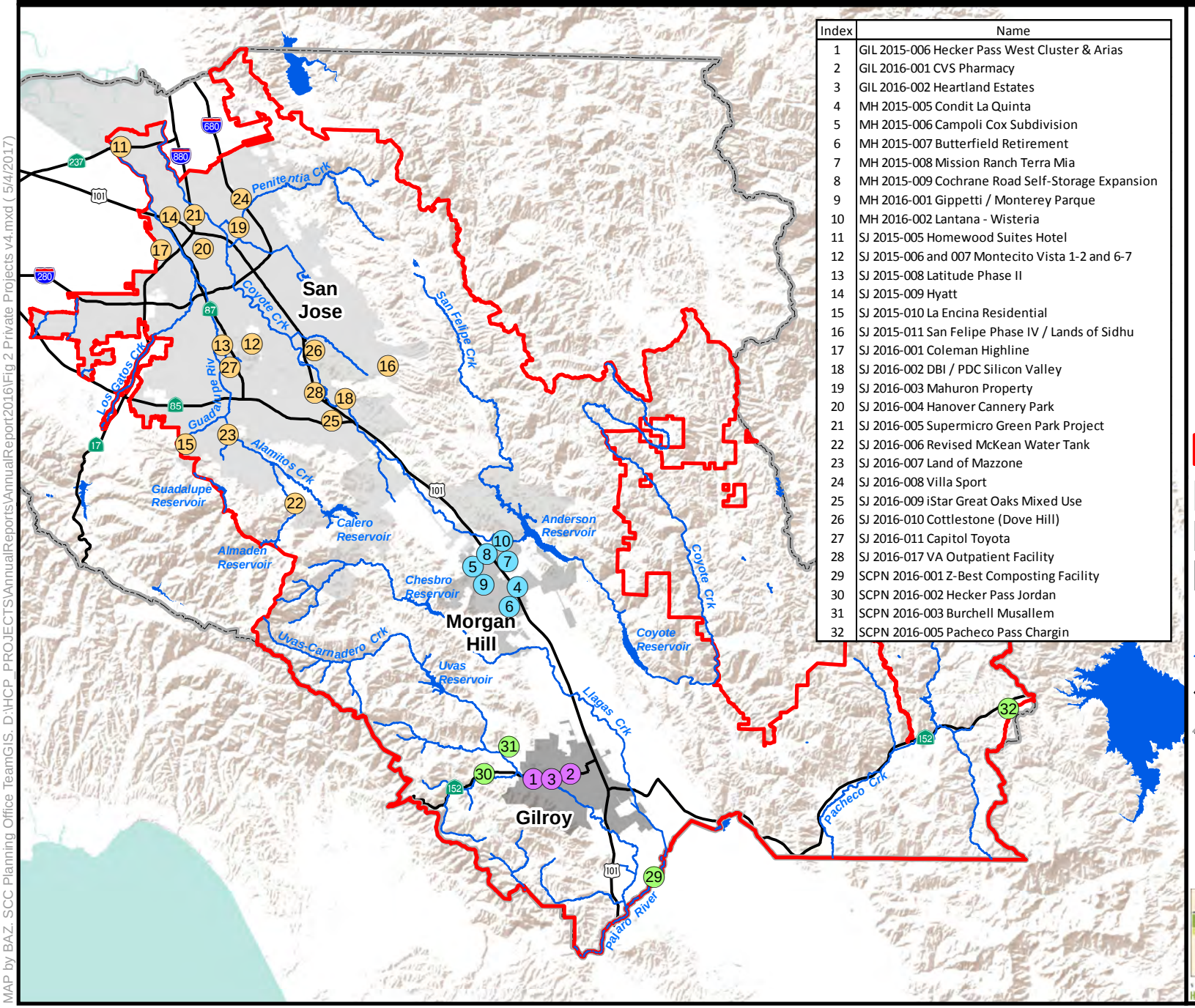
Smooth Lessingia. *Almaden Dam Improvement Project Geotechnical Investigations* removed an occurrence of smooth lessingia (6 plants).

Most beautiful Jewelflower. *Almaden Dam Improvement Project Geotechnical Investigations* removed an occurrence of most beautiful jewelflower (110 plants).

Stream and Riparian Setback Exemptions

The City of San José private project, *Lands of Mazzone*, received a stream setback exemption during the reporting period. The project proposes a 35-foot riparian setback from Golf Creek and a 75-foot riparian setback from Alamitos Creek. The project received an exception due to the existence of legal uses within the setback area.

Figure 2. Location of FY15-16 Private Covered Projects



Index	Name
1	GIL 2015-006 Hecker Pass West Cluster & Arias
2	GIL 2016-001 CVS Pharmacy
3	GIL 2016-002 Heartland Estates
4	MH 2015-005 Condit La Quinta
5	MH 2015-006 Campoli Cox Subdivision
6	MH 2015-007 Butterfield Retirement
7	MH 2015-008 Mission Ranch Terra Mia
8	MH 2015-009 Cochrane Road Self-Storage Expansion
9	MH 2016-001 Gippetti / Monterey Parque
10	MH 2016-002 Lantana - Wisteria
11	SJ 2015-005 Homewood Suites Hotel
12	SJ 2015-006 and 007 Montecito Vista 1-2 and 6-7
13	SJ 2015-008 Latitude Phase II
14	SJ 2015-009 Hyatt
15	SJ 2015-010 La Encina Residential
16	SJ 2015-011 San Felipe Phase IV / Lands of Sidhu
17	SJ 2016-001 Coleman Highline
18	SJ 2016-002 DBI / PDC Silicon Valley
19	SJ 2016-003 Mahuron Property
20	SJ 2016-004 Hanover Cannery Park
21	SJ 2016-005 Supermicro Green Park Project
22	SJ 2016-006 Revised McKean Water Tank
23	SJ 2016-007 Land of Mazzone
24	SJ 2016-008 Villa Sport
25	SJ 2016-009 iStar Great Oaks Mixed Use
26	SJ 2016-010 Cottlestone (Dove Hill)
27	SJ 2016-011 Capitol Toyota
28	SJ 2016-017 VA Outpatient Facility
29	SCPN 2016-001 Z-Best Composting Facility
30	SCPN 2016-002 Hecker Pass Jordan
31	SCPN 2016-003 Burchell Musallem
32	SCPN 2016-005 Pacheco Pass Chargin

Permitting Entity

- City of Gilroy (GIL) 3 Projects
- City of Morgan Hill (MH) 7 Projects
- City of San Jose (SJ) 18 Projects
- County of Santa Clara (SCPN) 4 Projects
- Habitat Plan Permit Area
- San Jose
- Morgan Hill
- Gilroy
- Reservoirs
- Major Streams
- Major Roads
- County Boundary

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Miles

535 Alkire Avenue
Morgan Hill, CA 95037
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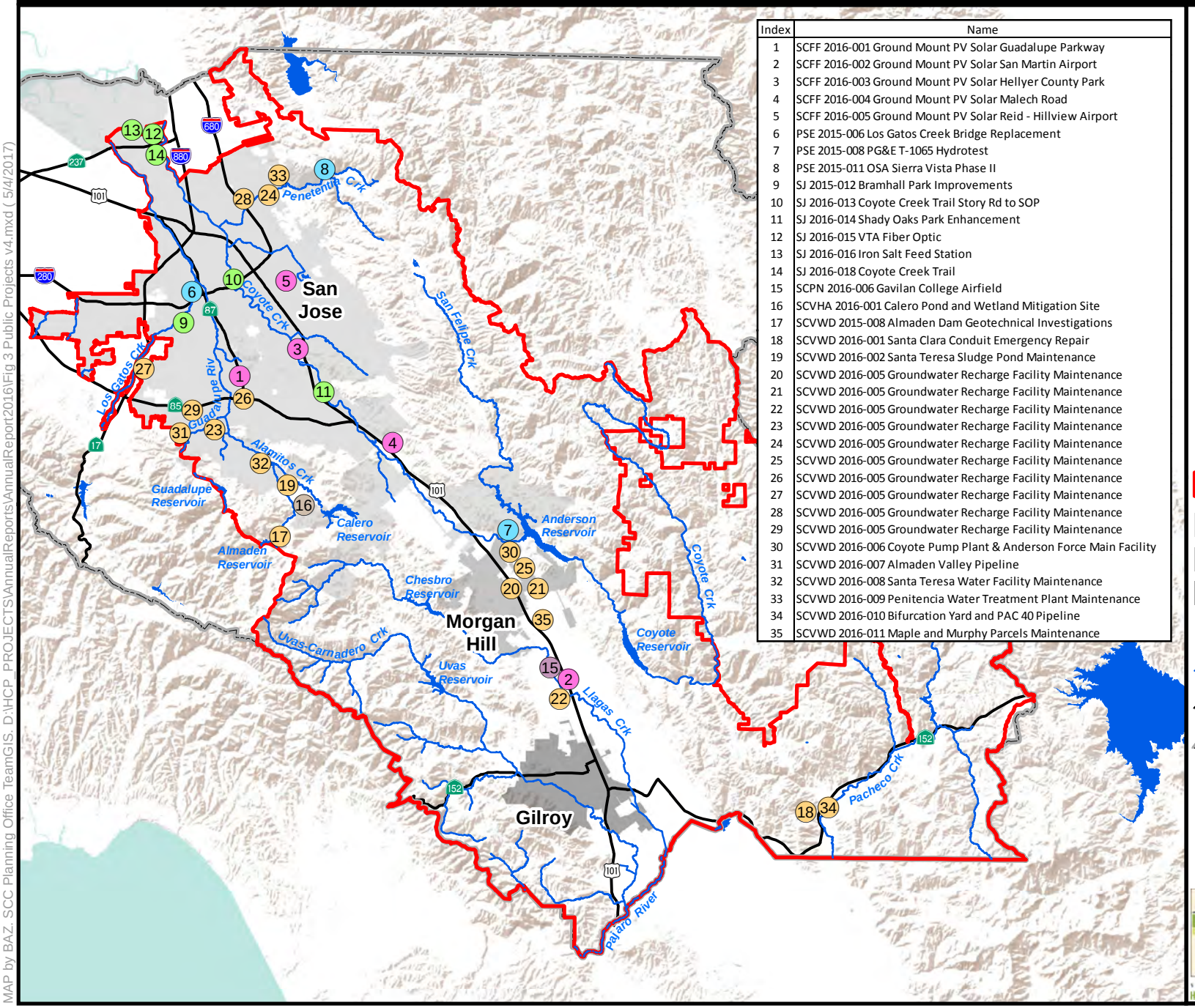
SANTA CLARA VALLEY HABITAT AGENCY

MAP by BAZ. SCC Planning Office TeamGIS. D:\HCP_PROJECTS\AnnualReports\AnnualReport2016\Fig 2 Private Projects v4.mxd (5/4/2017)

Figure 3. Location of FY15-16 Public Covered Projects



Index	Name
1	SCFF 2016-001 Ground Mount PV Solar Guadalupe Parkway
2	SCFF 2016-002 Ground Mount PV Solar San Martin Airport
3	SCFF 2016-003 Ground Mount PV Solar Hellyer County Park
4	SCFF 2016-004 Ground Mount PV Solar Malech Road
5	SCFF 2016-005 Ground Mount PV Solar Reid - Hillview Airport
6	PSE 2015-006 Los Gatos Creek Bridge Replacement
7	PSE 2015-008 PG&E T-1065 Hydrotest
8	PSE 2015-011 OSA Sierra Vista Phase II
9	SJ 2015-012 Bramhall Park Improvements
10	SJ 2016-013 Coyote Creek Trail Story Rd to SOP
11	SJ 2016-014 Shady Oaks Park Enhancement
12	SJ 2016-015 VTA Fiber Optic
13	SJ 2016-016 Iron Salt Feed Station
14	SJ 2016-018 Coyote Creek Trail
15	SCPN 2016-006 Gavilan College Airfield
16	SCVHA 2016-001 Calero Pond and Wetland Mitigation Site
17	SCVWD 2015-008 Almaden Dam Geotechnical Investigations
18	SCVWD 2016-001 Santa Clara Conduit Emergency Repair
19	SCVWD 2016-002 Santa Teresa Sludge Pond Maintenance
20	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
21	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
22	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
23	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
24	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
25	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
26	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
27	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
28	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
29	SCVWD 2016-005 Groundwater Recharge Facility Maintenance
30	SCVWD 2016-006 Coyote Pump Plant & Anderson Force Main Facility
31	SCVWD 2016-007 Almaden Valley Pipeline
32	SCVWD 2016-008 Santa Teresa Water Facility Maintenance
33	SCVWD 2016-009 Penitencia Water Treatment Plant Maintenance
34	SCVWD 2016-010 Bifurcation Yard and PAC 40 Pipeline
35	SCVWD 2016-011 Maple and Murphy Parcels Maintenance

Permitting Entity

- City of San Jose (SJ) 6 Projects
- County of Santa Clara (SCPN) 1 Project
- Santa Clara County Fleets and Facilities (SCFF) 5 Projects
- Santa Clara Valley Habitat Agency (PSE) 3 Projects
- Santa Clara Valley Habitat Agency (SCVHA) 1 Project
- Santa Clara Valley Water District (SCVWD) 10 Projects
- Habitat Plan Permit Area
- San Jose
- Morgan Hill
- Gilroy
- Reservoirs
- Major Streams
- Major Roads
- County Boundary

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Miles

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SANTA CLARA VALLEY HABITAT AGENCY

MAP by BAZ. SCC Planning Office TeamGIS. D:\HCP_PROJECTS\AnnualReports\AnnualReport2016\Fig 3 Public Projects v4.mxd (5/4/2017)

Covered Activity Type	Covered By	Project Name	Project Description	Covered Activity Category	Permanent Impacts	Temporary Impacts
Urban Development						
Commercial	City of San Jose	237 @ First Homewood Suites Hotel	A four-story 105,720 square foot building with 145 hotel rooms, surrounded by landscaping and surface parking.	Urban Development	3.5	
Park Facilities	City of San Jose	Bramhall Park Improvements	This project involves the rehabilitation of an existing lawn bowling facility and the construction of an approximately 1,680 square foot building at Bramhall Park in the Willow Glen neighborhood of San Jose.	Urban Development	0.4	
Residential	City of Morgan Hill	Butterfield Retirement	Butterfield Retirement is a senior congregate care housing project on 4.03 acres of land that is currently vacant. Structure will be 3 stories tall and there will be 73,000 sq. ft. of impervious surface.	Urban Development	4.0	
Residential	City of Morgan Hill	Gippetti/ Monterey Parque	A 58 unit single-family attached residential subdivision, public/private circulation and private open space on a 4.38 +/- acre site.	Urban Development	4.4	
Residential	City of Morgan Hill	Campoli Cox Subdivision	Residential subdivision consisting of 10 new single family residential lots.	Urban Development	1.9	
Residential	City of Morgan Hill	Cochrane Road Self-Storage Expansion	Self-storage facility on 2.74 acres of land.	Urban Development	2.7	
Commercial	City of Morgan Hill	Condit La Quinta	100+ room hotel and 2000+ coffee shop/ restaurant.	Urban Development	2.6	
Commercial	City of San Jose	Capitol Toyota	Demo existing auto dealership buildings and construct a new 194,151 sq. ft. building.	Urban Development	8.9	
Commercial	City of San Jose	Coleman Highline	The project proposes development of up to 675,000 square feet of commercial office space, 8,200 square feet of supporting retail space, construction of a 4-story parking structure, construction of new streets, public and private utilities, landscaping and parking structure.	Urban Development	48.6	48.2
Commercial	City of San Jose	Villa Sports	Demolishing existing theater and parking lot. Existing office building to remain. Construct new asphalt paved parking lot and health club/sports building with outdoor pool area.	Urban Development	9.1	
Residential	City of San Jose	Cottlestone (Dove Hill)	Demolition of existing residence and construction of 17 new single family homes in the city of San Jose.	Urban Development	7.2	
Transportation	City of San Jose	Coyote Creek Trail Story Road to SOP	3/4 mile long trail segment running along the eastern banks of Coyote Creek.	Urban Development	1.4	10.2

Covered Activity Type	Covered By	Project Name	Project Description	Covered Activity Category	Permanent Impacts	Temporary Impacts
Commercial	City of Gilroy	CVS Pharmacy	Remove four existing medical/dental office and all on-site improvements. Construct a new 14,715 sq. ft. CVS Pharmacy retail store and associated on-site improvement - parking, landscaping, site lighting, etc.	Urban Development	1.6	
Industrial	City of San Jose	DBI/PDC- Silicon Valley	Construction of two industrial/warehouse buildings on a 16.1 gross acre site.	Urban Development	10.7	
Facility Development	County of Santa Clara	Gavilan College Airfield	Construction and operation of facilities for an aviation maintenance program	Urban Development	3.5	2.3
Other	County of Santa Clara	Ground Mount PV Solar- Guadalupe Pkwy	2 megawatt fixed-tilt photovoltaic (PV) system that would cover approximately 6.4 acres on two County-owned vacant parcels west of Guadalupe Parkway.	Urban Development	9.0	
Other	County of Santa Clara	Ground Mount PV Solar- Hellyer County Park	2.74 megawatt fixed-tilt PV system that would cover approximately 6.6 acres in an open field southwest of the velodrome.	Urban Development	11.6	
Other	County of Santa Clara	Ground Mount PV Solar- Reid-Hillview Airport	1.04 megawatt system using a sun-tracking arrays on approximately 3.2 acres located on the southwest side of Reid-Hillview Airport near Cunningham Avenue.	Urban Development	5.3	0.7
Residential	City of San Jose	Hanover Cannery Park	construction of a new 4 story apartment building, and 5,000 SF of retail.	Urban Development	8.7	
Residential	City of Gilroy	Heartland Estates	15 lot single family detached residential subdivision (Tract 10267) with two open space parcels and public streets.	Urban Development	9.0	
Residential	City of Gilroy	Hecker Pass West Cluster & Arias	95 Lot single family home development.	Urban Development	16.3	2.1
Commercial	City of San Jose	Hyatt House / Hyatt Place	Demolition of four existing buildings totaling approximately 45,000 square feet, and construction of two hotel buildings with approximately 355 rooms, parking, landscaping and related improvements.	Urban Development	6.0	
Wastewater Management	City of San Jose	Iron Salt Feed Station Project	Implementation of iron salt and polymer feed stations. Each station consists of a chemical storage tank, a concrete containment.	Urban Development	0.3	1.5
Residential	City of San Jose	iStar Great Oaks Mixed Use (Residential)	The development of the 46.8 acre site for residential use, and including the construction of public street and associated infranstructure. Project location: West side of Great Oaks Blvd, approximately 1000 ft. north of Hwy 85.	Urban Development	46.8	

Covered Activity Type	Covered By	Project Name	Project Description	Covered Activity Category	Permanent Impacts	Temporary Impacts
Residential	City of San Jose	Lands of Mazzone	Construction of up to eight single family detached residences with driveways, a private street with underground utilities, street lights, open parking area, installation of bio-retention facilities, landscape, sprinklers, and a sound wall along Almaden Expressway.	Urban Development	1.2	0.6
Residential	City of San Jose	Latitude Phase II	This project is Phase II of the approved Latitude project at 1255 Babb Court. This phase entails construction of 86 multi-family residential units, including 38 one-bedroom units, 30 two-bedroom units, and 18 three-bedroom units.	Urban Development	1.4	
Residential	City of San Jose	Mahuron Property	109 Condominium Residential units consisting of 12 3-story and 4-story buildings.	Urban Development	4.7	
Residential	City of San Jose	La Encina Residential	Five new single-family homes and will retain one existing residence. One public trail will be constructed within the riparian setback adjacent to Guadalupe Creek and a sidewalk along Guadalupe Mines Road will be extended into riparian habitat.	Urban Development	1.6	1.0
Residential	City of Morgan Hill	Lantana-Wisteria	135-lot single family (121 single family detached homes and 14 duet units) subdivision with associated open space.	Urban Development	40.9	0.9
Residential	City of Morgan Hill	Mission Ranch Terra Mia	A 2 acre portion (8 units) of the 328-unit Mission Ranch subdivision.	Urban Development	2.0	
Residential	City of San Jose	Montecito Vista, Lots 1 and 2	A subdivision of a 2.05 acre area consisting of 22 residential units and 17,500 square feet of retail area in a horizontal mixed use configuration.	Urban Development	2.1	
Residential	City of San Jose	Montecito Vista, Lots 6 and 7	A subdivision of a 6.03 acre area consisting of 162 residential units.	Urban Development	12.1	
Utilities	Santa Clara Valley Habitat Agency	PG&E T-1065 Hydrotest	The project involves hydrostatically testing (hydrotesting) a 0.98-mile portion of PG&E gas pipeline L-300B, known as T-1065. T-1065 begins near Cochrane Road and runs north onto Coyote Ridge.	Urban Development	0.4	5.6
Other	City of San Jose	Shady Oaks Park Enhancement	1 mile long looped spur of the Coyote Creek Trail in San Jose.	Urban Development	2.0	1.5
Commercial	City of San Jose	Supermicro Green Park Project Master Plan	Redevelopment of a 35.7-acre site to provide approximately 760,500 gross square feet of warehouse, light industrial and office/R&D space in four 2-story buildings supported by surrounding surface parking on-site.	Urban Development	3.7	

Covered Activity Type	Covered By	Project Name	Project Description	Covered Activity Category	Permanent Impacts	Temporary Impacts
Other	City of San Jose	Trail: Coyote Creek (Hwy 237 to Tasman Dr.) D&C	Construction of a pedestrian/bicycle trail along the west side of Coyote Creek linking the existing Highway 237 Bikeway pavement.	Urban Development	2.2	0.2
Commercial	City of San Jose	VA Outpatient Facility	The construction of a 95,000 square foot outpatient clinic on an approximately 5.82 gross acre site.	Urban Development	5.8	
Utilities	City of San Jose	VTA Fiber Optic	Provide a connection between the RWF and the City's existing fiber optic communications network. The Project will use nearly 2,300 feet of existing conduit and approximately 460 feet of new conduit. This connection between the City's network and the RWF will provide high-speed reliability as the Facility undergoes its significant rehabilitation.	Urban Development		0.0
In-Stream Operations & Maintenance						
Other	Santa Clara valley Water District	FY 15/16 Groundwater Recharge Pond Facility Maintenance	Groundwater recharge maintenance work was performed as part of the opportunistic drought response work.	In-Stream Operations & Maintenance	140.3	
In Stream Capital Projects						
Transportation	Santa Clara Valley Habitat Agency	Caltrain Los Gatos Creek Bridge Replacement	Replacement of the existing bridge over Los Gatos Creek.	In Stream Capital Projects	1.4	
Rural Operations & Maintenance						
Pipeline Maintenance	Santa Clara valley Water District	Almaden Valley Pipeline Maintenance	This project is for the annual facility maintenance of the Almaden Valley Pipeline at the indicated locations. The facility maintenance is primarily for vegetation maintenance for access and fuel reduction. The facility maintenance may also include maintenance of the pipeline infrastructure as needed.	Rural Operations & Maintenance	5.0	
Other	Santa Clara valley Water District	Bifurcation Yard and PAC 40 Pipeline Maintenance	Annual facility maintenance of the Bifurcation Yard and at PAC 40 along the Pacheco Conduit at the two indicated locations.	Rural Operations & Maintenance	1.1	
Facility Maintenance	Santa Clara valley Water District	Coyote Pump Plant & Anderson Force Main Facility Maintenance	Annual facility maintenance of the Anderson Force Main Pipeline and the Coyote Pump Plant facility.	Rural Operations & Maintenance	18.0	

Covered Activity Type	Covered By	Project Name	Project Description	Covered Activity Category	Permanent Impacts	Temporary Impacts
Facility Maintenance	Santa Clara valley Water District	Maple and Murphy Parcels Facility Maintenance	Annual facility maintenance of three Santa Clara Valley Water District parcels in Morgan Hill.	Rural Operations & Maintenance		8.8
Facility Maintenance	Santa Clara valley Water District	Penitencia Water Treatment Plant Facility Maintenance	This project is for the annual facility maintenance of the Penitencia Water Treatment Plant facility. The facility maintenance is primarily for vegetation maintenance for access and fuel road.	Rural Operations & Maintenance	20.7	
Other	Santa Clara valley Water District	Santa Clara Conduit Emergency Repair	The Santa Clara Conduit, a part of the San Felipe Division of the Central Valley Project, was constructed in the 1980s, and is owned by the Bureau of Reclamation and maintained by the Santa Clara Valley Water District (SCVWD) pursuant to an operating agreement.	Rural Operations & Maintenance	2.3	
Facility Maintenance	Santa Clara valley Water District	Santa Teresa Sludge Pond Maintenance	Maintenance work was performed at the Santa Teresa Sludge Pond facility. The maintenance work consisted of the cleaning of the 16 settling ponds, minor repair to the existing maintenance road.	Rural Operations & Maintenance	15.7	
Facility Maintenance	Santa Clara valley Water District	Santa Teresa Water Treatment Plant Facility Maintenance	This project is for the annual facility maintenance of the Santa Teresa Water Treatment Plant facility. The facility maintenance is primarily for vegetation maintenance for access and fuel road.	Rural Operations & Maintenance	29.2	
Rural Development						
Residential	County of Santa Clara	Chagrin Residence	Project is to be single family residence with a basement and an attached there car garage. 4023 sq. ft. Home. 1093 sq. ft. garage.	Rural Development	1.3	0.3
Other	County of Santa Clara	Ground Mount PV Solar- San Martin Airport	The project is a 1.36 megawatt fixed-tilt PV facility that would be located at the southern boundary of the County-owned airport at Church and Murphy Avenues within the unincorporated community of San Martin.	Rural Development	9.1	0.1
Residential	County of Santa Clara	Lands of Jordan	The project includes the development of 4835 Hecker Pass Highway, Gilroy California (APN 756-36-056). The existing site includes a gravel driveway along the east property line that leads to the parcel to the north and also serves an existing recreation road.	Rural Development	0.9	0.2
Residential	County of Santa Clara	Lands of Mussallem	Proposed single family residence, driveway and associated improvements.	Rural Development	1.1	0.6

Covered Activity Type	Covered By	Project Name	Project Description	Covered Activity Category	Permanent Impacts	Temporary Impacts
Other	County of Santa Clara	Santa Clara Ground Mount Solar PV Project, Malech Road Site	The Malech Road Solar Project is a component of the Santa Clara Ground Mount Solar PV project, which consists of construction and operation of photovoltaic (PV) panels.	Rural Development	16.2	0.1
Recreation	Santa Clara Valley Habitat Agency	Sierra Vista Open Space Preserve Trail	Public access improvements within the Sierra Vista Open Space Preserve.	Rural Development	0.2	0.1
Industrial	County of Santa Clara	Z-Best Composting Facility and Outfall	Z-Best is proposing to expand compost processing operations into 28 acres of an 80-acre parcel east of the current operational footprint.	Rural Development	34.4	31.4
Rural Capital Projects						
Dam Maintenance	Santa Clara Valley Water District	Almaden Dam Improvement Project Geotechnical Investigations	Seismically stabilize or reconstruct the dam intake structure, renovate the outlet works, and determine if spillway modifications are necessary.	Rural Capital Projects	0.1	0.0
Conservation Strategy Implementation						
Restoration	Santa Clara Valley Habitat Agency	Calero County Park Pond and Wetland Restoration Project	Pond and wetland restoration project in Calero County Park to implement the Habitat Agency's Conservation Strategy.	Conservation Strategy Implementation	0.2	2.9
Total					**600.8**	**119.0**

	Conditions																		
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
237 @ First Homewood Suites Hotel	X		X												X					
Bramhall Park Improvements	X		X																	
Butterfield Retirement	X		X																	
Capitol Toyota	X		X																	
Campoli Cox Subdivision	X		X																	
Cochrane Road Self-Storage Expansion	X		X																	
Condit La Quinta	X		X																	
Coleman Highline	X		X																	
Cottlestone (Dove Hill)	X		X				X													X
Coyote Creek Trail Story Road to SOP	X		X																	
CVS Pharmacy	X		X																	
DBI/PDC- Silicon Valley	X		X												X	X	X			

	Conditions																	
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
Gavilan College Airfield	X		X															
Ground Mount PV Solar- Guadalupe Pkwy	X		X															
Ground Mount PV Solar- Hellyer County Park	X		X															
Ground Mount PV Solar- Reid-Hillview Airport	X		X												X			
Hanover Cannery Park	X		X															
Heartland Estates	X		X															
Hecker Pass West Cluster & Arias	X		X												X			
Hyatt House / Hyatt Place	X		X															
Iron Salt Feed Station Project	X		X												X			

	Conditions																		
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
iStar Great Oaks Mixed Use (Residential)	X		X																
Lands of Mazzone	X	X	X	X							X						X		
Latitude Phase II	X		X																
Mahuron Property	X		X																
La Encina Residential	X		X								X				X		X		
Lantana-Wisteria	X		X																
Mission Ranch Terra Mia	X		X																
Montecito Vista, Lots 1 and 2	X		X																
Montecito Vista, Lots 6 and 7	X		X																
PG&E T-1065 Hydrotest	X		X										X					X	X
Shady Oaks Park Enhancement	X		X														X		

	Conditions																		
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
Supermicro Green Park Project Master Plan	X		X																
Trail: Coyote Creek (Hwy 237 to Tasman Dr.) D&C	X		X												X		X		
VA Outpatient Facility	X		X		X			X											
VTA Fiber Optic	X		X												X				
FY 15/16 Groundwater Recharge Pond Facility Maintenance	X		X														X		
Caltrain Los Gatos Creek Bridge Replacement	X		X	X		X											X		
Villa Sports	X		X																

	Conditions																		
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
Almaden Valley Pipeline Maintenance	X		X														X			
Bifurcation Yard and PAC 40 Pipeline Maintenance	X		X																	
Coyote Pump Plant & Anderson Force Main Facility Maintenance	X		X				X					X						X		
Gippetti/ Monterey Parque	X		X					X		X							X			
Maple and Murphy Parcels Facility Maintenance	X		X																	
Penitencia Water Treatment Plant Facility Maintenance	X		X																	

	Conditions																		
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
Santa Clara Conduit Emergency Repair	X		X				X													
Santa Teresa Sludge Pond Maintenance	X		X								X			X						
Santa Teresa Water Treatment Plant Facility Maintenance	X		X																	
Chagrin Residence	X		X				X							X				X		
Ground Mount PV Solar- San Martin Airport	X		X																	
Lands of Jordan	X		X	X			X					X				X	X			
Lands of Mussallem	X		X				X						X						X	X
Santa Clara Ground Mount Solar PV Project, Malech Road Site	X		X																	

Table 2. Applied Conditions by Covered Activity - Reporting Period

	Conditions																		
Covered Activity	**Condition 1.** Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	**Condition 2.** Incorporate Urban-Reserve System Interface Design Requirements	**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality	**Condition 4.** Avoidance and Minimization for In-Stream Projects	**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance	**Condition 6.** Design and Construction Requirements for Covered Transportation Projects	**Condition 7.** Rural Development Design and Construction Requirements	**Condition 8.** Implement Avoidance and Minimization Measures for Rural Road Maintenance	**Condition 9.** Prepare and Implement a Recreation Plan	**Condition 10.** Fuel Buffer	**Condition 11.** Stream and Riparian Setbacks	**Condition 12.** Wetland and Pond Avoidance and Minimization	**Condition 13.** Serpentine and Associated Covered Species Avoidance and Minimization	**Condition 14.** Valley Oak and Blue Oak Woodland Avoidance and Minimization	**Condition 15.** Western Burrowing Owl	**Condition 16.** Least Bell's Vireo	**Condition 17.** Tricolored Blackbird	**Condition 18.** San Joaquin Kit Fox	**Condition 19.** Plant Salvage when Impacts are Unavoidable	**Condition 20.** Avoid and Minimize Impacts to Covered Plant Occurrences
Z-Best Composting Facility and Outfall	X		X	X			X					X				X	X			
Almaden Dam Improvement Project Geotechnical Investigations	X		X									X	X	X					X	X
Sierra Vista Open Space Preserve Trail	X		X																	
Calero County Park Pond and Wetland Restoration Project	X		X	X			X				X	X	X				X		X	X
Grand Total	**57**	**1**	**57**	**5**	**1**	**1**	**8**	**2**	**0**	**1**	**4**	**5**	**4**	**3**	**8**	**3**	**12**	**2**	**4**	**5**

Project Name	Species-Level Measures-Wildlife																		
	Western Burrowing Owl				Least Bell's Vireo				Tricolored Blackbird				San Joaquin Kit Fox				Bay Checkerspot Butterfly		
	Habitat Survey	Preconstruction Surveys	AMM	Construction Monitoring	Habitat Survey	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Habitat Survey	Preconstruction Surveys	AMM	Construction Monitoring	Preconstruction Surveys	AMM	Construction Monitoring
237 @ First Homewood Suites Hotel	X	X																	
Coyote Creek Trail Story Road to SOP									X										
PG&E T-1065 Hydrotest	X								X										
Hyatt House / Hyatt Place	X																		
La Encina Residential	X	X							X	X									
DBI/PDC- Silicon Valley									X	X		X							
Gavilan College Airfield	X	X	X		X	X	X		X	X	X								
Land of Mazzone									X	X		X							
Cottlestone (Dove Hill)									X										
VA Outpatient Facility									X										
Z-Best Composting Facility and Outfall					X	X			X	X									
Lands of Jordan					X				X	X									
Chagrin Residence													X	X		X			
Shady Oaks Park Enhancement									X										
VTA Fiber Optic	X	X	X	X															
Iron Salt Feed Station Project	X	X	X	X															
Santa Teresa Sludge Pond Maintenance									X										
FY 15/16 Groundwater Recharge Pond Facility Maintenance									X										
Almaden Valley Pipeline Maintenance									X										
Trail: Coyote Creek (Hwy 237 to Tasman Dr.) D&C	X								X										
Ground Mount PV Solar- Hellyer County Park									X										
Santa Clara Ground Mount Solar PV Project, Malech Road Site									X										
Ground Mount PV Solar- Reid-Hillview Airport																	X	X	X

Project Name	Species-Level Measures-Wildlife																		
	Western Burrowing Owl				Least Bell's Vireo				Tricolored Blackbird				San Joaquin Kit Fox				Bay Checkerspot Butterfly		
	Habitat Survey	Preconstruction Surveys	AMM	Construction Monitoring	Habitat Survey	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Habitat Survey	Preconstruction Surveys	AMM	Construction Monitoring	Preconstruction Surveys	AMM	Construction Monitoring
Santa Clara Conduit Emergency Repair													X						
Caltrain Los Gatos Creek Bridge Replacement									X	X									

Project Name	Species-Level Measures-Plants																	
	Smooth Lessingia		Fragrant Fritillary		Metcalf Canyon Jewelflower		Most Beautiful Jewelflower		Tiburon Paintbrush		Coyote Ceanothus		Santa Clara Valley Dudleya		Mount Hamilton Thistle		Loma Prieta Hoita	
	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM
237 @ First Homewood Suites Hotel																		
Coyote Creek Trail Story Road to SOP																		
PG&E T-1065 Hydrotest							X				X							
Hyatt House / Hyatt Place																		
La Encina Residential																		
DBI/PDC- Silicon Valley																		
Gavilan College Airfield																		
Land of Mazzone																		
Cottlestone (Dove Hill)																		
VA Outpatient Facility																		
Z-Best Composting Facility and Outfall																		
Lands of Jordan																		
Chagrin Residence																		
Shady Oaks Park Enhancement																		
VTA Fiber Optic																		
Iron Salt Feed Station Project																		
Santa Teresa Sludge Pond Maintenance																		
FY 15/16 Groundwater Recharge Pond Facility Maintenance																		
Almaden Valley Pipeline Maintenance																		
Trail: Coyote Creek (Hwy 237 to Tasman Dr.) D&C																		
Ground Mount PV Solar- Hellyer County Park																		
Santa Clara Ground Mount Solar PV Project, Malech Road Site																		
Ground Mount PV Solar- Reid-Hillview Airport																		

	Species-Level Measures-Plants																	
	Smooth Lessingia		Fragrant Fritillary		Metcalf Canyon Jewelflower		Most Beautiful Jewelflower		Tiburon Paintbrush		Coyote Ceanothus		Santa Clara Valley Dudleya		Mount Hamilton Thistle		Loma Prieta Hoita	
Project Name	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM	Preconstruction Surveys	AMM
Santa Clara Conduit Emergency Repair																		
Caltrain Los Gatos Creek Bridge Replacement																		

	Reporting Period (acres, unless otherwise noted)		Cumulative (acres, unless otherwise noted)					
Land Cover Type	**Permanent**	**Temporary**	**Permanent**	**Temporary**	**Total Allowable Permanent Impact**	**Percentage used of Total Allowable Permanent Impacts (%)**	**Total Allowable Temporary Impact**	**Percentage used of Total Allowable Temporary Impacts (%)**
Terrestrial								
California Annual Grassland	74.9	5.6	168.3	54.4	2,006	8%	574	8.5%
Serpentine Bunchgrass	3.7	3.4	22.2	3.4	550	4%	91	0.0%
Serpentine Rock Outcrop/Barrens	0.0	0.3	0.0	0.3	22	0%	2	0.0%
Serpentine Seep			0.0	0.0	0.5	2%	0.4	0.0%
Rock Outcrop (Non-Serpentine)			0.0	0.0	0.5	0%	0.2	0.0%
Northern mixed chaparral/chamise chaparral	0.7	0.0	0.7	0.0	86	1%	31	0.0%
Mixed serpentine chaparral	0.5	0.9	0.7	1.2	131	1%	30	1.0%
Northern coastal scrub/Diablan coastal scrub			1.0	0.0	178	1%	66	0.0%
Coyote brush scrub			2.8	0.1	10	28%	10	1.0%
Valley oak woodland			1.2	7.5	201	0.6%	45	16.7%
Mixed oak woodland and forest	1.9	0.5	7.0	1.8	1,441	0.5%	302	0.4%
Coast live oak woodland and forest	0.1	0.3	4.6	0.3	840	0.5%	181	0.0%
Blue oak woodland			0.5	0.0	131	0.4%	39	0.0%
Foothill pine-oak woodland			0.2	0.0	46	0.4%	26	0.0%
Mixed evergreen forest			0.0	0.0	50	0.0%	25	0.0%
Redwood forest			0.0	0.0	109	0.0%	56	0.0%
Ponderosa pine woodland			0.0	0.0	0	--	1	0.0%
Knobcone pine woodland			0.0	0.0	8	0.0%	2	0.0%
Subtotal terrestrial	81.8	11.0	209.3	69.0	5,810	3.6%	1,482	3.9%
Aquatic								
Willow riparian forest and scrub	0.01	0.01	1.04	0.06	180	0.6%	103	0.0%
Central California sycamore alluvial woodland			0.00	0.00	7	0.0%	6	0.0%
Mixed riparian woodland and forest	0.09	0.24	0.87	0.69	109	0.8%	101	0.4%
Coastal and valley freshwater marsh	0.04	0.01	0.16	3.88	25	0.6%	7	55.3%
Seasonal wetland		0.02	0.23	0.07	15	1.5%	2	2.5%
Pond	0.00	0.17	0.04	0.17	52	0.1%	9	0.0%

Table 4. Summary of Impacts to Land Cover Types - Reporting Period and Cumulative

	Reporting Period		Cumulative					
	(acres, unless otherwise noted)		(acres, unless otherwise noted)					
Land Cover Type	**Permanent**	**Temporary**	**Permanent**	**Temporary**	**Total Allowable Permanent Impact**	**Percentage used of Total Allowable Permanent Impacts (%)**	**Total Allowable Temporary Impact**	**Percentage used of Total Allowable Temporary Impacts (%)**
Terrestrial								
Reservoir		0.00	32.80	0.30	-	-	-	-
Subtotal Aquatic	0.14	0.45	35.14	5.17	388	9.1%	228	2.1%
Stream (length in linear feet)								
Total stream length	14.00	840.00	168.00	1,740.00	49,632	0.3%	253,440	0.4%
Agricultural								
Orchard	1.9	1.5	13.8	1.5	625	2.2%	24	-
Vineyard			0.0	0.0	37	-	3	-
Agriculture developed	9.0	0.2	16.1	1.0	-	-	-	-
Grain, row-crop, hay and pasture, disked/short-	171.9	45.0	393.2	59.5	7,356	5.3%	284	5.1%
Subtotal Agricultural	182.8	46.7	423.1	62.0	8,018	5.3%	311	4.9%
Developed								
Rural residential	3.3	0.3	7.3	0.5	1,603	0.5%	139	0.1%
Golf courses/ Urban parks	64.7	9.7	66.6	9.8	2,095	3.2%	40	0.3%
Ornamental woodland	0.2	0.1	0.2	0.1	30	-	8	-
Barren		0.0	0.4	0.3	32	1.3%	15	2.0%
Urban Suburban	267.9	50.8	145.0	57.9	-	-	-	-
Subtotal Developed	336.0	60.9	436.5	68.6	3,760	11.6%	202	3.8%
Totals								
Acres	600.8	119.0	1104.0	204.8	**17,976**	**6.1%**	**2,223**	**3.9%**
Linear Feet	14.00	840.00	168.00	1740.00	**49,632**	**0.3%**	**253,440**	**0.4%**

	Impacts			
Aquatic Land Cover Type (acres)	**Reporting Period**		**Cumulative**	
Watershed	**Permanent**	**Temporary**	**Permanent**	**Temporary**
Coyote				
Willow riparian forests, woodlands, and scrub	-	-	0.90	0.05
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	-	-	-	-
Coastal and valley freshwater marsh	-	-	-	3.87
Seasonal wetland	-	-	-	0.03
Pond	-	-	-	-
Subtotal aquatic	-	-	0.90	3.95
Reservoir	-	-	-	-
Stream (linear feet)			-	-
Total stream length	-	-	-	900.00
Guadalupe				
Willow riparian forests, woodlands, and scrub	-	-	0.12	-
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	0.09	0.13	0.29	0.17
Coastal and valley freshwater marsh	-	-	-	-
Seasonal wetland	-	-	0.20	0.02
Pond	-	-	-	-
Subtotal aquatic	0.09	0.13	0.61	0.19
Reservoir	-	-	32.80	0.30
Stream (linear feet)	-	-	-	-
Total stream length	12.00	640.00	137.00	640.00
Pajaro			-	-
Willow riparian forests, woodlands, and scrub	0.01	0.01	0.01	0.01
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	-	0.09	0.58	0.50
Coastal and valley freshwater marsh	0.04	-	-	-
Seasonal wetland	-	-	-	-
Pond	0.00	0.00	0.00	0.00
Subtotal aquatic	0.05	0.10	0.63	0.51
Reservoir	-	-	-	-
Stream (linear feet)	-	-	-	-
Total stream length	-	-	-	-
Uvas			-	-
Willow riparian forests, woodlands, and scrub	-	-	0.01	-
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	-	-	-	-
Coastal and valley freshwater marsh	-	-	0.16	-
Seasonal wetland	-	-	0.03	-
Pond	0.00	0.00	0.04	0.00
Subtotal aquatic	0.00	0.00	0.20	0.00

	Impacts			
Aquatic Land Cover Type (acres)	**Reporting Period**		**Cumulative**	
Watershed	**Permanent**	**Temporary**	**Permanent**	**Temporary**
Reservoir	-	-	-	-
Stream (linear feet)	-	-	-	-
Total stream length	-	-	29.00	-
Llagas			-	-
Willow riparian forests, woodlands, and scrub	-	-	-	-
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	-	0.02	-	0.02
Coastal and valley freshwater marsh	-	0.01	-	0.01
Seasonal wetland	-	0.02	-	0.02
Pond	-	0.17	-	0.17
Subtotal aquatic	-	0.22	-	0.22
Reservoir	-	-	-	-
Stream (linear feet)	-	-	-	-
San Tomas				
Willow riparian forests, woodlands, and scrub	-	-	-	-
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	-	-	-	-
Coastal and valley freshwater marsh	-	-	-	-
Seasonal wetland	-	-	-	-
Pond	-	-	-	-
Subtotal aquatic	-	-	-	-
Reservoir	-	-	-	-
Stream (linear feet)	-	-	-	-
Total stream length	-	-	-	-
Total	-	-	-	-
Total stream length	-	-	-	-
Alamitos Creek				
Willow riparian forests, woodlands, and scrub	-	-	-	-
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	-	-	-	-
Coastal and valley freshwater marsh	-	-	-	-
Seasonal wetland	-	-	-	-
Pond	-	-	-	-
Subtotal aquatic	-	-	-	-
Reservoir	-	-	-	-
Stream (linear feet)	-	-	-	-
Total stream length	2.00	100.00	2.00	100.00
Total	-	-	-	-
Willow riparian forests, woodlands, and scrub	0.01	0.01	1.04	0.06
Central California sycamore alluvial woodland	-	-	-	-
Mixed riparian woodland and forest	0.09	0.24	0.87	0.69

	Impacts			
Aquatic Land Cover Type (acres)	**Reporting Period**		**Cumulative**	
Watershed	**Permanent**	**Temporary**	**Permanent**	**Temporary**
Coastal and valley freshwater marsh	0.04	0.01	0.16	3.88
Seasonal wetland	-	0.02	0.23	0.07
Pond	0.00	0.17	0.04	0.17
Reservoir	-	-	32.80	0.30
Total aquatic	0.14	0.45	35.14	5.17
Total stream length	14.00	840.00	168.00	1,740.00

	Reporting Period (acres, unless otherwise noted)		Cumulative (acres, unless otherwise noted)					
Modeled Habitat	**Permanent**	**Temporary**	**Permanent**	**Temporary**	**Maximum Allowable Permanent Impacts to Modeled Habitat (acres)**	**Percentage used of Total Allowable Permanent Impacts (%)**	**Maximum Allowable Temporary Impacts to Modeled Habitat (acres)**	**Percentage used of Total Allowable Temporary Impacts (%)**
Bay Checkerspot Butterfly								
Primary Habitat	8.3	3.1	68.2	5.1	300	22.7%	54	9.4%
California Tiger Salamander								
Breeding Habitat	0.3	1.0	0.9	1.0	77	1.2%	14	6.8%
Non-breeding Habitat	237.1	36.8	334.9	57.0	12,855	2.6%	1,529	3.7%
Total	237.3	37.8	335.8	57.9	12,932	2.6%	1,543	3.8%
California Red-Legged Frog								
Primary Habitat	17.9	2.6	22.3	5.4	299	7.5%	116	4.7%
Secondary Habitat	303.3	62.5	486.1	81.1	12,937	3.8%	1,489	5.4%
Total	321.1	65.1	508.5	86.6	13,236	3.8%	1,605	5.4%
Foothill Yellow-Legged Frog (length in miles)								
Primary Habitat	0.0	0.1	0.0	0.1	2	1.5%	0.7	12.9%
Secondary Habitat	0.1	0.1	0.3	0.1	5	5.4%	1.3	4.6%
Total	0.2	0.2	0.3	0.2	7	4.3%	2.0	7.5%
Western Pond Turtle								
Primary Habitat	147.3	18.4	187.0	29.8	1,824	10.3%	440	6.8%
Secondary Habitat	108.0	39.2	202.8	54.3	7,825	2.6%	986	5.5%
Total	255.3	57.6	389.8	84.1	9,649	4.0%	1,426	5.9%
Western Burrowing Owl								
Occupied Nesting Habitat	49.3	3.2	49.3	3.2	198	24.9%	20	16.2%
Potential Nesting Habitat	-	-	-	-	4,000	0.0%	604	0.0%
Overwintering Habitat	274.3	65.6	433.2	86.3	9,671	4.5%	762	11.3%
Total	274.3	65.6	433.2	86.3	13,869	3.1%	1,385	6.2%
Least Bell's Vireo								
Primary Habitat	0.7	0.2	2.2	0.8	72	3.1%	43	1.9%
San Joaquin Kit Fox								
Secondary Habitat	4.7	1.8	6.2	2.3	198	3.1%	46	4.9%
Secondary Habitat (low use)	1.0	2.4	2.8	3.7	28	10.0%	6	61.1%
Total	5.7	4.3	9.0	5.9	226	4.0%	52	11.4%
Tricolored Blackbird								
Primary Habitat	92.8	1.0	98.4	7.6	276	35.6%	93	8.2%

	Reporting Period (acres, unless otherwise noted)		Cumulative (acres, unless otherwise noted)					
Modeled Habitat	**Permanent**	**Temporary**	**Permanent**	**Temporary**	**Maximum Allowable Permanent Impacts to Modeled Habitat (acres)**	**Percentage used of Total Allowable Permanent Impacts (%)**	**Maximum Allowable Temporary Impacts to Modeled Habitat (acres)**	**Percentage used of Total Allowable Temporary Impacts (%)**
Secondary Habitat	291.3	69.0	449.8	87.3	10,317	4.4%	768	11.4%
Total	384.0	70.0	548.2	95.0	10,593	5.2%	861	11.0%
Mt. Hamilton Thistle								
Primary Habitat	-	-	-	-	26	0.0%	4	0.0%
Fragrant Fritillary								
Primary Habitat	8.9	2.9	12.5	2.9	5503	0.2%	59	4.9%
Secondary Habitat	16.4	10.3	55.3	15.8	2,729	2.0%	655	2.4%
Total	25.3	13.2	67.7	18.7	3,279	2.1%	714	2.6%
Loma Prieta Hoita								
Primary Habitat	0.7	1.4	20.6	1.4	2,117	1.0%	413	0.3%
Secondary Habitat	12.2	0.4	14.9	1.3	266	5.6%	60	2.1%
Total	12.9	1.8	35.5	2.6	2,383	1.5%	473	0.6%
Smooth Lessingia								
Primary Habitat	9.1	2.9	69.3	2.9	550	12.6%	68	4.2%
Metcalf Canyon Jewelflower								
Primary Habitat	8.9	2.8	12.5	2.8	550	2.3%	62	4.6%
Most Beautiful Jewelflower								
Primary Habitat	20.6	3.3	83.5	4.1	550	15.2%	92	4.5%
Secondary Habitat	-	-	-	-	0	0.0%	0	0.0%
Total	20.6	3.3	83.5	4.1	550	15.2%	92	4.5%

	Reporting Period (acres)		Cumulative (acres)					
Species	Permanent	Temporary	Permanent	Temporary	Maximum Allowable Permanent Impact to Critical Habitat (acres)	Percentage used of Total Allowable Permanent Impacts (%)	Maximum Allowable Temporary Impact to Critical Habitat (acres)	Percentage used of Total Allowable Temporary Impacts (%)
California Red-Legged Frog								
STC Unit 1	0.9	0.1	9.0	0.7				
STC Unit 2	3.7	1.8	19.8	2.0				
ALA Unit 2	-	-	-	-				
Total	4.6	2.0	28.8	2.7	1,035	2.8%	277	1.0%
California Tiger Salamander								
EBR Unit 5	-	-	-	-				
EBR Unit 6	-	-	0.5	2.7				
EBR Unit 7	-	-	-	-				
EBR Unit 8	0.8	5.3	15.8	7.2				
EBR Unit 9	-	-	-	-				
EBR Unit 10a	-	-	-	-				
EBR Unit 10b	-	-	-	-				
EBR Unit 11	-	-	-	-				
EBR Unit 12	2.5	-	2.8	0.1				
Total	3.3	5.3	19.2	10.0	272	7.0%	125	8.0%
Bay Checkerspot Butterfly								
Tulare Hill	-	-	-	-				
Metcalf	0.8	0.1	0.8	0.1				
Santa Teresa Hills	-	-	-	-				
Calero Reservoir	0.8	5.3	5.7	5.4				
Kirby	27.7	2.0	28.9	2.7				
Kalana	-	-	0.3	1.8				
Hale	-	-	-	-				
Bear Ranch	-	-	-	-				
San Martin	-	-	-	-				
Total	29.3	7.4	35.8	10.1	550	6.5%	86	11.7%

Table 8. Summary of Impacts to Covered Plants

			Impacts (Occurrences)	
Common Name	**Scientific Name**	**Known Occurrences that May Be Removed by Covered Activities[1]**	**Reporting Period**	**Cumulative**
Tiburon paintbrush	*Castilleja affinis ssp. Neglecta*	0	0	0
Coyote ceanothus	*Ceanothus ferrisiae*	3,650 individuals[2]	140	206
Mt. Hamilton thistle	*Cirsium fontinale var. campylon*	6	0	0
Santa Clara Valley dudleya	*Dudleya abramsii ssp. Setchellii*	11	1	1
Fragrant fritillary	*Fritillaria liliacea*	1	0	0
Loma Prieta hoita	*Hoita strobilina*	0	0	0
Smooth lessingia	*Lessingia micradenia var. glabrata*	6	1	1
Metcalf Canyon jewelflower	*Streptanthus albidus ssp. Albidus*	2	0	0
Most beautiful jewelflower	*Streptanthus albidus ssp. Peramoenus*	6	1	1

[1] These could change over time if additional occurrences are found. This column provides the limit of impacts by number of occurrences allowable under the Habitat Plan. The impact limit assumes that no new occurrences of the species are discovered during the permit term and that occurrences impacted are in worse condition than those protected within reserves . Impact limits were determined based on estimated impacts of covered activities. In some cases,

[2] 3,650 individuals of the occurrence on either side of Anderson Dam could be removed by covered activities, or up to 5% of the total population.

Chapter 3
Land Acquisition

Reserve System

Reporting Requirements

- A year-to-date and cumulative summary of the extent of modeled habitat for covered species protected. This will be calculated by overlaying the most current species habitat models.
- Location, extent, and timing of land acquisition and Habitat Plan reserve establishment within each Conservation Analysis Zone.
- An assessment of the progress toward all acquisition requirements by local, state, and federal sources, including land cover types, landscape linkages, covered plant occurrences, and wetland protection. This assessment will include evaluation of compliance with the reserve design and assembly principles in Chapter 5 (e.g., minimizing edge). A year-to-date and cumulative summary of the protection of occupied habitat for select covered wildlife species described in Chapter 5.
- A copy of all easements recorded during the reporting year.

The Habitat Plan Reserve System will be at least 46,496 acres and up to an estimated 46,920 acres. Land preservation is an important component of the Habitat Plan conservation strategy, acquired through fee title purchase from willing sellers or through establishment of conservation easements to create the Habitat Plan Reserve System. The Reserve System links existing protected areas and newly protected lands. When completed, the Reserve System will protect substantial areas of high-quality habitat for covered species and provide extensive opportunities for habitat enhancement, restoration, and creation. The minimum land acquisition requirement is 32,850 acres, and all terrestrial land acquisition must be accomplished by 2058 (Year 45). In addition to newly acquired land, 13,291 acres of existing open space will be incorporated into the Reserve System to enhance its long-term management.

Regardless of impacts, the Habitat Agency must acquire, at a minimum, 250 acres of riparian forest and scrub, 40 acres of central California sycamore alluvial woodland, 10 acres of coast and valley freshwater marsh (perennial wetland), 5 acres of seasonal wetland, 50 acres of ponds, and 100 miles of streams. The following principles guide the development of the Reserve System.

- Maximize size efficiently
- Preserve irreplaceable and threatened resources
- Preserve the highest-quality communities
- Preserve connectivity
- Minimize edge
- Buffer urban impacts
- Fully represent environmental gradients

- Consider watersheds
- Consider full ecological diversity within communities
- Consider management needs

This chapter provides a summary of the sites acquired and quantifies contributions to requirements for conservation analysis zones (CAZs), covered plant species occurrences, land cover requirements, species modeled habitat, and landscape linkages. The section *Sites Under Review* provides a summary of acquisitions in progress.

Conservation Analysis Zones

The Plan Area is subdivided into 34 discrete CAZs to develop priorities and identify potential locations for acquisition (**Figure 4**). These zones define the areas in which conservation actions could occur outside existing protected areas. CAZs were defined within the six primary watersheds of the study area: Guadalupe, Coyote, Llagas, Uvas, Pacheco, and Pescadero.

To ensure that acquisition occurs in locations that will maximize the benefits to natural communities and covered species, acquisition requirements are also defined by CAZ or by a combination of CAZs. The Habitat Plan describes land acquisition and enhancement requirements for select CAZs where geographic specificity was required to ensure that Habitat Plan biological goals and objectives were met. **Figure 4** illustrates the relative level of land acquisition effort that would be required in each CAZ (high, moderate, or low).

Sites Acquired

This section summarizes the progress toward land acquisition requirements during this reporting period (**Table 9a** through **Table 12**). Working with the Santa Clara Valley Open Space Authority, the Habitat Agency successfully enrolled the first property in the Reserve System, Coyote Ridge Open Space Preserve totaling 1,803 acres.

Coyote Ridge Open Space Preserve

The Coyote Ridge Open Space Preserve site is an 1,803-acre site running north to south along Coyote Ridge in the central region of the Permit Area (**Figure 4**)[4]. It is located in the high-priority CAZs Coyote-4 and Coyote-5 (**Figure 5**) and contributes to critical linkages in the region: Habitat Plan Linkages 6 and 7 and a Bay Area Critical Linkage (Santa Cruz Mountains to Gabilan Range). It supports 12 land cover types, with serpentine bunchgrass grassland as the dominant land cover type, fulfilling 5% of the overall land acquisition requirements (**Table 9b**; **Figure 6**). The site contains habitat for 14 covered species and over 20 known occurrences of seven covered plants (**Figure 7**). The site contains modeled habitat or occurrences for the following species: Bay checkerspot butterfly (critical habitat), California tiger salamander, California red-legged frog (critical habitat), foothill yellow-legged frog, western pond turtle, tricolored blackbird, Mt. Hamilton

[4] The Coyote Ridge Open Space Preserve conservation easement totals 1,803 acres. Of these, 56 acres are encumbered by easements or existing infrastructure. Although the entire area is managed per the Habitat Plan requirements, only 1,747 acres contribute towards the Reserve System requirements.

thistle (five known occurrences), Santa Clara Valley dudleya (occurrences to be determined), fragrant fritillary (two known occurrences), Loma Prieta hoita (two known occurrence), smooth lessingia (one known occurrence), Metcalf Canyon jewelflower (8 known occurrences), and most beautiful jewelflower (two known occurrence). The site fulfills 36% of the modeled habitat acquisition requirements for Bay checkerspot butterfly, 10% of the requirements for California tiger salamander, and 6% of the requirements for California red-legged frog (**Table 10a**).

Located on Coyote Ridge, the site is topographically variable and supports diverse land cover types. It ranges in elevation from approximately 700 feet to 1,400 feet above sea level. The eastern portion features a gently sloped, rounded ridgetop. The northeastern and southeastern parcels, east of the ridgeline, feature steeper terrain. The west-facing hillside features moderately steep slopes interspersed by steeper drainages, which feature both north and southern aspects.

Coyote Ridge Open Space Preserve fulfills 34% of the protection requirements for serpentine bunchgrass grassland, 6% of the protection requirements for mixed serpentine chaparral, and 3% of the protection requirements for seasonal wetland (**Table 9a**). Serpentine bunchgrass grassland is the dominant land cover type (1,369.3 acres). California annual grassland (264.6 acres), serpentine rock outcrop/barrens (0.2 acre), serpentine seep (0.4 acre), mixed serpentine chaparral (43.2 acres), valley oak woodland (1.1 acres), mixed oak woodland and forest (14.5 acres), coast live oak forest and woodland (94.4 acres), willow riparian forest and scrub and mixed riparian forest and woodland (2.75 acres), seasonal wetland (1.89 acres), ponds (0.24 acres) and streams (12.9 miles) are also present (**Table 9b**).

Coyote Ridge Open Space Preserve provides habitat for 14 of the 18 covered species and includes critical habitat for two (**Table 10a** and **Table 10b**). The site fulfills 34% of the modeled habitat acquisition requirements for Bay checkerspot butterfly primary habitat, 46% of the requirements for Mt. Hamilton thistle primary habitat, 43% of the requirements for fragrant fritillary primary habitat, and 34% of the requirements for most beautiful jewelflower primary habitat. The site also contributes 1,665.8 acres to the Kirby/East Hills Bay checkerspot butterfly occupied habitat unit, fulfilling 31% of the acquisition requirements in the Kirby-13 habitat unit. In addition, the site contributes 279.6 acres of critical habitat for California red-legged frog in the STC-1 critical habitat unit, fulfilling less than 1% of the acquisition requirements for this critical habitat unit.

The site spans the high priority CAZs Coyote-4 and Coyote-5 (**Figure 5**) and fulfills 8% of the acquisition requirements in Coyote-4 (**Table 11a** and **Table 11b**). The site has 1,416.7 acres in Coyote-5 and 322.9 acres in Coyote-4. The site contributes 1,324.7 acres of serpentine grassland in Coyote-4 and Coyote-5, fulfilling 67% of the serpentine grassland acquisition requirements. Land acquisition in CAZ Coyote-5 protects and enhances extensive serpentine grassland, which is essential to meeting the conservation objectives for the Bay checkerspot butterfly and serpentine-dependent covered plant species. Land acquisition in CAZ Coyote-5 will protect and enhance extensive serpentine grassland, which is essential to meeting the conservation objectives for the Bay checkerspot butterfly and serpentine-dependent covered plant species. Coyote-4 is noteworthy because of its relatively high concentration of desirable land cover types: blue oak woodland, valley oak woodland and forest, and ponds. Acquisition in this zone also supports a large proportion of the annual grassland in the Reserve System. The majority of the woodland and forest communities within the site are found within CAZ Coyote-4.

The site contributes to two landscape linkages (**Table 12**). Within CAZ Coyote-4, the site will provide a landscape linkage between Coyote Ridge and mid- to high-elevation protected land in the

Diablo Range, including Anderson Lake County Park, Henry W. Coe State Park, Joseph D. Grant County Park, and the VTA Mitigation Site (Habitat Plan Linkage 7). This will allow wildlife to migrate north to south. Within CAZ Coyote-5, the site will enhance the landscape linkage from Coyote Ridge to Coyote Creek, facilitating connections across the Santa Clara Valley. The site provides connectivity for serpentine species within core habitat along Coyote Ridge and links patches of protected lands along the ridge between the Motorcycle County Park, Anderson Reservoir, and the Coyote Ridge Ecological Preserve (Habitat Plan Linkage 6).

The site is located in the Coyote Creek watershed and supports several aquatic features, including streams, springs, wetlands, and ponds. The western slope feeds Coyote Creek, which flows toward the Guadalupe River and the San Francisco Bay. The northern portion of the eastern slope drains into Silver Creek and Thompson Creek, which also flow northward. Further south, the eastern face drains to San Felipe Creek and Anderson Reservoir. The site features approximately 3.15 miles of intermittent streams of which 2.98 miles flow to Coyote Creek; 0.17 mile is in the upper headwaters of Las Animas Creek, which flows southeast into the Anderson Valley Reservoir after its confluence with San Felipe Creek. These streams feature springs that contribute to flows and support freshwater wetlands.

Sites Under Review

Acquisitions in Progress

The following section describes the potential acquisitions currently under consideration by the Habitat Agency. **Figure 8** provides a map of these sites.

Rancho El Toro

Rancho El Toro is a 12,220-acre site found in the Diablo Foothills, in the southwestern corner Santa Clara County. Located in the Pacheco Creek Watershed, it contains 90 miles of stream, supports 14 natural land cover types and provides habitat for 13 covered species. It would fulfill 82% of the acquisition requirements for streams. The site is located within the moderate and low priority Conservation Analysis Zones Pacheco 1-6. Land acquisition in these conservation analysis zones will protect important stands of riparian woodland and scrub, valley oak woodland, and northern mixed chaparral. Acquisition of low-slope grassland in this area may also provide suitable breeding habitat for San Joaquin kit fox, although such events are expected to be rare. Rancho El Toro contributes to Linkage 15, which provides a key linkage within the Diablo Range that will likely benefit species such as San Joaquin kit fox. If kit foxes move from the Salinas Valley to the San Luis Reservoir area in Merced and Stanislaus Counties, they may use this site as a secondary route around the San Luis Reservoir.

Sargent Ranch

Sargent Ranch is a 5,242.5-acre site located in the southwestern portion of Santa Clara County. Pescadero Creek runs along the western edge and Uvas-Carnadero Creek runs along the northeastern side of the property. The Pajaro River runs along the southern and southeastern sides of the property. Conservation Analysis Zones Pescadero-1, Uvas-5, and Uvas-6 overlap with the property boundary. Acquisition of this property will contribute to Santa Clara Valley Habitat Plan Linkages 19 and 20 and Santa Cruz Mountains to Gabilan Range Bay Area Critical Linkage. Species corridors that overlap with this Bay Area Critical Linkage include mountain lion, American badger, bobcat, and black-tailed deer. Land acquisition in this watershed will protect large stands of riparian woodland and potential breeding habitat for least Bell's vireo, along with diverse land cover types in the southern Santa Cruz Mountains that range from California annual grassland to redwood forest to valley oak woodland. These lands may also support secluded rock outcrops or large trees overlooking extensive stands of annual grassland that would provide suitable nesting sites for raptors.

Calero Preserve

The Calero Preserve is a 3,020-acre[5] subset of Calero County Park. Once part of the Pueblo lands of San José and the Rancho San Vicente land grant, this 3,020-acre area is nestled in the eastern foothills of the Santa Cruz Mountains. The site spans CAZs Guadalupe-1 and Llagas-2, providing a critical landscape linkage from the protected lands south of Calero Reservoir with Almaden Quicksilver County Park and extensive protected lands outside the Permit Area to the west in the Santa Cruz Mountains. The site protects 12 natural land cover types, provides habitat for 13 covered species, and contains known occurrences of 6 covered plant species. It contains critical habitat for Bay checkerspot butterfly and California tiger salamander and would fulfill 38% of the serpentine grassland acquisition requirements in Guadalupe-1.

Coyote Valley

Owned by Santa Clara Valley Open Space Authority, the Coyote Valley Open Space Preserve is a 348-acre site located on the west side of Coyote Valley, at the southern boundary of the Coyote Valley Urban Reserve. The site is positioned on the west side of Coyote Valley, approximately equidistant between the north and south end. It supports 6 natural land cover types, provides habitat for 12 covered species, and has known occurrences of 3 covered plant species. In addition to protecting an important wildlife linkage from Coyote Ridge to Coyote Creek, the site links to the undeveloped areas in Coyote Valley and provides a corridor to the Calero County Park. The site spans three CAZs and contributes to several land acquisition targets in these zones. It also protects breeding habitat for California red-legged frog and California tiger salamander and contains critical habitat for Bay checkerspot butterfly in the Kalana Avenues (1-4) occupied habitat unit.

[5] This County enrollment will count both towards existing open space requirements and new acquisition requirements. Lands acquired during the preparation of the Habitat Plan (after the Planning Agreement was signed) are consider interim conservation and may count toward new acquisition requirements once the site is incorporated into the Reserve System through placement of a conservation easement. A portion of Calero County Park, Rancho San Vicente, acquired in October 2009 using County Park Charter Funds, is considered interim conservation.

Laumond and Creighton

The Laumond and Creighton properties are 407.1 acres in the Diablo Foothills in the northeast corner of Santa Clara County. The site is located northeast of Sierra Vista Open Space Preserve and north of the Cherry Flat Reservoir. Upper Penitencia Creek runs through the northern portion of the site, and the city of San José lies 2.5 miles southwest of the site. The surrounding area is primarily made up of undeveloped conservation lands owned by The Nature Conservancy and the SCVWD. Laumond and Creighton protect important linkages between protected lands in the northeast corner of the Permit Area and protected lands in Alameda County and between Upper Penitencia Creek and the San Francisco Bay. Laumond and Creighton contains habitat for eight covered species and critical habitat for two covered species. There are no known occurrences of covered plants; however, suitable habitat is present for two covered plant species. The entire site is identified as critical habitat for California red-legged frog in the STC-1 unit. It also provides 276.2 acres of critical habitat for California tiger salamander in the East Bay Region unit.

Pacheco Creek Mitigation Area

The Habitat Agency, Wildlife Agencies, and the California Department of Transportation (Caltrans) are currently in discussions regarding the Caltrans transfer the 64.4-acre Pacheco Creek Mitigation Area (three parcels) to the Habitat Agency. The Pacheco Creek Mitigation Area is located in CAZ Pacheco-6 (moderate conservation effort) and could contribute to CAZ requirements identified for Pacheco 1–6 and other Habitat Plan-wide requirements. The site protects potential habitat for nine covered species, a healthy riparian woodland natural community (willow riparian forest and scrub, mixed riparian forest and woodland, and Central California sycamore alluvial riparian woodland), and provides opportunities for enhancement and restoration of these same land cover types. The site protects land on the south side of State Route 152 at one of two key crossing points targeted under the Habitat Plan to protect and provide opportunities for wildlife movement across the highway. It contributes to protection of at least 1 mile of the main stem of Pacheco Creek, as well as the protection of two linkages (Habitat Plan Linkages 5 and 10).

Richmond Ranch

The Richmond Ranch is a 3,777.4-acre site located in the Diablo Range, bordering the city of San José and Joseph D. Grant County Park. It is northwest of the Coyote Ridge Open Space Preserve acquisition. Located in the Coyote Creek watershed, it supports 14 natural land cover types, provides habitat for 14 covered species, and has known occurrences of 2 covered plants. It contains critical habitat for three covered species and would fulfill 21% of the natural land cover acquisition requirements for CAZ Coyote-4. Acquisition of this site will contribute to Habitat Plan Linkage 5 and provide connectivity with Type 1 Open Space.

UTC 2-Shingle Valley

The UTC 2–Shingle Valley is a 3,290-acre site on Coyote Ridge and Shingle Valley in the Diablo Range. Located in the Coyote Creek watershed, it supports 14 natural land cover types, provides habitat for 14 covered species, and has known occurrences of 6 covered plant species. It contains critical habitat for three covered species and fulfills 68% of the natural land cover acquisition requirements for CAZ Coyote-4. Acquisition of this site will contribute to Habitat Plan Linkages 5, 6, and 7 and the Santa Cruz Mountains to Gabilan Range Bay Area Critical Linkage.

San José-Santa Clara Regional Wastewater Facility

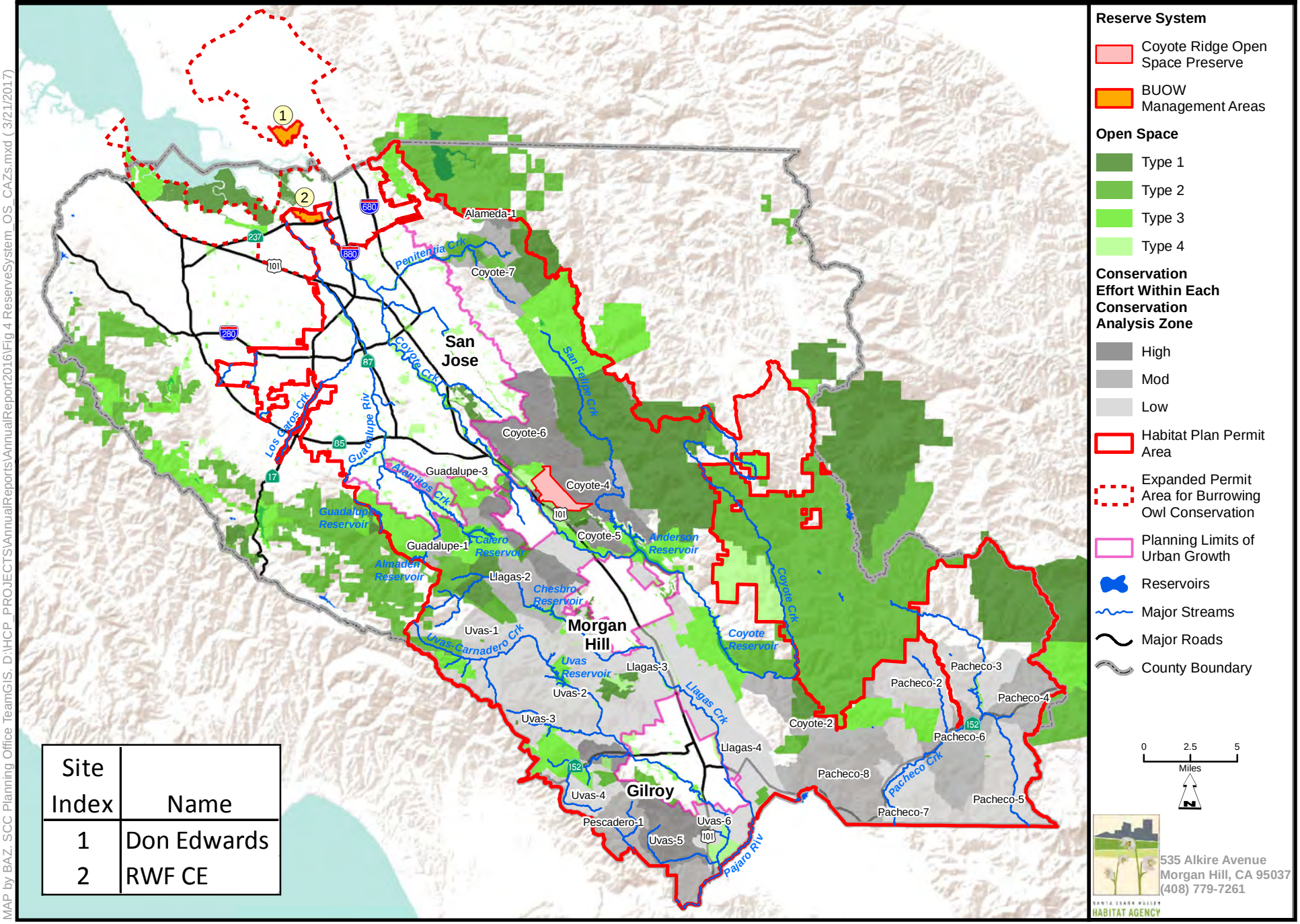
The San José-Santa Clara Regional Wastewater Facility (RWF) is the most successful western burrowing breeding site in the permit area. The City of San José will enroll 72 acres of their bufferlands in lieu of fees for four Capital Improvement Projects. The site will be enrolled in the Reserve System in 2017.

Mitigation Banks

Lucky Day Mitigation Bank

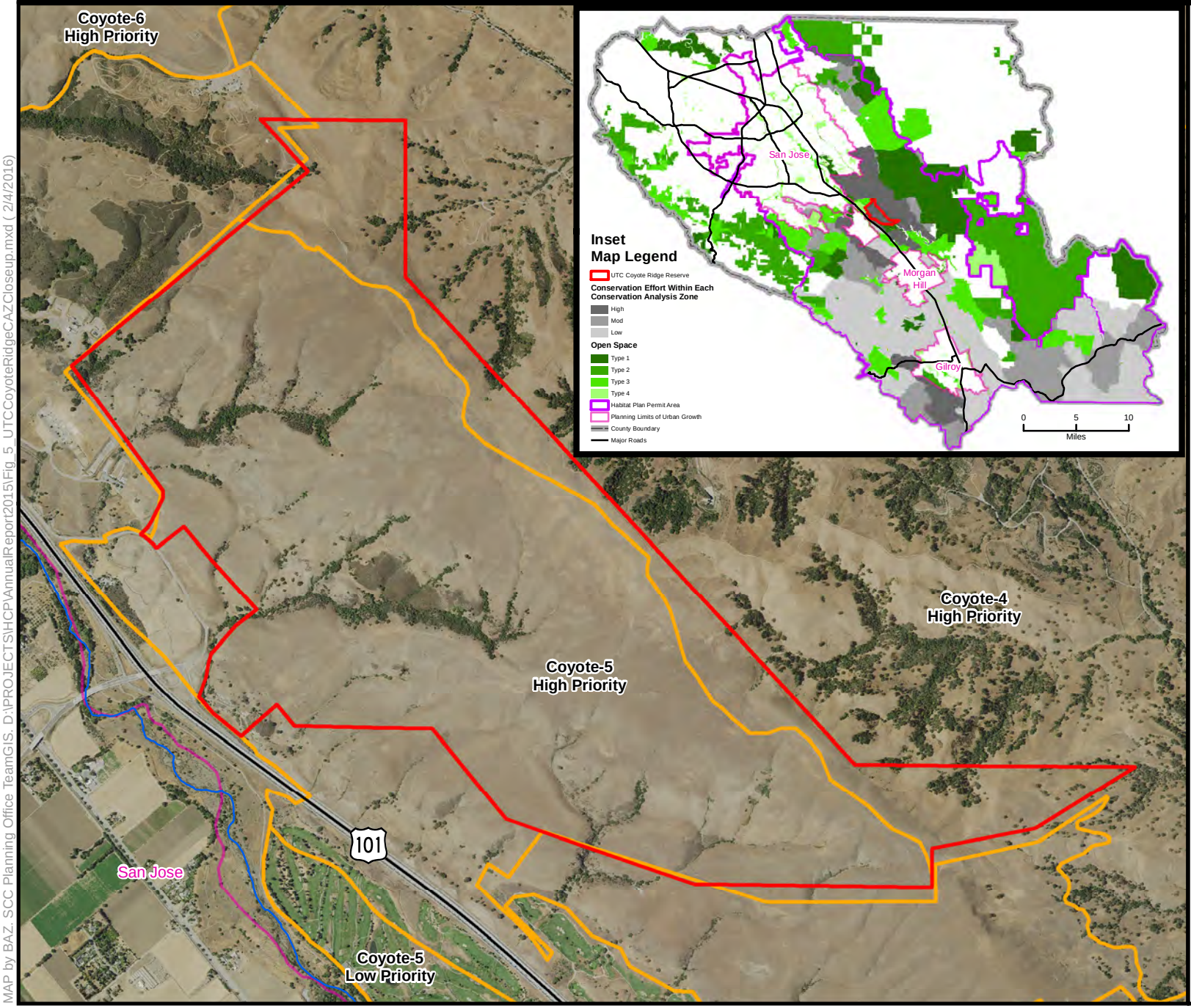
The Lucky Day Ranch Mitigation Bank is a 1,867-acre site in the southwestern edge of Santa Clara County, in the lower foothills of the Santa Cruz Mountains. Located in the Uvas and Llagas Creek watersheds, it supports 14 natural land cover types and modeled habitat for 11 covered species. It contains critical habitat for California tiger salamander and occupied overwintering habitat for western burrowing owl. The site fulfills 100% of the natural land cover acquisition requirements for CAZ Uvas-2. Acquisition of this site will contribute to Habitat Plan Linkage 12. Purchase of credits from this bank could be used to fulfill wetland restoration, land cover, and species model habitat requirements, depending on the bank's final approval.

Figure 4. Reserve System, Existing Open Space, and Conservation Analysis Zones



MAP by BAZ. SCC Planning Office TeamGIS. D:\HCP_PROJECTS\AnnualReports\AnnualReport2016\Fig 4 ReserveSystem_OS_CAZs.mxd (3/21/2017)

Figure 5: Coyote Ridge Open Space Preserve: Conservation Analysis Zone Map



Main Map Legend

- Coyote Ridge Open Space Preserve

Conservation Analysis Zones

- Conservation Analysis Zones
- Planning Limits of Urban Growth
- Major Streams
- County Boundary
- Major Roads

Aerial 2014 NAIP

0 1,000 2,000
Feet

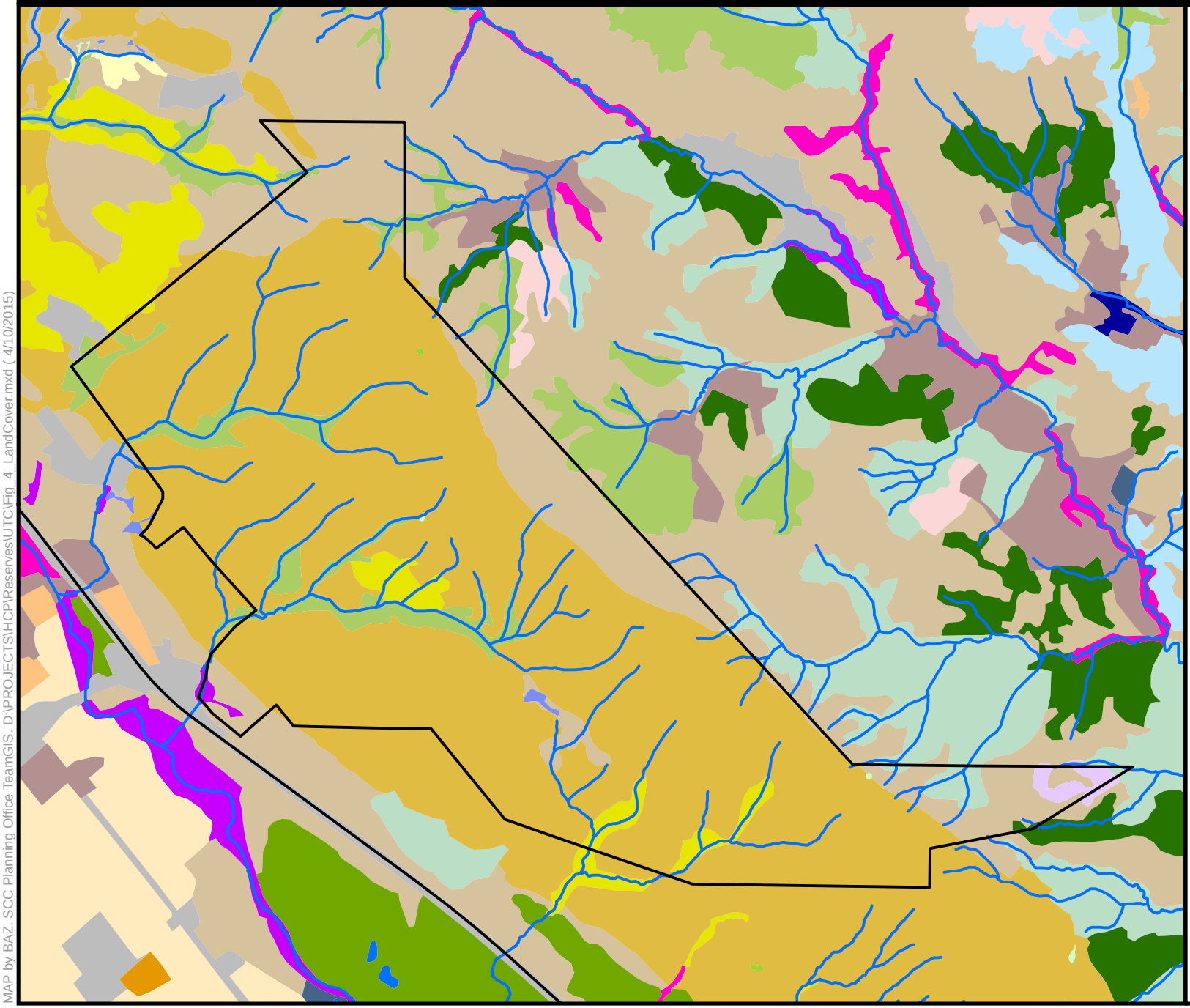
N

535 Alkire Avenue
Morgan Hill, CA 95037
(408) 779-7261

SANTA CLARA VALLEY HABITAT AGENCY

MAP by BAZ. SCC Planning Office TeamGIS. D:\PROJECTS\HCP\AnnualReport2015\Fig_5_UTCCoyoteRidgeCAZCloseup.mxd (2/4/2016)

Figure 6. UTC-Coyote Ridge: Land Cover Map



Legend

- UTC-Coyote Ridge
- Habitat Plan Permit Area
- Major Roads
- Streams (12.85 miles)

Land Cover

Grasslands

- California Annual Grassland (264.70 acres)
- Serpentine Bunchgrass Grassland (1,369.46 acres)
- Serpentine Rock Outcrop / Barrens (0.23 acres)
- Serpentine Seep (0.36 acres)

Chaparral and Coastal Scrub

- Northern Mixed Chaparral / Chamise Chaparral
- Mixed Serpentine Chaparral (43.21 acres)
- Northern Coastal Scrub / Diablan Sage Scrub
- Coyote Brush Scrub

Oak Woodland

- Valley Oak Woodland (1.12 acres)
- Mixed Oak Woodland and Forest (14.54 acres)
- Blue Oak Woodland
- Coast Live Oak Forest and Woodland (94.42 acres)
- Foothill Pine - Oak Woodland

Riparian Forest and Scrub

- Willow Riparian Forest and Scrub (2.75 acres)
- Mixed Riparian Forest and Woodland

Wetland

- Coastal and Valley Freshwater Marsh
- Seasonal Wetland (1.89 acres)

Open Water

- Pond

Agricultural

- Orchard
- Grain, Row-crop, Hay and Pasture, Disked / Short-term Fallowed (11.50 acres)
- Agriculture Developed

Developed

- Urban - Suburban (0.001 acres)
- Rural Residential (0.40 acres)
- Golf Courses / Urban Parks

0 1,000 2,000
Feet

N

535 Alkire Avenue
Morgan Hill, CA 95037
(408) 779-7261

MAP by BAZ. SCC Planning Office TeamGIS. D:\PROJECTS\HCP\Reserves\UTC\Fig_4_LandCover.mxd (4/10/2015)

Figure 7. Coyote Ridge Open Space Preserve: Representative Photographs

Photo 1: On-site grazing

Photo 2: Serpentine rock outcrop

Photo 3: View from the top of the ridge, looking down into Coyote Valley

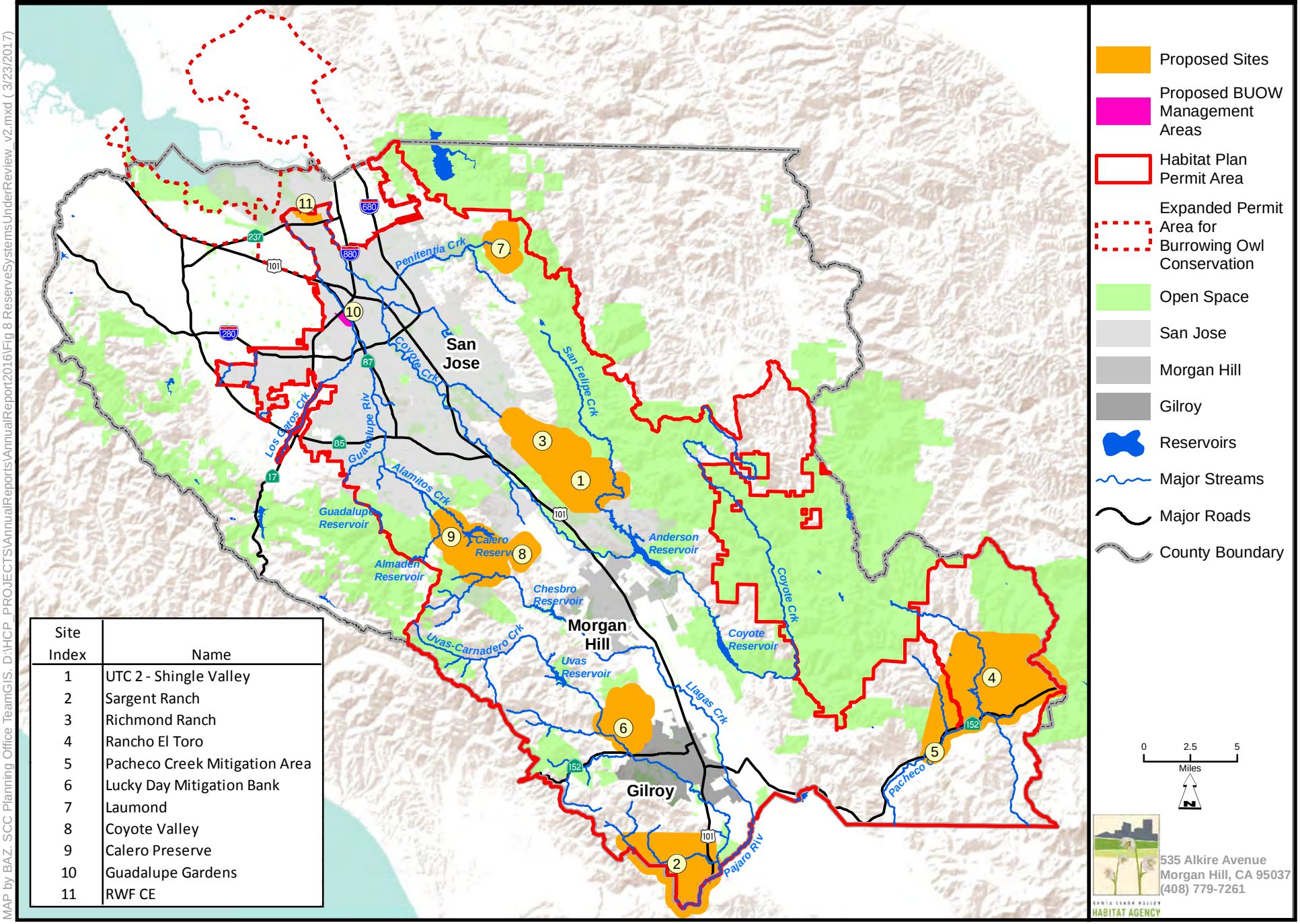
Photo 4: Existing water barrel

Photo 5: Covered Species Fragrant Fritillary found on the site

Photo 6: Covered Species Most Beautiful Jewelflower found on the site*

* Photo taken from adjacent site

Figure 8. Reserve System Sites Under Review



Site Index	Name
1	UTC 2 - Shingle Valley
2	Sargent Ranch
3	Richmond Ranch
4	Rancho El Toro
5	Pacheco Creek Mitigation Area
6	Lucky Day Mitigation Bank
7	Laumond
8	Coyote Valley
9	Calero Preserve
10	Guadalupe Gardens
11	RWF CE

MAP by BAZ. SCC Planning Office TeamGIS. D:\HCP_PROJECTS\AnnualReports\AnnualReport2016\Fig 8 ReserveSystemsUnderReview_v2.mxd (3/23/2017)

Table 9a. Summary of Land Acquisition Contribution to Land Cover Requirements To Date

	Land Cover Requirements (acres)			Reporting Period (acres)				Cumulative (acres)				Percent Complete (%)	
Land Cover Type	**Total in Study Area (acres)**	**Total Protection Requirements (acres)**	**Restoration + Creation**	**Protection**	**Existing Easements**	**Total Protection + Easement**	**Restoration + Creation**	**Protection**	**Existing Easements**	**Total Protection + Easement**	**Restoration + Creation**	**Protection**	**Restoration + Creation**
California Annual Grassland	81,795	13,300	-	251.6	13.0	264.6	-	251.6	13.0	264.6	-	1.9%	-
Serpentine Bunchgrass Grassland	10,308	4,000	-	1,328.4	41.0	1369.3	-	1,328.4	41.0	1,369.3	-	33.2%	-
Serpentine Rock Outcrop/ Barrens	260	120	-	0.2	0.0	0.2	-	0.2	0.0	0.2	-	0.2%	-
Serpentine Seep	34	10	-	0.4	-	0.4	-	0.4	-	0.4	-	3.6%	-
Rock Outcrop	87	10	-	-	-	-	-	-	-	-	-	-	-
Northern Mixed Chaparral / Chamise Chaparral	23,763	400	-	-	-	-	-	-	-	-	-	-	-
Mixed Serpentine Chaparral	3,712	700	-	43.2	-	43.2	-	43.2	-	43.2	-	6.2%	-
Northern Coastal Scrub / Diablan Sage Scrub	10,306	1,400	-		-	-	-	0.0	-	-	-	0.0%	-
Valley Oak Woodland	12,895	1,700	-	1.12	-	1.1	-	1.1	-	1.1	-	0.1%	-
Mixed Oak Woodland and Forest	84,488	7,100	-	14.5	-	14.5	-	14.5	-	14.5	-	0.2%	-
Blue Oak Woodland	11,160	1,100	-		-	-	-	0.0	-	-	-	0.0%	-
Coast Live Oak Forest and Woodland	31,652	2,900	-	94.0	0.4	94.4	-	94.0	0.4	94.4	-	3.2%	-
Foothill Pine—Oak Woodland	10,960	80	-	9.3	-	9.3	-	9.3	-	9.3	-	11.7%	-
Mixed Evergreen Forest	5,775	20	-	-	-	-	-	-	-	-	-	-	-
Willow Riparian Forest and Scrub and Mixed Riparian Forest and Woodland	6,310	917	339	2.4	0.3	2.8	-	2.4	0.3	2.8	-	0.3%	-
Central California Sycamore Alluvial Woodland	373	54	14	-	-		-	-	-	0.0	-	-	-
Redwood Forest	9,693	10	-	-	-		-	-	-	0.0	-	-	-
Coastal and Valley Freshwater Marsh (Perennial Wetland)	381	95	45	-	-	-	0.16	-	-	-	0.2	-	0.4%
Seasonal Wetland	201	60	30	1.89	-	1.9	0.24	1.9	-	1.9	0.2	3.1%	0.8%
Pond	1,110	177	72	0.24	-	0.2	0.22	0.2	-	0.2	0.2	0.1%	0.3%
Subtotal (acres)	**305,263**	**34,153**	**500**	**1,747.3**	**54.7**	1802.0	**0.62**	**1,747.3**	**54.73**	**1,802.01**	**0.62**	**5.1%**	0.1%
Streams (miles)	2,392.0	110.4	10.4	12.8	0.1	12.9	-	12.8	0.1	12.9	-	11.6%	-
Land Cover Types without Acquisition, Restoration, or Creation Requirements													
Coyote brush scrub	180	-	-	-	-	-	-	-	-		-	-	-
Ponderosa Pine Woodland	419	-	-	-	-	-	-	-	-		-	-	-
Knobcone Pine Woodland	711	-	-	-	-	-	-	-	-		-	-	-
Reservoir	2,767	-	-	-	-	-	-	-	-		-	-	-
Orchard	2,697	-	-	-	-	-	-	-	-		-	-	-
Vineyard	1,393	-	-	-	-	-	-	-	-		-	-	-
Agriculture developed / covered agriculture	1,935	-	-	-	-	-	-	-	-		-	-	-
Grain, row-crop, hay and pasture, disked/short-term fallowed	33,648	-	-	-	-	-	-	-	-		-	-	-
Urban-suburban	89,438	-	-	0.1	-	0.1	-	0.1	-	0.1	-	-	-
Rural - residential	12,414	-	-	-	-	-	-	-	-		-	-	-
Barren	211	-	-	-	-	-	-	-	-		-	-	-
Landfill	364	-	-	-	-	-	-	-	-		-	-	-
Golf courses / urban parks	8,673	-	-	-	-	-	-	-	-		-	-	-
Ornamental woodland	95	-	-	-	-	-	-	-	-		-	-	-
Subtotal	**154,944**	**0**	**0**	**0.1**	**0.0**	**0.1**	**-**	**0.1**	**0.0**	**0.1**	**0.0**	**-**	**-**
TOTAL	**460,207**	**34,153**	**500**	**1,747.4**	**54.7**	**1,802.1**	**0.62**	**1,747.4**	**54.7**	**1,802.1**	**0.62**	**5.1%**	0.1%

	Land Acquisition and Restoration Properties (acres)			
	Coyote Ridge OSP			Calero County Park
Land Cover Type	**Protection**	**Existing Easements**	**Total Protection + Easement**	**Creation + Restoration**
California Annual Grassland	251.6	13.0	264.6	-
Serpentine Bunchgrass Grassland	1,328.4	41.0	1369.3	-
Serpentine Rock Outcrop/ Barrens	0.2	-	0.2	-
Serpentine Seep	0.4	-	0.4	-
Rock Outcrop	-	-	-	-
Northern Mixed Chaparral / Chamise Chaparral	-	-	-	-
Mixed Serpentine Chaparral	43.2	-	43.2	-
Northern Coastal Scrub / Diablan Sage Scrub	-	-	-	-
Valley Oak Woodland	1.1	-	1.1	-
Mixed Oak Woodland and Forest	14.5	-	14.5	-
Blue Oak Woodland	-	-	-	-
Coast Live Oak Forest and Woodland	94.0	0.4	94.4	-
Foothill Pine—Oak Woodland	9.3	-	9.3	-
Mixed Evergreen Forest		-	-	-
Willow Riparian Forest and Scrub and Mixed Riparian Forest and Woodland	2.44	0.31	2.75	-
Central California Sycamore Alluvial Woodland	-	-	-	-
Redwood Forest	-	-	-	-
Coastal and Valley Freshwater Marsh (Perennial Wetland)	-	-	-	0.16
Seasonal Wetland	1.89	-	1.89	0.24
Pond	0.24	-	0.24	0.22
Subtotal (acres)	**1,747.3**	**54.7**	**1,802.0**	**0.62**
Streams (miles)	12.8	0.05	12.9	-
Land Cover Types without Acquisition, Restoration, or Creation Requirements				
Coyote brush scrub	-	-	-	-
Ponderosa Pine Woodland	-	-	-	-
Knobcone Pine Woodland	-	-	-	-
Reservoir	-	-	-	-
Orchard	-	-	-	-
Vineyard	-	-	-	-
Agriculture developed / covered agriculture	-	-	-	-
Grain, row-crop, hay and pasture, disked/short-term fallowed	-	-	-	-
Urban-suburban	0.1	-	0.1	-
Rural - residential	-	-	-	-
Barren	-	-	-	-
Landfill	-	-	-	-
Golf courses / urban parks	-	-	-	-
Ornamental woodland	-	-	-	-
Subtotal	**0.1**	**-**	**0.1**	**-**
TOTAL	**1,747.4**	**54.7**	**1,802.1**	**0.62**

Table 10a. Summary of Land Acquisition Contribution to Modeled Habitat Requirements To Date

	Modeled Habitat Requirements (acres)			Reporting Period (acres)				Cumulative (acres)				Percent Complete (%)		
	Protection	Existing Open Space	Total	Protection	Existing Easement	Existing Open Space	Total	Protection	Existing Easement	Existing Open Space	Total	Protection	Existing Open Space	Total
Bay Checkerspot Butterfly														
Primary Habitat	3,800	754	4,554	1,309.7	39.3	-	1,349.0	1,309.7	39.3	-	1,349.0	34%	-	29%
California Tiger Salamander														
Breeding Habitat	150	45	195	1.9	-	-	1.9	1.9	-	-	1.9	1%	-	1%
Non-breeding Habitat	30,000	11,700	41,700	1,745.4	54.7	-	1,800.1	1,745.4	54.7	-	1,800.1	6%	-	4%
Total	30,150	11,745	41,895	1,747.3	54.7	-	1,802.0	1,747.3	54.7	-	1,802.0	6%	-	4%
California Red-Legged Frog														
Primary Habitat	1,300	130	1,430	17.9	0.4	-	18.3	17.9	0.4	-	18.3	1%	-	1%
Secondary	30,000	11,800	41,800	1,727.5	394.4	-	2,121.9	1,727.5	394.4	-	2,121.9	6%	-	4%
Total	31,300	11,930	43,230	1,745.4	394.8	-	2,140.2	1,745.4	394.8	-	2,140.2	6%	-	4%
Foothill Yellow-Legged Frog (length in miles)														
Primary Habitat	30	7	37	0.3	0.01	-	0.3	0.3	0.0	-	0.3	1%	-	1%
Secondary	50	17	67	2.8	0.03	-	2.8	2.8	0.0	-	2.8	6%	-	4%
Total	80	24	104	3.1	0.04	-	3.1	3.1	0.0	-	3.1	4%	-	3%
Western Pond Turtle														
Primary Habitat	7,000	2,800	9,800	494.1	5.1	-	499.2	494.1	5.1	-	499.2	7%	-	5%
Habitat	20,000	9,100	29,100	1,215.4	46.5	-	1,261.8	1,215.4	46.5	-	1,261.8	6%	-	4%
Total	27,000	11,900	38,900	1,709.5	51.5	-	1,761.0	1,709.5	51.5	-	1,761.0	6%	-	4%
Western Burrowing Owl							0.0							
Overwintering Habitat	17,000	4,310	21,310	1,485.4	53.7	-	1,539.2	1,485.4	53.7	-	1,539.2	9%	-	7%
Occupied and Potential Nesting Habitat	5,300	0	5,300	201.0		-	201.0	920.0	0.0	-	920.0	17%	-	17%
Total	22,300	4,310	26,610	1,539.2	53.7	-	1,592.9	1,539.2	53.7	-	1,592.9	7%	-	6%
Tricolored Blackbird							0.0							
Primary Habitat	1,000	40	1,040	2.8	0.0	-	2.8	2.8	0.0	-	2.8	0%	-	0%
Habitat	18,000	3,800	21,800	1,582.6	54.0	-	1,636.6	1,582.6	54.0	-	1,636.6	9%	-	7%
Total	19,000	3,840	22,840	1,585.4	54.0	-	1,639.4	1,585.4	54.0	-	1,639.4	8%	-	7%
Least Bell's Vireo							0.0							
Primary Habitat	460	2	462	-	-	-	0.0	-	-	-	0.0	-	-	-

Modeled Habitat Requirements (acres)				Reporting Period (acres)				Cumulative (acres)				Percent Complete (%)		
	Protection	Existing Open Space	Total	Protection	Existing Easement	Existing Open Space	Total	Protection	Existing Easement	Existing Open Space	Total	Protection	Existing Open Space	Total
San Joaquin Kit Fox							0.0							
Secondary	4,000	-	4,000	-	-	-	0.0	-	-	-	0.0	-	-	-
Secondary Habitat (Low Use)	100	-	100	-	-	-	0.0	-	-	-	0.0	-	-	-
Total	4,100	-	4,100	-	-	-	0.0	-	-	-	0.0	-	-	-
Mt. Hamilton Thistle							0.0							
Primary Habitat	150	60	210	68.4	0.5	-	68.9	68.4	0.5	-	68.9	46%	-	33%
Fragrant Fritillary							0.0							
Primary Habitat	3,000	1,000	4,000	1,300.5	35.8	-	1,336.3	1,300.5	35.8	-	1,336.3	43%	-	33%
Habitat	20,000	3,000	23,000	357.3	12.5	-	369.8	357.3	12.5	-	369.8	2%	-	2%
Total	23,000	4,000	27,000	1,706.1	48.4	-	1,754.5	1,706.1	48.4	-	1,754.5	7%	-	6%
Loma Prieta Hoita							0.0							
Primary Habitat	9,000	3,500	12,500	108.6	0.4	-	109.0	108.6	0.4	-	109.0	1%	-	1%
Habitat	1,000	600	1,600	43.2	0.0	-	43.2	43.2	0.0	-	43.2	4%	-	3%
Total	10,000	4,100	14,100	152.2	0.4	-	152.6	152.2	0.4	-	152.6	2%	-	1%
Smooth Lessingia														
Primary Habitat	4,000	1,100	5,100	1,328.7	41.0	-	1,369.7	1,328.7	41.0	-	1,369.7	33%	-	26%
Metcalf Canyon Jewelflower														
Primary Habitat	3,200	1,000	4,200	979.6	9.2	-	988.8	979.6	9.2	-	988.8	31%	-	23%
Most Beautiful Jewelflower														
Primary Habitat	4,000	1,700	5,700	1,371.9	41.0	-	1,412.9	1,371.9	41.0	-	1,412.9	34%	-	24%

	Reporting Period Properties (acres)			
	Coyote Ridge Open Space			Regional Wastewater Facility
Modeled Habitat	Protection	Existing Easement	Total	Management Agreement
Bay Checkerspot Butterfly				
Primary Habitat	1,309.7	39.3	1,349.0	
California Tiger Salamander				
Breeding Habitat	1.9	-	1.9	
Non-breeding Habitat	1,745.4	54.7	1,800.1	
Total	1,747.3	54.7	1,802.0	
California Red-Legged Frog				
Primary Habitat	17.9	0.4	18.3	
Secondary Habitat	1,727.5	394.4	2,121.9	
Total	1,745.4	394.8	2,140.2	
Foothill Yellow-Legged Frog (length in miles)				
Primary Habitat	0.3	0.01	0.3	
Secondary Habitat	2.8	0.03	2.8	
Total	3.1	0.04	3.1	
Western Pond Turtle				
Primary Habitat	494.1	5.1	499.2	
Secondary Habitat	1,215.4	46.5	1,261.8	
Total	1,709.5	51.5	1,761.0	
Western Burrowing Owl				
Overwintering Habitat	1,485.4	53.7	1,539.2	
Occupied and Potential Nesting Habitat	0.0	0.0	0.0	201.0
Total	1,485.4	53.7	1,539.2	
Tricolored Blackbird				
Primary Habitat	2.8	0.0	2.8	
Secondary Habitat	1,636.6	54.0	1,690.6	
Total	1,639.4	54.0	1,693.4	
Least Bell's Vireo				
Primary Habitat	-		0.0	
San Joaquin Kit Fox				
Secondary Habitat	-		0.0	
Secondary Habitat (Low Use)	-		0.0	
Total	-		0.0	
Mt. Hamilton Thistle				
Primary Habitat	68.4	0.5	68.9	
Fragrant Fritillary				
Primary Habitat	1,300.5	35.8	1,336.3	
Secondary Habitat	357.3	12.5	369.8	
Total	1,657.8	48.4	1,706.1	

	Reporting Period Properties (acres)			
	Coyote Ridge Open Space			Regional Wastewater Facility
Modeled Habitat	**Protection**	**Existing Easement**	**Total**	**Management Agreement**
Loma Prieta Hoita				
Primary Habitat	108.6	0.4	109.0	
Secondary Habitat	43.2	0.0	43.2	
Total	151.8	0.4	152.2	
Smooth Lessingia				
Primary Habitat	1,328.7	41.0	1,369.7	
Metcalf Canyon Jewelflower				
Primary Habitat	979.6	9.2	988.8	
Most Beautiful Jewelflower				
Primary Habitat	1,371.9	41.0	1,412.9	

Conservation Analysis Zone	Natural Land Cover Types in Zone(s) (acres)	Natural Land Cover Acquisition Requirement in Zone(s) (acres)	Reporting Period Total Contribution (acres)	Cumulative Total Contribution (acres)	Percentage of Requirement Met by all acquisitions
Alameda-1	1,338				
Coyote-7	49,567				
Subtotal	*5,905*	*2,300*			
Coyote-4	9,146	4,200	323	323	8%
Subtotal	*9,146*	*4,200*	*323*	*323*	*8%*
Uvas-1	10,891	1,000			
Uvas-2	8,573	800			
Uvas-3	4,761				
Uvas-4	4,357				
Uvas-5	8,630	4,600			
Uvas-6	831	200			
Subtotal	*38,043*	*6,600*			
Pacheco-1	9,093				
Pacheco-2	7,535				
Pacheco-3	5,849				
Pacheco-4	5,477				
Pacheco-5	12,959				
Pacheco 6	8,278				
Subtotal	*49,190*	*2,400*			
Coyote 2	4,954	900			
Pacheco 8	11,706	3,800			
Subtotal	*21,697*	*5,500*			
Total	**123,981**	**21,000**	**323**	**323**	**2%**

			Reporting Period Land Acquisitions (acres)	
			Coyote Ridge Open Space Preserve	
Conservation Analysis Zone	**Natural Land Cover Types in Zone(s) (acres)**	**Natural Land Cover Acquisition Requirement in Zone(s) (acres)**	**Contribution by Acquisition (acres)**	**Percentage of Requirement Met by Acquisition**
Alameda-1	1,338			
Coyote-7	49,567			
Subtotal	*5,905*	*2,300*		
Coyote-4	9,146	4,200	339	8%
Subtotal	*9,146*	*4,200*	*339*	*8%*
Uvas-1	10,891	1,000		
Uvas-2	8,573	800		
Uvas-3	4,761			
Uvas-4	4,357			
Uvas-5	8,630	4,600		
Uvas-6	831	200		
Subtotal	*38,043*	*6,600*		
Pacheco-1	9,093			
Pacheco-2	7,535			
Pacheco-3	5,849			
Pacheco-4	5,477			
Pacheco-5	12,959			
Pacheco 6	8,278			
Subtotal	*49,190*	*2,400*		
Coyote 2	4,954	900		
Pacheco 8	11,706	3,800		
Subtotal	*21,697*	*5,500*		
Total	**123,981**	**21,000**	**339**	**8%**

Table 12. Summary of Land Acquisition Contributions to Wildlife Linkages

Wildlife Linkage Ref. # from Habitat Plan Figure 5-6	Linkage (Listed Generally from North to South)	Approx. Length[a] (miles)	General Linkage Purpose	Acquisitions that Contribute to Linkage	Reporting Year Total (acres)	Cumulative Total (acres)
6	Coyote Ridge from Silver Creek Hills to Anderson Dam	9.5	Provide connectivity for serpentine species within core habitat along Coyote Ridge. Link patches of protected lands along the ridge.	Coyote Ridge Open Space Preserve	1,803	1,803
7	Coyote Ridge to Anderson Lake County Park and Henry W. Coe State Park	7.5	Provide connectivity along an elevation gradient and between protected open space along Coyote Ridge and large blocks of protected open space centered on Henry W. Coe State Park. Provide connectivity among stands of valley oak woodland at different elevations.	Coyote Ridge Open Space Preserve	1,803	1,803

Chapter 4
Habitat Restoration and Creation

Habitat restoration and creation is a critical component of the Habitat Plan's conservation strategy. Restoration and creation of specific habitats and land cover types are required in addition to protection of land within the Reserve System. Specifically, if all anticipated impacts occur, implementation of the Habitat Plan will result in restoration or creation of an estimated 353 acres of riparian, 75 acres of wetlands, 72 acres of ponds, and 10.4 miles of streams. Together, land preservation and restoration/creation provide benefits to covered species, natural communities, biological diversity, hydrologic function, and ecosystem function to compensate for impacts on, and to contribute to, recovery of covered species.

During the reporting period, the Habitat Agency carried out the first restoration project: a pond and wetland at Calero County Park (**Figure 9**). These two components are discussed below.

Reporting Requirements

- The location, extent, and timing of restoration or creation of applicable land cover types.
- A description of all natural community creation/restoration conservation actions implemented during the reporting period. Riparian and wetland restoration and creation will also be reported by the watersheds shown in Figure 3-6 in the Habitat Plan to facilitate regional coordination of wetland mitigation for the U.S. Army Corps of Engineers and the San Francisco and Central Coast Regional Water Quality Control Boards.
- Year-to-date and cumulative summaries of the extent of land cover types restored or created. The success rate for restoration and creation projects will also be documented. If conservation easements were used, the report will describe who holds the easements. A map containing this information will also be provided.
- Year-to-date and cumulative summaries of stream and riparian restoration conducted outside of the Reserve System.
- The location, extent, timing, and progress of plant occurrence creation and enhancement (Table 5-16 in the Habitat Plan).
- Year-to-date and cumulative summaries of the protection or creation of covered plant occurrences and occupied habitat for selected covered wildlife species as defined in Chapter 5 of the Habitat Plan.

Restoration and Creation Projects

Wetland, Riparian, and Stream Restoration Projects

Calero County Park Pond and Wetland Restoration Project

The pond and wetland restoration project is composed of two sites in the northwest portion of Calero County Park (**Figure 9**). Calero Country Park is located in the eastern foothills of the Santa Cruz Mountains in the Alamitos Creek watershed. The project sites were selected in partnership with County of Santa Clara Parks and Recreation Department (County Parks), USFWS, CDFW, and the Resource Conservation District of Santa Cruz County. This project resulted in the restoration/creation of 0.17 acres of coastal valley

freshwater marsh, 0.26 acres of seasonal wetland, and 0.22 acres of pond to benefit California tiger salamander, California red-legged frog, western pond turtle, and Mt. Hamilton thistle (**Table 13**). Water conveyance systems for cattle were also installed to ensure sufficient year-round water for the park's pastures.

The project focused on improving aquatic natural communities, improving covered species habitat, and installing water conveyance infrastructure for cattle at a pond and wetland sites. The pond site was heavily grazed by cattle, had a limited ponding duration, and was occupied by invasive aquatic predators. These conditions reduced habitat quality for California red-legged frog, California tiger salamander, western pond turtle, and Mt. Hamilton thistle. The pond restoration objectives were to:

- Restore breeding habitat for California tiger salamander and foraging and dispersal habitat for California red-legged frog,
- Restore wetland habitat functions including habitat for Mt. Hamilton thistle,
- Create seasonal wetland habitat,
- Establish basking habitat for the western pond turtle,
- Improve pond habitat climate change resiliency, and
- Provide water for cattle.

To accomplish these objectives, the following actions were taken at the pond.

- Fencing installed to exclude cattle from a portion of the pond.
- Pond excavated to increase ponding depth and duration, and basking logs for western pond turtle installed.
- Uplands at the pond fringe excavated to establish new seasonal wetlands.
- Native wetland vegetation planted the pond fringe.
- Pond outfall structure replaced with gated structure to allow for draining for aquatic predator control at the deepened pond.
- Ditch excavated and wood log jams install above spring box to increase seep inflow.
- Two 400-gallon troughs, 3,200-gallon water storage tank, and conveyance infrastructure installed for cattle.

The wetland site was heavily grazed and subject to sedimentation largely due to access by cattle. The wetland restoration objectives were to:

- Restore wetland habitat functions,
- Establish seasonal wetland habitat,
- Restore breeding habitat for California tiger salamander and foraging and dispersal habitat for California red-legged frog,
- Improve wetland habitat climate change resiliency, and
- Provide water for cattle.

To accomplish these objectives, the following actions were taken.

- Fencing installed to exclude cattle.
- Uplands adjacent to existing wetlands excavated to establish new wetlands.
- Sediment within existing wetlands excavated to restore California red-legged frog foraging habitat.
- Native wetland vegetation planted.
- One 400-gallon trough and water conveyance infrastructure installed for cattle.

Ecological performance standards are summarized in **Table 14**.

Coyote Ceanothus Population Creation

There are a three known occurrences of Coyote ceanothus in the world, all of which are located in the Permit Area. These occurrences are located in the vicinity of Morgan Hill on serpentine soils. The Habitat Plan requires protection of five occurrences of this species, with creation of one or more occurrences permitted under the Habitat Plan.

The focus on meeting the biological goals and objectives for the species has been centered on population creation because it is highly unlikely that any additional occurrences will be discovered in the Permit Area. The SCVWD has taken the lead on creating a new occurrence for this species. Efforts by the SCVWD began in 2009 and 2010 with an updated population census and detailed ecological observations of all three known occurrences, a series of collaborative research studies on the population genetics of the species, modeling of suitable habitat, surveys for additional undiscovered populations, and identification of potentially suitable introduction sites for population creation. The data collected were used in developing the details of the conservation strategy for Coyote ceanothus in the final Habitat Plan, released in 2012. Additional research studies since 2010 have documented not only population dynamics, but water potential and microclimate needs, propagation methods, and soil symbiotic relationships. The data have been used to develop a comprehensive population creation strategy on mitigation land purchased by the SCVWD on Coyote Ridge, in an area located north of the Anderson Dam population.

The first test phase (Test Phase I) of the Coyote ceanothus population creation effort began on Coyote Ridge in winter 2013. The second test phase (Test Phase II) commenced in winter 2015, the results of which are included here. Test Phase II consisted of a direct seeding experiment using Coyote ceanothus seed collected from the Anderson Dam area in summer 2015. New planting basins (60 basins per plot in three fenced test plots, for a total of 180 basins) were prepared. Each basin had one of three different treatments: 1) basin lightly raked to remove vegetation; 2) basin augered to break up soil, fertilizer added; 3) basin augered to break up soil, no fertilizer added. Prior to sowing, seeds were treated with a hot water soak to break dormancy. The seeds were sown on December 18, 2015. All phytosanitary procedures were followed during planting. By January 2016, germination was documented at all three test plots. By summer 2016, fertilized basins exhibited more vigorous seedlings than non-fertilized basins. The Chaparral Edge plot had the highest seedling survivorship and vigor, while the Lower Sage plot experienced heavy seedling predation.

Phase III of the Coyote ceanothus Creation Pilot Project involved a combination of direct seeding and installation of container stock. Three of the four test plots on Coyote Ridge were prepped with 20 new planting basins in each plot for direct seeding of Coyote ceanothus seed on December 22, 2016.

Direct seeding of Coyote ceanothus did not occur in the Lower Sage test plot due to heavy mortality of seedlings observed there in 2016 after implementation of the Phase II planting effort. Mortality was mostly due to predation. Germination of Coyote ceanothus was first observed on February 14, 2017.

In addition, Coyote ceanothus was grown by The Watershed Nursery as container stock under phytosanitary conditions in summer 2016 and ten container plants were planted in each of the four test plots on Coyote Ridge. Planting of container stock used phytosanitary planting procedures and occurred on December 7, 2016. All basins were fertilized prior to planting.

During Phase III, solarized basins in all four plots that were located in full sun were successfully remediated in 2016 and showed no signs of *Phytophthora cactorum* in subsequent testing by SCVWD's pathogen consultant, Phytosphere Research. Several basins in the Pine plot which were located under the shade of mature overstory grey pine have not yet been fully remediated; however, pathogens appear to still be locally confined to the basins and have not spread to additional areas. A prototype heat auger is under development by SCVWD and should be ready for pilot testing in spring 2017. If successful, this instrument will be used to remediate the few remaining infected basins.

Restoration Project Planning

The Habitat Agency collaborated with Santa Clara County Parks, Santa Cruz County Resource Conservation District, Santa Clara Valley Open Space Authority, The Nature Conservancy, and Point Blue Conservation Science to evaluate, prioritize, and select restoration sites for the next planning and construction period. In Spring 2016, site visits to Joseph D. Grant County Park and Coyote Ridge Open Space Preserve identified 18 potential wetland, pond, stream, or riparian restoration projects. Habitat Plan biological goals and objectives and restoration needs were used to select 3 projects for implementation. Conversations with The Nature Conservancy and Point Blue Conservation Science led to a collaboration on a hedgerow project on Gonzalez Farm.

San Felipe Creek Restoration Project on Joseph D. Grant County Park

A stream and riparian restoration project along San Felipe Creek on Joseph D. Grant County Park was selected for 2017 construction. San Felipe Creek runs through a historically farmed valley and the reach is currently denuded of riparian vegetation and incised. A watershed approach will be taken to understand historic and current hydrologic and geomorphic conditions as well as the spatial and temporal distribution of water. This information will be used to

- Protect, expand, and enhance habitat for plant and wildlife species consistent with park activities, including recreation and grazing
- Capture and retain water to sustain hydrologic resources and reduce overdraft impacts in the groundwater basin
- Reduce on-site and downstream water quality impacts
- Reestablish connectivity of tributaries to the creek and the creek to the 100-year floodplain
- Improve the quality of stream and the hydrologic and geomorphic processes that support it
- Establish a functional riparian canopy and scrub community at a variety of succession stages

- Improve or establish a functional aquatic and riparian community that benefits covered species and promotes native biodiversity

Stock Ponds Restoration Project on Coyote Ridge Open Space Preserve

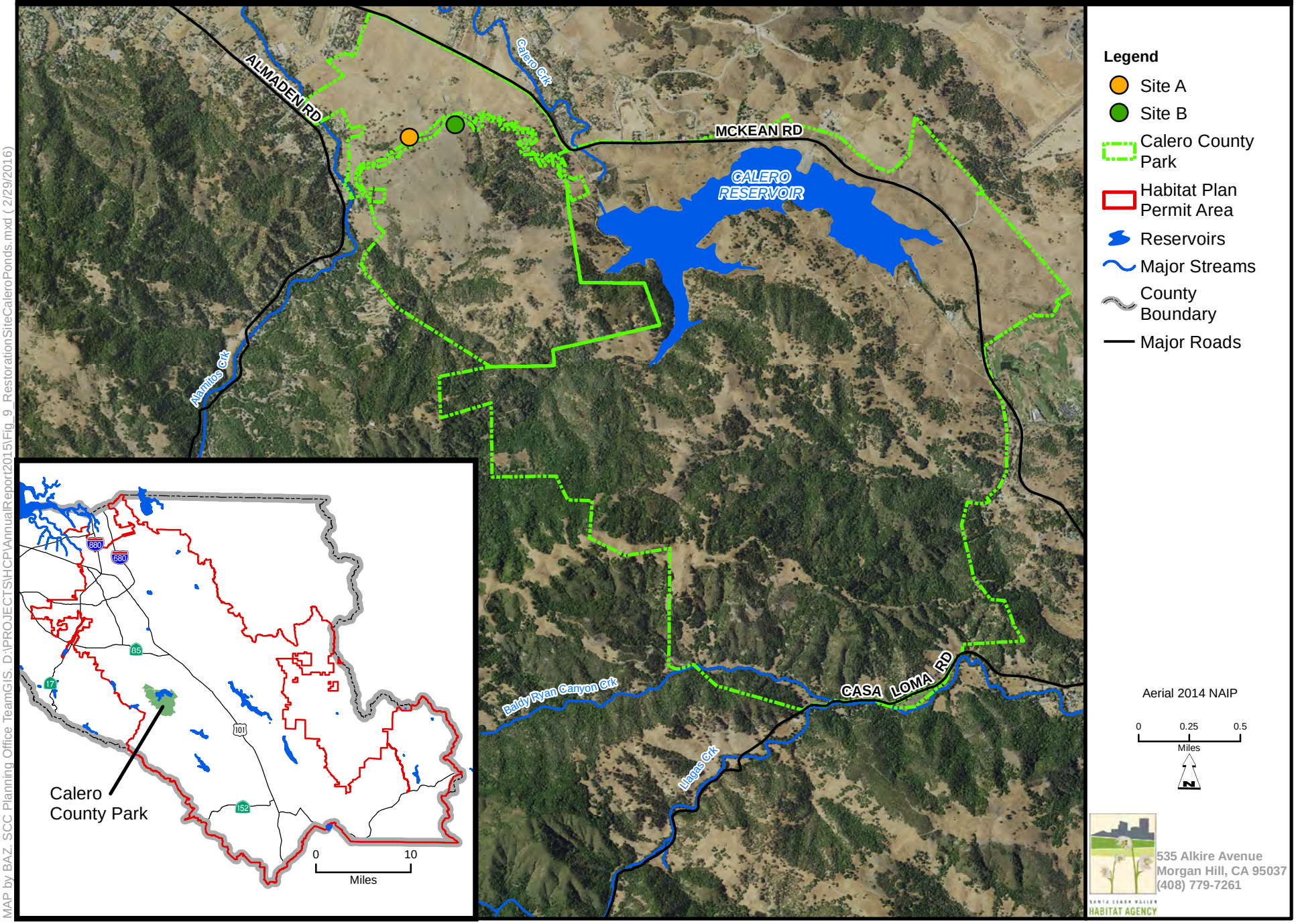
The Coyote Ridge Preserve Stock Ponds Restoration Project will repair the two earthen dams, excavate and re-contour the basins, create new wetland areas and re-establish the vegetation. Midway along the northeast property line, two existing stock ponds are located high in the watershed, each cut into a separate natural drainage. Each pond has an earthen dam with a spillway that drains down the east face of the ridge and sends the water into tributaries feeding the San Felipe Creek within the Coyote Creek watershed. Both of these stock ponds have lost functionality due to the degradation of their earthen dams. In both cases, a head cut in the dams is preventing water from collecting in the ponds. The resulting drainage from the ponds has severely eroded and incised the spillways that channel the water downhill. Project goals are as follows.

- Create and restore aquatic habitat
- Create habitat for two or more covered species– the California red-legged frog and the California tiger salamander and possibly western pond turtle
- Reduce downstream sedimentation and improve the overall water quality of the Coyote Creek watershed

Hedgerow on Gonzales Farm

Restoration of a hedgerow on Gonzales Farm will provide a covered corridor to encourage wildlife movement along the Pajaro River. The Pajaro River corridor provides movement habitat for anadromous fish between Monterey Bay and spawning habitat in the Pacheco Creek watershed. It also provides an important linkage for upland and riparian wildlife between Diablo Range and Santa Cruz Mountains. Now channelized in some locations, this project will create a hedgerow along the historical river alignment.

Figure 9. Map of Restoration and Creation: 2016 Calero Ponds Sites



MAP by BAZ, SCC Planning Office TeamGIS, D:\PROJECTS\HCP\AnnualReport2015\Fig_9_RestorationSiteCaleroPonds.mxd (2/29/2016)

Figure 10. Calero County Park Pond and Wetland Restoration Project: Representative Photographs

Photo 1. Preconstruction conditions at
at the Wetland Site (August, 2016)

Photo 2. Post construction conditions at
at the Wetland Site (December, 2016)

Photo 3. Preconstruction conditions at
at the Pond Site (August, 2016)

Photo 4. Post construction conditions at
at the Pond Site (December, 2016)

Figure 11. Coyote Ceanothus Population Creation: Representative Photographs

Photo 1: One-Year Old Direct Seeded Coyote Ceanothus

Photo 2: Delivery of Clean Container Stock

Photo 3: Good Root Development

Photo 4: Plant installation

	Aquatic Land Cover (acres)							
Watershed	**Willow riparian forests, woodlands, and scrub**	**Central California sycamore alluvial woodland**	**Mixed riparian woodland and forest**	**Coastal and valley freshwater marsh**	**Seasonal wetland**	**Pond**	**Stream (linear feet)**	**Aquatic Land Cover Total**
Coyote								
Restoration								0.00
Creation								0.00
subtotal	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	0.00
Guadalupe								
Restoration				0.16	0.21	0.22		0.59
Creation					0.03			0.03
subtotal	*0.00*	*0.00*	*0.00*	*0.16*	*0.24*	*0.22*	*0.00*	0.62
Pajaro								0.00
Restoration								0.00
Creation								0.00
subtotal	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	0.00
Uvas								
Restoration								0.00
Creation								0.00
subtotal	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	0.00
Llagas								
Restoration								0.00
Creation								0.00
subtotal	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	0.00
Total	**0.00**	**0.00**	**0.00**	**0.16**	**0.24**	**0.22**	**0.00**	**0.62**

Ecological Performance Standards

Performance Standard	Year 1	Year 2	Year 3	Year 4	Year 5 (final)
Target Hydrologic Regime	Depth of inundation at pond at least two feet through Aug 31, if average rainfall year	Depth of inundation at pond at least two feet through Aug 31, if average rainfall year	Depth of inundation at pond at least two feet through Aug 31, if average rainfall year	Depth of inundation at pond at least two feet through Aug 31, if average rainfall year	Depth of inundation at pond at least two feet through Aug 31, if average rainfall year
Sedimentation and Geomorphic Stability	The pond, wetland, and springbox-seep water collection structures will demonstrate minimal sedimentation and geomorphic stability	The pond, wetland, and springbox-seep water collection structures will demonstrate minimal sedimentation and geomorphic stability	The pond, wetland, and springbox-seep water collection structures will demonstrate minimal sedimentation and geomorphic stability (includes cross-section surveys)	The pond, wetland, and springbox-seep water collection structures will demonstrate minimal sedimentation and geomorphic stability	The pond, wetland, and springbox-seep water collection structures will demonstrate minimal sedimentation and geomorphic stability (includes cross-section surveys)
California Red-legged Frog/ California Tiger Salamander Surveys	At pond, continued successful breeding of California tiger salamander and continued occurrence of the western pond turtle	At pond, continued successful breeding of California tiger salamander and continued occurrence of the western pond turtle	At pond, continued successful breeding of California tiger salamander and continued occurrence of the western pond turtle	At pond, continued successful breeding of California tiger salamander and continued occurrence of the western pond turtle	At pond, successful breeding of California red-legged frog in at least one monitoring year. Continued successful breeding of California tiger salamander and continued occurrence of the western pond turtle
Predator Surveys	Abundance of bullfrogs and crayfish below baseline conditions at the pond; minimal predator occurrence at the wetland	Abundance of bullfrogs and crayfish below baseline conditions at the pond; minimal predator occurrence at the wetland	Abundance of bullfrogs and crayfish below baseline conditions at the pond; minimal predator occurrence at the wetland	Abundance of bullfrogs and crayfish below baseline conditions at the pond; minimal predator occurrence at the wetland	Abundance of bullfrogs and crayfish below baseline conditions at the pond; minimal predator occurrence at the wetland
Mt. Hamilton Thistle Abundance Temporal Trend to be evaluated in Year 5	NA	NA	NA	NA	a stable or increasing population of Mt. Hamilton thistle at the pond
Wetland Vegetation Percent Cover	15% in planting zones; less than 50% in open water pond habitat; at least three wetland species will be present	25% in planting zones; less than 50% in open water pond habitat; at least three wetland species will be present	40% in planting zones; less than 50% in open water pond habitat; at least three wetland species will be present	60% in planting zones; less than 50% in open water pond habitat; at least three wetland species will be present	70% in planting zones; less than 50% in open water pond habitat; at least three wetland species will be present
Invasive Plant Cover	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%

Ecological Performance Standards					
Performance Standard	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5 (final)**
Wetland Delineation	NA	Na	NA	Na	At least 0.27 acres at the pond and 0.10 acres at the wetland of restored USACE/ RWQCB jurisdictional habitat and at least 0.01 acres at the pond and 0.02 acres at the wetland of established/ created wetland habitat
Water for Cattle	Sufficient water to support the same grazing intensity of the Reserve lands as the existing conditions	Sufficient water to support the same grazing intensity of the Reserve lands as the existing conditions	Sufficient water to support the same grazing intensity of the Reserve lands as the existing conditions	Sufficient water to support the same grazing intensity of the Reserve lands as the existing conditions	Sufficient water to support the same grazing intensity of the Reserve lands as the existing conditions

Chapter 5

Western Burrowing Owl Management and Monitoring

Reporting Requirements

- Management agreements for western burrowing owl nesting habitat, lands acquired in fee title, interagency memorandums of agreement, or any other agreements entered into for the purposes of protecting, enhancing, restoring, or creating covered species habitat.
- Year-to-date and cumulative summaries of exceptions to the burrowing owl passive relocation prohibition, as described in Habitat Plan Chapter 6.

The Habitat Agency will manage a minimum of 5,300 acres of western burrowing owl occupied breeding habitat over the next 45 years. Of this acreage, a minimum of 600 acres must be protected in fee title or placed under conservation easement. For the remaining 4,700 acres, a combination of land acquisition (fee title or easement) and long-term management agreements may be used, with the goal of having all 5,300 acres under some sort of permanent protection by year 45. Maintaining suitable habitat and increasing breeding pairs in a highly-altered environment, such as exists around the San Francisco Bay area, will require active land management; therefore, ensuring long-term management is essential for the continued existence of western burrowing owls in the South Bay area. Lands acquired or protected using permanent or temporary management agreements will be managed to protect and enhance the owl populations. Temporary management agreements (e.g., 5- to 20-year agreements as opposed to agreements in perpetuity) may be used to protect nesting habitat in areas not immediately planned for development or on lands where permanent protection is not possible or necessary. **Figure 10** shows the Expanded Burrowing Owl Conservation Area and the potential to increase the burrowing owl population within the Permit Area.

This chapter provides a summary of western burrowing owl–related management actions undertaken during the reporting period, research studies, current management agreements, and ongoing and future agreements.

Protection of Western Burrowing Owl Habitat

Management Agreements

San José-Santa Clara Regional Wastewater Facility

The San José-Santa Clara Regional Wastewater Facility bufferlands are owned and controlled by the City of San José (City). The Habitat Agency entered into a 5-year management agreement with the City that covers 201 acres of the bufferlands as part of a suite of measures aimed at reversing the declining trend of the burrowing owl population in Santa Clara County. A conservation easement held by the Habitat Agency will cover 72 acres of the 201 acres, all of which will be managed under a single management plan.

Management onsite focuses actions that benefit the burrowing owl. This includes maintaining proper vegetation height, excluding predators, coordinating trapping efforts, and performing wildlife surveys. Mowing and wire trimming around active burrows keeps vegetation low within a 30-foot radius. Invasive plants are managed to benefit the owls and maintain prey base. Perimeter fencing, low perches, and natural and artificial burrows will be installed, repaired, or maintained. Prey refugia (e.g., rock piles, brush piles, and vegetated mounds) will be installed and maintained as necessary. As necessary, predators will be managed on site.

Data for this population has been collected somewhat consistently since 1996 with the number of adult owls historically fluctuating between 2 and 20 adults observed during the breeding season. In 2016 the number of breeding season adults was the highest recorded, with 25 adults (up from 20 in 2015) observed and 12 successful nesting pairs which fledged 58 chicks. A total of 18 active burrows were found to contain evidence of owl activity: 13 burrows were designated as nest locations and five satellite burrows were identified as burrows for escape from disturbance or used during chick dispersal. Six nesting attempts occurred in artificial burrows.

One survey was conducted on October 1, 2016 in accordance with the Staff Report on Burrowing Mitigation (CDFW 2012). Based on the survey results, a total of 15 nesting burrows were observed with owls present at the time of survey, and nine additional satellite burrows. Two burrows were observed with no owls present at the time of survey, but that did show recent activity at the burrow entrance. A total of 23 burrowing owls were observed this reporting period. Five burrows were observed with more than one owl present; these are most likely an adult with juveniles or siblings sharing a burrow.

Don Edwards San Francisco National Wildlife Refuge

The Habitat Agency entered into a 5-year management agreement over 719 acres of the Warm Springs Unit (Warm Springs) of Don Edwards San Francisco Bay National Wildlife Refuge (Refuge) with San Francisco Bay Bird Observatory (SFBBO) and the Refuge. The emphasis of this agreement is to perform a series of monitoring and habitat enhancement tasks to better understand the status of the western burrowing owl population and to improve nesting and foraging habitat of this species in Warm Springs.

Warm Springs is composed of 719 acres of vernal pool grasslands in South Fremont, within the North San José/Baylands region. It is managed by USFWS to provide habitat to several endangered and special-status species, including western burrowing owls. Western burrowing owls have been regularly observed in and around Warm Springs since it was purchased in 1992, and they have been regularly observed in the mitigation lands since biological surveys were initiated in the late 1990s.

Warm Springs is dominated by alkali grasslands and seasonal wetlands. Of the 719 acres at Warm Springs, approximately 200 acres are seasonal wetlands. Vegetation height can be characterized as low, except in the highly weedy patches or fields. The site is grazed by cattle, which are rotated among 10 fenced pastures to keep vegetation low and improve habitat conditions for three federally listed species as well as for the western burrowing owl. Cattle grazing has occurred at Warm Springs throughout most of the twentieth century. On acquisition of Warm Springs in 1992, however, the Refuge ceased all grazing practices in the absence of a formal management plan.

A habitat management program for Warm Springs was initiated in 2004. This program included the reintroduction of grazing, as well as prescribed burning, invasive plant control, and expanded biological monitoring. The program set five main goals.

1. Reduce residual dry matter (RDM).
2. Enhance hydrology for vernal pool functions and species.
3. Increase native plant species richness and cover.
4. Reduce invasive plants, excluding nonnative grasses.
5. Maintain a grassland community of shorter stature (i.e., less than 6 inches) throughout the upland areas of Warm Springs within 5 years in order to provide habitat that supports at least five pairs of western burrowing owls 10 years from program approval.

In Warm Springs, western burrowing owls nest in upland areas. They have been repeatedly observed foraging in the pond areas during the summer once the ponds have dried. The highest number of owls observed was in 2005, when approximately 28 pairs nested within the Refuge (approximately 60 adults observed in total) and reproductive success was relatively high (WRA 2011). In 2014, eight nesting pairs of burrowing owls were recorded in Warm Springs. The surveys documented a total of 17 adults during the peak breeding season and 5 juveniles in 4 different nests, although actual juvenile numbers were likely higher.

In 2015, the Habitat Agency funded SFBBO to perform a series of monitoring and habitat enhancement tasks in collaboration with the Refuge with the goals of better understanding the status of the burrowing owl population, improving nesting and foraging habitat of this species, and stabilizing or increasing the breeding population in Warm Springs. In 2015, the breeding burrowing owl population in Warm Springs was restricted to seven adult owls. That year, there were three nesting pairs, which successfully fledged a total of 13 chicks.

In 2016, all 719 acres were surveyed. The number of breeding adults in Warm Springs was 9-10, an increase over the 2015 population. Of the five nests observed, two nests successfully fledged chicks (40% nest success). Nest productivity in 2016 was 6.5 chicks per successful nest and 2.6 chicks per all nests. Western burrowing owl management includes conducting vegetation management in the immediate area around occupied burrows across all of Warm Springs to ensure that vegetation height stays shorter than 6 inches during the breeding season. In addition, vegetative islands and debris piles to increase the prey base for burrowing owls will be installed. In order to enhance survival of burrowing owls at Warm Springs, funding will be sought to support predator management activities across the entire 719 acres. Finally, more rigorous monitoring methods and standardized protocols will be applied to assess western burrowing owl population and breeding success in Warm Springs throughout the year to identify active burrows for vegetation management actions and to inform future habitat management. All the proposed actions will focus on stabilizing and increasing the western burrowing owl population in Warm Springs and will add to current and future habitat management as it is applied by the Refuge.

Based on the first two years of the plan implementation, the team recommends continuing vegetation management on occupied burrows and active nests.

- Maintain the approval of contingency funding to use a tractor mower in areas with expanded weed infestations when control through other methods is not efficient or possible to apply on a timely fashion.
- Coordinate the vegetation management activities with the grazing schedule.
- Carefully monitor the use of the newly installed artificial burrows and base future recommendations on these observations.

- Continue predator control and investigate methods in reducing the pressure of avian predators.
- Observe foraging patterns of the burrowing owls and other avifauna close to rock piles or use of them for perching. Consider collaborating with other researchers in conducting studies to evaluate rock pile effectiveness.
- Continue rigorous monitoring of the Warm Springs burrowing owl population and focus more on banded bird resights to acquire more knowledge on the population dynamics.
- Continue the use of motion censored cameras and approve maintenance costs.

Progress to Date

Acres under Protection

- 920 acres of occupied burrowing owl habitat under management agreements.

Exceptions to Passive Relocation Prohibition

Passive relocation is currently prohibited under the Habitat Plan. As of June 30, 2015, there have been no exceptions to the passive relocation prohibition in Habitat Plan Chapter 6.

Monitoring Actions

South Bay Western Burrowing Owl Survey Network

Annual western burrowing owl surveys are to be completed through a collaborative effort between resource agencies, cities, and other local jurisdictions that are surveying for western burrowing owls in the region (Habitat Plan Appendix M, *Western Burrowing Owl Conservation Strategy*). This group was first assembled in 2014, and is collectively referred to as the South Bay Burrowing Owl Survey Network. Currently this group consists of members from the City of Mountain View/Shoreline Golf Course, San José-Santa Clara Regional Wastewater Facility, Don Edwards National Wildlife Refuge, ICF, NASA Ames: Moffett Airfield, San Francisco Bay Bird Observatory, San José State University, City of San José, City of Palo Alto, DeAnza College, County Parks, The Nature Conservancy, San José International Airport/U.S. Department of Agriculture, and the Santa Clara Valley Audubon Society. This group meets at least twice annually, once before the breeding season begins and once after the breeding season concludes. The South Bay Burrowing Owl Survey Network allows the Habitat Agency to gain maximum knowledge of breeding western burrowing owls in the region by coordinating with resource agencies, cities, and other local jurisdictions that are surveying for western burrowing owls.

Survey areas are divided into two groups: (1) potential habitat surveys and (2) known nesting location surveys. Standardized data sheets are used. While many of the sites were visited multiple times in the season, the goal was to collect a minimum of two rounds of data aimed at capturing information on nest establishment and fledging success. The general windows identified for the survey rounds were March 15–April 15 for the first round and June 1–July 15 for the second round. Staff and volunteers from the South Bay Burrowing Owl Survey Network conducted surveys in

known nesting locations within the survey area that were determined based on current western burrowing owl populations and other ongoing survey work. **Table 14** shows 2015 survey results.

In 2016, surveys focused on those areas within a 0.5 mile buffer of locations known to have supported nesting burrowing owls in the previous 3 years (2013–2015) and parcels with suitable habitat in the North San José/Baylands, South San José, Morgan Hill, and Gilroy burrowing owl conservation regions, as identified in the Habitat Plan.

Burrowing Owl Survey Results

The 2016 surveys documented 62 breeding adult burrowing owls and 108 documented fledged young. These numbers are down from the number of adult owls observed in 2015 (74) and below those reported from the early 1990's and 2009, just prior to Habitat Plan publication. The 2016 breeding season surveys occurred within the Habitat Plan study area and the expanded burrowing owl conservation area (**Figure 12**). These surveys were conducted to assess habitat with potential to be managed for burrowing owls and to determining the number of nesting adult burrowing owls in the South Bay Area.

County-wide Habitat Assessment

The first effort is a habitat assessment of public lands to determine the distribution of high quality burrowing owl habitat. The lands identified from this effort will be surveyed for owls and may also be targeted for future management and/or enhancement actions.

Winter Burrowing Owl Banding Project

The Habitat Plan conservation strategy envisions the possibility of banding and monitoring migratory burrowing owls in Santa Clara County to determine habitat use and dispersal patterns for wintering birds. The conservation strategy for this species requires constant monitoring to document population trends, range, habitat use, reproductive success, and dispersal. The effectiveness of monitoring, particularly for understanding dispersal distances, is significantly enhanced when it is possible to track the movements of individual owls, enabling the testing of existing assumptions and fine tuning or replacement of existing strategies.

The Santa Clara Valley Audubon Society in partnership with Philip Higgins and Lynne Trulio, received a FY2013–2014 LAG grant to survey and band burrowing owls. This study investigated whether burrowing owls banded during the wintering, non-breeding season (September–January) were remaining within Santa Clara County at their original banding locations, moving to other locations in the north of Santa Clara County where most owls breed, or moving outside of the area when the breeding season starts. All areas where wintering owls were observed overwintering in 2014/2015 were surveyed during the 2015 breeding season. No new breeding season nesting locations were identified in 2015, though some single owls were observed very early in the breeding season without mates. This study is funded through the end of 2016.

2016 Phase 1

The 2016 Phase 1 of the banding project was conducted between February 1 and July 31, 2016, the breeding season for burrowing owls in Santa Clara County. All sites where burrowing owls were observed during the 2015/2016 non-breeding season (September 2015 to February 2016) were

revisited. Burrowing owl surveys were conducted on foot at all known breeding and non-breeding sites to confirm presence or absence of breeding burrowing owls and to identify previously banded owls. The team also conducted two standardized roadside point count surveys for burrowing owls along three approximately 7.5-mile routes in Santa Clara County, following protocols developed by Conway and Simon (2003).

A total of 24 or 25 breeding females or pairs of burrowing owls were monitored at 4 historic breeding sites. During the 2016 breeding season, 6 adults and 67 chicks were banded at those 4 historic breeding sites: San José/Santa Clara Regional Wastewater Facility in Alviso, Moffett Field, Shoreline at Mountain View, and Warm Springs Unit of the Refuge. A total of 17 sites were surveyed: 10 in the Plan Area and 7 in the Expanded Study Area.

Plan Area

Ten sites were surveyed inside the Plan Area. Two sites had burrowing owls present:

- San José/Santa Clara Regional Wastewater Facility in Alviso— 13 females/pairs.
- A single owl was observed at Sierra Vista Open Space Preserve in March, but it did not remain to breed.

The historic site in Alviso had confirmed nest success, producing 58 chicks. Inside the Plan Area, a total of 26–27 adult burrowing owls were observed during the 2016 breeding season, maintaining the same number of adults that were observed in the 2015 breeding season.

No breeding burrowing owls were observed during the walk-through transect surveys at known wintering sites in the southern section of the Plan Area. In addition, no burrowing owls were detected at any of the 50 standardized roadside point county survey locations.

Expanded Study Area

Seven sites were surveyed inside the Expanded Study Area. Three historic sites had burrowing owls present.

- NASA Ames Research Center at Moffett Field—six pairs.
- Shoreline Regional Wildlife Mountain Area in Mountain View—one to two pairs.
- Warm Springs Unit at Don Edwards San Francisco Bay National Wildlife Refuge—four pairs.

Inside the Expanded Study Area, all 3 breeding sites had confirmed nest success, producing 29 chicks. A total of 23–24 adult burrowing owls were observed during the 2016 breeding season—a 20% decline from 2015.

Overall, a total of 49–51 adult burrowing owls were observed within the Plan Area and the Expanded Study Area during the 2016 breeding season, reflecting an 11% reduction from the 2015 breeding population.

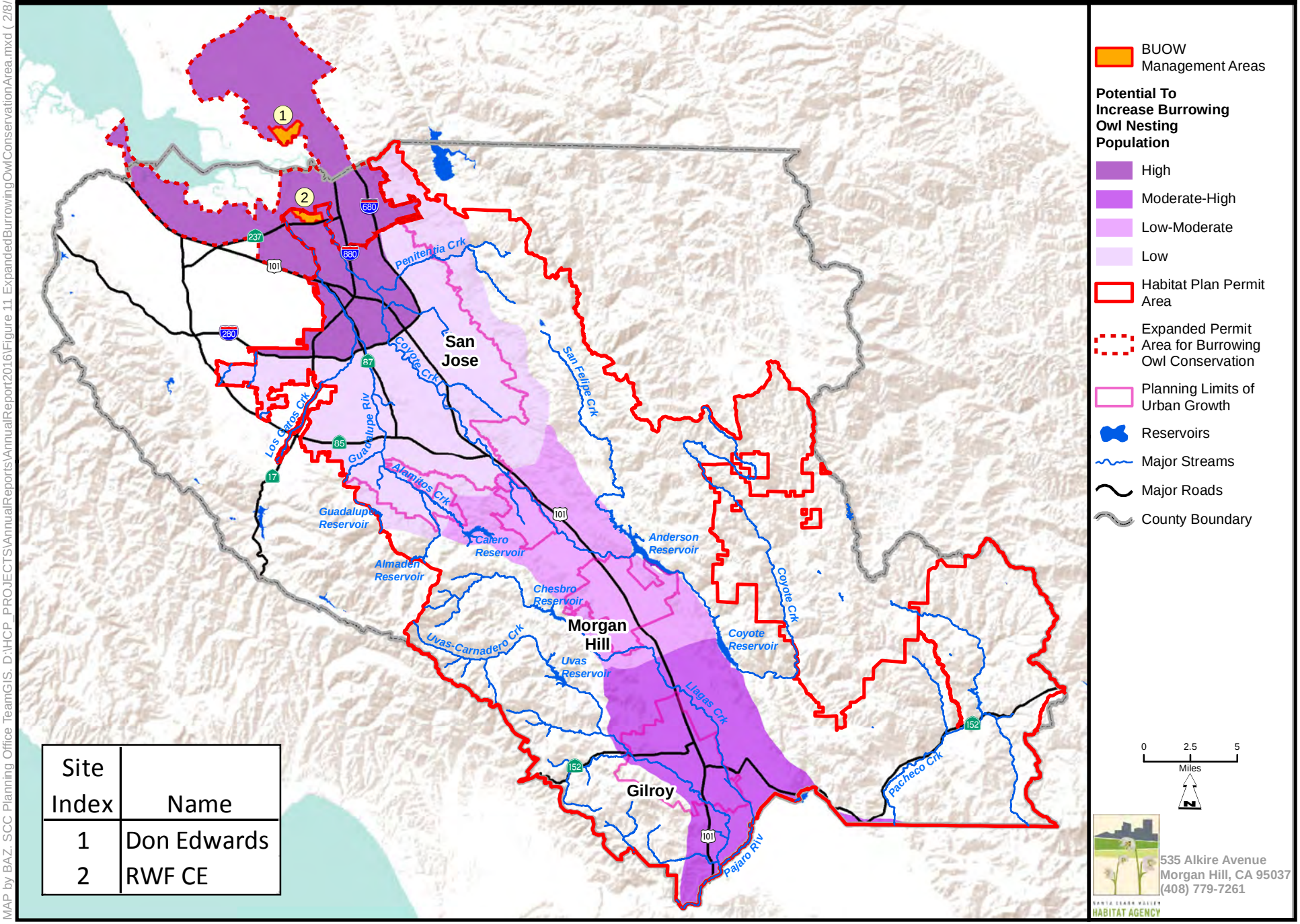
Future Research Studies

Western Burrowing Owl Supplemental Feeding Study: Breeding Season

The Habitat Plan's western burrowing owl conservation strategy requires constant monitoring to document population trends, range, habitat use, reproductive success, and dispersal, as described in the Burrowing Owl Conservation Strategy (Appendix M) of the *Final Santa Clara Valley Habitat Plan*. An expected outcome of the strategy is the natural expansion of owls from existing breeding sites to unoccupied habitat within reasonable dispersal distance. Natural expansions can only occur if the population is increasing, either through immigration or increased local reproduction.

Lynne Trulio, Phil Higgins, and Debra Chromczak will implement a supplemental feeding study to investigate whether supplemental feeding of western burrowing owls with dead laboratory mice during breeding seasons (March/April to September) will increase reproductive success as measured by the percent of pairs producing chicks and the number of chicks fledged per pair. The study will be conducted from 2016 to 2018. Increased nest success and chicks fledged are positive attributes for bird populations; ideally, this will lead to greater numbers of nesting pairs and local dispersal of young to increase the burrowing owl population in the Permit Area and the Expanded Burrowing Owl Conservation Area. All supplemental feedings occur at locations within the Permit Area, including the Expanded Burrowing Owl Conservation Area, where permission is granted.

Figure 12. Expanded Burrowing Owl Conservation Area with Management Areas



Site Index	Name
1	Don Edwards
2	RWF CE

MAP by BAZ. SCC Planning Office TeamGIS. D:\HCP_PROJECTS\AnnualReports\AnnualReport2016\Figure 11 ExpandedBurrowingOwlConservationArea.mxd (2/8/2017)

Site Name/Location	Number of Potential Breeding Season Adults	Number of Young Fledged	Number of Pairs	Number of Successful Pairs	Acreage
Within Permit Area					
Coyote Valley - Laguna Avenue	1*	-	-	-	2
Coyote Valley - Tulare Hill Ecological Preserve	2*	-	-	-	90
San Jose – 1st & Component Drive (Phillips)	1				
San Jose International Airport	18	24	8	8	331
San Jose-Santa Clara Regional Wastewater Facility	23	46	10	9	492
Permit Area Subtotal	45	70	18	17	915
Within Expanded Burrowing Owl Conservation Area					
Shoreline at Mountain View	6	3	3	1	750
Don Edwards National Wildlife Refuge - Warm Springs Unit	7	13	3	3	719
NASA Ames Moffett Airfield	17	11	8	3	700
Sunnyvale - Landfill Site	1*	-	-	-	300
Tasman Drive, 49ers Stadium, PG&E Trimble Substation	2	-	-	-	2
Expanded Area Subtotal	33	27	14	7	2,471
Total Breeding Season Adults	74	97	32	24	3,386

*Single owls observed early in the breeding season.

Chapter 6
Reserve System Management

Reserve System lands are managed to meet the Habitat Plan's biological goals and objectives. The Santa Clara Valley Open Space Authority manages the Coyote Ridge Open Space Preserve on the behalf of the Habitat Agency consistent with its interim management plan. A long-term management and monitoring plan is under development along with conceptual ecological models to guide management and monitoring decisions.

Reporting Requirements

- A summary of all land and water management activities undertaken on and off the reserves and a discussion of the management issues facing the Habitat Agency.

Management Planning Activities

The Habitat Agency began developing the *Coyote Ridge Reserve Management and Monitoring Plan*, which provides a detailed prescription for the long-term management and monitoring of the Coyote Ridge Open Space Preserve. The Habitat Plan requires the development of reserve management and monitoring plans. Each plan will identify, on the basis of site-specific conditions and objectives, the management, monitoring, and maintenance actions necessary to ensure that desired ecosystem characteristics and functions are established, maintained, and enhanced.

The management and monitoring plan is being is based on the *Management and Monitoring Plan for the Coyote Ridge Open Space Preserve*, prepared by Jodi McGraw for the Santa Clara Valley Open Space Authority. However, the plan goes beyond the Santa Clara Valley Open Space Authority document to address issues specifically required by the Habitat Plan as well as more robust monitoring requirement that are tied to the Habitat Plan's biological goals and objectives.

The monitoring portion of the plan assesses the status of Habitat Plan covered species and natural communities and tracks the progress and effectiveness of management activities over time. Management actions will be informed by monitoring and will allow adaptive management actions to be implemented more effectively. The management and monitoring plan is focused solely on the Coyote Ridge Open Space Preserve, although the Habitat Agency may expand it if adjacent lands are acquired in the future.

Conceptual Ecological Models

Draft conceptual ecological models for natural communities and covered species occurring on, or with modeled habitat on, the Coyote Ridge Open Space Preserve were developed as part of the *Coyote Ridge Reserve Management and Monitoring Plan*. Conceptual ecological models identify cause-and-effect relationships between ecological processes and management actions. These "living" models serve as a framework for management decisions, and they function as reference points for the Habitat Agency's understanding of how management actions affect the natural communities and covered species in the Reserve System. A critical task in the development of these models is the

identification of uncertainties related to ecosystem management and threats or stressors to natural communities and covered species.

The draft conceptual ecological models contain management actions or objectives that are specific to the Coyote Ridge Open Space Preserve but are still expected to apply to natural communities or species throughout the Reserve System. Accordingly, many of the reserve-specific management actions and objectives developed for the Coyote Ridge Open Space Preserve will also likely be applied—with adjustments based on site-specific conditions and adaptive management—to other reserves with the same natural communities and species habitat.

Management Implementation

Coyote Ridge Open Space Preserve

Management Activities

The following management activities were conducted on the Coyote Ridge Open Space Preserve by the Santa Clara Valley Open Space Authority.

- Invasive plant species (barb goatgrass, purple starthistle, yellow starthistle, artichoke thistle, mustards, and milk thistle) mapped and over 80 acres treated (artichoke thistle, milk thistle, and mustard).
- Conservation grazing achieved RDM targets and to support Bay checkerspot butterfly host plants.
- Assembled list of needed improvements for springs, seeps, and troughs.
- Made initial road improvements in areas where the road is unsafe.
- Replaced dilapidated gates with new cattle gates.

Management Issues

The Santa Clara Valley Open Space Authority identified the following management issues on the Coyote Ridge Open Space Preserve.

- A grazing contract is needed.
- Grazing infrastructure needs improvements, such as replacing the dilapidated fencing with wildlife-friendly fencing.
- The cyclone fencing needs to be replaced.
- Mapping and removal of thistle, barbed goatgrass, and other invasive plants needs to continue.
- Ponds CR-01 and CR-04 need restoration.
- Ponds CR-02 and CR-03 need to be deepened.
- Springs require protection and development.

- Sensitive aquatic habitat requires protection.
- Roads and trails must be inventoried and repaired.

Chapter 7
Monitoring, Research, and Adaptive Management

Reporting Requirements

- A description of the landscape-, natural community–, and species-level monitoring undertaken during the reporting period and a summary of monitoring results, including species status and trends.
- A presentation of the conceptual ecological models developed to date and any changes to them that have taken place during the reporting period.
- A description of the adaptive management process utilized during the reporting period (e.g., consultation with science advisors, convening of the Independent Conservation Assessment Team).
- A summary of the recommendations or advice provided by the Wildlife Agencies, science advisors, and the Independent Conservation Assessment Team (if applicable) regarding adaptive management and monitoring.
- An assessment of the efficacy of habitat restoration and creation methods in achieving performance objectives and recommended changes to improve the efficacy of the methods.
- An assessment of the appropriateness of performance indicators and objectives (see Habitat Plan Table 7-1 for examples) based on the results of effectiveness monitoring, and recommendations for changes to performance indicators and objectives.
- The success of the conservations actions in meeting the biological objectives in Habitat Plan Chapter 5 and in Tables 5-1a through 5-1d.
- The location and extent of annual and cumulative compliance with the species occupancy requirements.
- The location, extent, timing, and success rates of implementation of all other conservation actions described in Habitat Plan Chapter 5 (e.g., preparing reserve unit management plans [including recreation plans], constructing artificial perches, monitoring).
- A summary of the monitoring program objectives, techniques, and protocols including monitoring locations; variables measured; sampling frequency, timing, and duration; analysis methods; and who performed the analyses.
- An assessment of the efficacy of the monitoring and research program and recommended changes to the program based on interpretation of monitoring results and research findings.

The Habitat Plan provides a framework, guidelines, and specific suggestions to help the Habitat Agency develop and implement a detailed monitoring program during the initial years of Habitat Plan implementation. The Habitat Plan describes two types of monitoring: compliance monitoring and effectiveness monitoring.

Compliance monitoring is monitoring to determine if the requirements of the Habitat Plan are being implemented as described in the Habitat Plan. This Annual Report is the primary mechanism for tracking and reporting on Habitat Plan compliance issues.

Effectiveness monitoring is monitoring designed to evaluate the effectiveness of the management and monitoring actions described in the Reserve Management and Monitoring Plans (RMMP) at achieving their intended outcomes. In addition, each RMMP divides the process for conducting effectiveness monitoring into three main phases: inventory, long-term monitoring and adaptive management, and targeted studies (i.e., research). These three phases will be ongoing throughout the Habitat Plan permit term. Collectively, the purpose of the monitoring and adaptive management program is to track Habitat Plan compliance, as well as inform and improve conservation actions—management activities in particular—in the Reserve System to ensure that the Habitat Plan achieves its biological goals and objectives. This chapter of the Annual Report is focused on reporting on the effectiveness monitoring requirements of the Habitat Plan.

Monitoring

Inventory Phase

The inventory phase provides baseline information to lay the foundation of the overarching monitoring and adaptive management program. The Habitat Agency inventories and assesses landscapes, natural communities, and species, as appropriate, within the Reserve System. This information builds largely on the data collected during pre-acquisition. In addition to the establishment of baseline information, the inventory phase focuses on the identification of key relationships between species, habitats, and processes; the prioritization of project implementation; the refinement of species groups; and the selection of biotic and abiotic indicators for evaluating ecosystem condition.

Coyote Ridge Open Space Preserve

Herpetofauna Surveys

Vollmar Natural Lands Consulting (VNLC) surveyed ponds and streams at the Coyote Ridge Open Space Preserve in 2016 with the objectives of identifying native and special-status herpetofauna, evaluating the capacity of the ponds and streams to support special-status herpetofauna, and providing management recommendations to benefit these species. Targeted covered species were California tiger salamander, California red-legged frog, foothill yellow-legged frog, and western pond turtle.

In the winter and early spring, VNLC surveyed nines ponds and two seeps. In late February and early April, VNLC visited each pond identified through remote data-gathering to analyze habitat parameters and judge its capability to support special-status herpetofauna. At each pond, VNLC evaluated the pond's physical structure, water quality, vegetation, and surroundings, and these data were used to estimate the pond's ability to support special-status herptiles. The team also observed California red-legged frog sheltering in three functioning ponds (in addition to the breeding ponds), one failed pond, one stream, and one seep wetland. In general, the preserve was found to have a good mix of sheltering and breeding habitat for California tiger salamander and California red-

legged frog, although the total number and size of breeding ponds is relatively low. Repairing and/or deepening failed or silted-in ponds could create additional breeding habitat and significantly enhance California tiger salamander and California red-legged frog populations on the preserve.

In May 2016, VNLC walked two stream sections that remote analysis had identified as potentially supporting California red-legged frog or foothill yellow-legged frog breeding habitat. For sections of stream with potential to support special-status breeding or sheltering, VNLC evaluated the stream's physical and biotic structure, as described below.

Six of the nine ponds were determined to be functional. The limiting factor for California tiger salamander and California red-legged frog breeding on the preserve is water depth in ponds. Groundwater is available to fill ponds; however, several ponds have lost their functionality as California tiger salamander and California red-legged frog breeding habitat due to issues around soil erosion: berms have failed and pond basins have been silted-in.

The preserve has a good mix of sheltering and breeding habitat for California tiger salamander and California red-legged frog, although the total number and size of breeding ponds is relatively low. California red-legged frog or California tiger salamander breeding was detected in four of the six functional ponds. California red-legged frog were found breeding in two ponds and California tiger salamander in three.

In general, pond depth appears to be the controlling factor for special-status amphibian breeding on the Coyote Ridge Open Space Preserve. The three deepest ponds (Coyote Ridge Open Space Preserve-05, -06, and -07) all had breeding by California tiger salamander, California red-legged frog, or both. California tiger salamander also bred in the fourth-deepest pond (Coyote Ridge Open Space Preserve-03), but with limited or no success, based on the detection of only one larva, and that during only the earliest sampling round. VNLC also observed California red-legged frog sheltering in three functioning ponds (in addition to the breeding ponds), one failed pond, one stream, and one seep wetland.

Restoration or enhancement (e.g., excavation) is recommended for five of the ponds (Coyote Ridge Open Space Preserve-01, -02, -03, -04, and -08). Repairing and/or deepening failed or silted-in ponds could create additional breeding habitat and significantly enhance California red-legged frog and California tiger salamander populations on the preserve. In addition to the pond habitat, Seep Coyote Ridge Open Space Preserve-SEP-A and the lower reach of the main stream (labeled Coyote Ridge Open Space Preserve-STR-A) provide important sheltering habitat for adult and juvenile California red-legged frog. These features are unlikely to provide breeding opportunities, but they should be monitored and maintained to ensure their current value is not degraded. For the seep, this includes maintaining the existing trough.

Key survey results are summarized below, followed by details of the survey efforts.

- Successfully breeding California red-legged frogs were found in two of six functional ponds; successfully breeding California tiger salamanders were found at three. Foothill yellow-legged frog and western pond turtle were not found.
- In general, pond depth appears to be the controlling factor for special-status amphibian breeding on the preserve.

- For California red-legged frog, 22% of ponds and wetlands were found to be occupied; for California tiger salamander, 33%; and for western pond turtle, 0% (**Table 15**).[6]
- Restoration and enhancement opportunities were identified to enhance or establish breeding sites for California red-legged frog and California tiger salamander at five ponds and basking habitat for western pond turtle at three ponds.

Bay Checkerspot Butterfly Surveys

In 2016, surveys for Bay checkerspot butterfly were conducted at Coyote Ridge Open Space Preserve to estimate the population and distribution and to establish a baseline. Surveys were completed by Creekside Center for Earth Observation. The preserve contains 1,665.8 acres of the occupied Kirby/East Hills habitat unit (31%) and the 1,665.8 Kirby Recovery Unit (31%). Larval sample sites were distributed across the landscape and grouped into "population zones" in which average densities and absolute numbers are estimated. A total of 71 plots were sampled. Larvae were observed in all plots along the ridgeline, except for three plots at the far southeast end. Larvae were observed in all but four plots at mid and low elevations (Creekside Center for Earth Observation 2016).

The "Coyote Ridge" ridgetop population complex extending from north of Metcalf Canyon to Anderson Dam is the core of the Bay checkerspot butterfly distribution, and the habitat on the preserve supports a high fraction of the overall population. The survey results indicated approximately 200,000 larvae on the Coyote Ridge Open Space Preserve, constituting 25–50% of the entire Bay checkerspot butterfly population on the Coyote Ridge. The habitat on the Coyote Ridge Open Space Preserve is clearly essential for the long-term persistence of healthy Bay checkerspot butterfly populations (Creekside Center for Earth Observation 2016).

The grazing program at the Coyote Ridge Open Space Preserve is intended to manage the serpentine grasslands on the property specifically for the benefit of this species and for rare, serpentine-associated plants. The different pastures on Coyote Ridge Open Space Preserve represent slightly different grazing regimes, each of which have been functioning to provide Bay checkerspot butterfly habitat over time (Creekside Center for Earth Observation 2016). Monitoring for Bay checkerspot butterfly, plant composition, serpentine plants, and RDM will inform the grazing regime. Key findings were as follows, with survey details provided below (Creekside Center for Earth Observation 2016):

- It was estimated that there were 200,000 larvae on the Coyote Ridge Open Space Preserve, constituting 25–50% of the entire Bay checkerspot butterfly population on the Coyote Ridge.
- Larvae were observed in 64 of 71 plots.
- Adults were observed on all suitable serpentine grasslands across the property.

The basic method of population estimation was timed counts of larvae in a stratified sampling.

[6] California red-legged frog, California tiger salamander, and western pond turtle were grouped for the purposes of the species occupancy requirement because of their co-reliance and frequent co-occurrence in ponds and perennial wetlands in the study area.

Serpentine Grassland Composition Surveys

Serpentine grassland composition is monitored to provide a reliable system for detecting major changes in grassland composition in response to climate, topography, and management and to characterize Bay checkerspot butterfly habitat. In 2016, the plant composition assessment at Coyote Ridge Open Space Preserve was completed by Creekside Center for Earth Observation. Three plant species composition/cover monitoring clusters, consisting of four sampling transects each, were established on serpentine soils of the preserve, and key data included cover of Bay checkerspot butterfly host and nectar sources, nonnative annual grass, native perennial grass, perennial forbs, annual forbs, native cover, nonnative cover, native richness, thatch, and bare ground. Key findings appear below, followed by survey details (Creekside Center for Earth Observation 2016).

All sites surveyed had high quality Bay checkerspot butterfly habitat, with plentiful host plants and nectar sources. Native perennial grasses, annual forbs, and native cover varied across the clusters. As noted above, three plant species composition/cover monitoring clusters (north, middle, and south), consisting of four sampling transects each, were established on serpentine soils. The different elevations encompass different rates of nitrogen deposition. The system is designed to monitor large changes in composition from year to year (interannual) and across topographic and edaphic (soil) gradients, while at the same time being efficient for data collection and interpretation.

Also as noted above, key data collected were cover of Bay checkerspot butterfly host and nectar sources, nonnative annual grass, native perennial grass, perennial forbs, annual forbs, native cover, nonnative cover, native richness, thatch, and bare ground. Bay checkerspot butterfly host and nectar sources, native cover, and richness are all desirable. The forbs (non-woody, non-graminoid plants) mostly include what are commonly called wildflowers. Nonnative forbs include thistles and other broadleaf weeds, but these are mostly not present in the serpentine soil areas of the property. The nonnative cover in the region's serpentine grasslands is almost entirely nonnative annual grass, which are undesirable because they and their associated thatch compete with forbs, especially the annual forbs that are important Bay checkerspot resources. The native perennial bunchgrasses do not tend to outcompete these plants and are considered desirable. Bare ground is also desirable because it favors forbs over grass.

Bay checkerspot host plants and dwarf plantain cover varied across clusters, with the north portion of the reserve having the least at 2.6% and the middle portion having the most at 4.6%. The south cluster shows that dwarf plantain was at a fairly high level this year. Cover of owl's clover was highest in the north at 1.1% and lowest in the south 0.4%. The south cluster shows a moderate year, since some years had barely detectable owl's clover, and that the north cover was relatively high.

Bay checkerspot nectar sources and goldfields varied across sites. The north portion of the Coyote Ridge Open Space Preserve had the highest cover at 3.7%. The south remained low at 0.7%, apparently not yet recovering from drought. The older south data also illustrate the relatively high cover of the other sites. Tidy tips and jeweled onion were uniformly low across the three sites at well under 0.5%, as well as low compared with historical data from the south portion. Muilla was fairly uniform across the sites, ranging from about 0.4 to 0.5%. The older south data show that these are moderate to high amounts.

All perennial grasses measured were native. The north portion of the reserve had the highest cover with 2.3%, and the south had the lowest with 0.9%. This is a moderate to low value for the south portion. Nonnative annual grasses were very low in the north (5.6%) and even middle portion of the

Coyote Ridge Open Space Preserve (8.0%). The highest cover was in the south (15.9%), which was still moderate. Thatch was very low at all sites (<2.2%).

All Coyote Ridge sites surveyed are high quality Bay checkerspot butterfly habitat, with plentiful host plants and nectar sources. The data among sites show that different locations, elevations, and grazing regimes can support Bay checkerspot butterfly and their associated diverse native flora.

This survey was meant to serve as a baseline, and at this point no changes to management are recommended, even though some sites were slightly higher quality than others. Results will be used to determine if different pastures or parts of the property are responding similarly to weather, or whether management changes (likely changes in grazing pressure) are recommended, in the context of managing for Bay checkerspot butterfly and overall native cover and richness.

Covered Plant Surveys

The 2016 covered plant surveys on the Coyote Ridge Open Space Preserve were conducted by Creekside Center for Earth Observation.

Santa Clara Valley Dudleya

Santa Clara Valley dudleya is a federally endangered, perennial, succulent forb in the Crassulaceae family. It is endemic to the ultramafic formations (serpentinite and peridotite) of the Santa Clara Valley (H.T. Harvey and Creekside 2008). On the Coyote Ridge Open Space Preserve, it is generally found on rocky outcrops, and other areas of exposed bedrock, more commonly on ridgelines and slopes. It can be found on both warm and cool exposures.

Creekside Science was provided historical GIS files by the Habitat Agency in early 2016. These files included known point and polygon occurrences of Santa Clara Valley dudleya. In the course of mapping other covered species on Coyote Ridge Open Space Preserve, Creekside Science staff navigated to a set grid of points 100 meters apart, and among other things, recorded presence of dudleya within a 5-meter radius. Additional dudleya occurrences were mapped opportunistically in addition to those grid points. Work was done in June 2016 when plants were in flower and easiest to locate. The total points collected were 463. Adding up midpoints, the log scale estimate is 66,905 Santa Clara Valley dudleya on the Coyote Ridge Open Space Preserve.

Santa Clara Valley dudleya are well distributed and abundant on the Coyote Ridge Open Space Preserve. As expected, dudleya were not found in serpentine soil. They were also not common along the flatter areas along the ridgetop, even in serpentine soil. While some trampling and herbivory was observed, it seemed to be within the normal range of variation for this species. Plants overall seemed healthy, with no obvious pests or disease noted.

Mount Hamilton Thistle

Plants were only counted if the largest leaf was 10 inches long. Smaller plants (seedlings) were common. Mount Hamilton thistle was widely distributed in the drainages and seeps on the property. There are five occurrences with an estimated, 22,191 individuals.

Loma Prieta Hoita

There are two occurrences in the Coyote Ridge Open Space Preserve. There are an estimated 110-220 plants across the two occurrences with one occurrence of 10-20 and the other of 100-200.

Smooth Lessingia

Smooth lessingia is ubiquitous on the serpentine soils of Coyote Ridge Open Space Preserve, with only one large occurrence of an estimated 27.5 million plants.

Most Beautiful Jewelflower and Metcalf Canyon Jewelflower

The two jewelflowers are present on Coyote Ridge Open Space Preserve. There are eight occurrences of Metcalf Canyon jewelflower and two occurrences of most beautiful jewelflower on Coyote Ridge Open Space Preserve. There are an estimated 3.1 million plants across the most beautiful jewelflower occurrences and 980,000 plants across the Metcalf Canyon jewelflower occurrences.

Fragrant Fritillary

There are two occurrences of fragrant fritillary on the site. The northern occurrence is estimated at 10,000 – 30,000 plants. The southern occurrence is estimated at 41 plants.

Residual Dry Matter

The annual RDM survey and report for grazed areas of Coyote Ridge Open Space Preserve reports RDM retention levels as recommended in the July 2015 *Interim Management and Monitoring Plan for the Coyote Ridge Open Space Preserve.* The 2016 RDM survey determined that in general target RDM goals were met for the grazed areas of the Coyote Ridge Open Space Preserve. All California annual grasslands were found to exceed 2,000 lbs/acre of RDM. The serpentine grasslands within the Rock Field 1 pasture were found to be generally 700–1,000 lbs/acre of RDM. All other serpentine grasslands were found to be mostly 1,000–1,500 lbs/acre with some lower slope serpentine grasslands having RDM levels that exceeded 1,500 lbs/acre.

Species Occupancy and Occurrence Requirements

The Reserve System is required to support occupied habitat for five covered wildlife species and protect occurrence of all nine covered plant species (**Table 15**). Baseline surveys at the Coyote Ridge Open Space Preserve detected occupied habitat for Bay checkerspot butterfly, California red-legged frog, and California tiger salamander. Plant occurrences were found for Santa Clara Valley dudleya, Mt. Hamilton Thistle, smooth lessignia, most beautiful jewelflower, Metcalf Canyon jewelflower, Loma Prieta hoita, and Fragrant fritillary (**Table 16**).

Research

Research provides new information or direction regarding management actions. The purpose of research is to inform management in cases where species and natural community response to management is uncertain. The following research activities were funded by CDFW's NCCP Local Assistance Grant (LAG) Program, which provides state funds for urgent tasks associated with the implementation of approved NCCPs.

Current Grant-Funded Research Activities

Sycamore Alluvial Woodland Habitat Mapping and Regeneration Study

The San Francisco Estuary Institute and H.T. Harvey & Associates received a LAG to assess the biotic and abiotic factors that influence sycamore stand health. The sycamore alluvial woodland habitat mapping and regeneration study provides data relevant to the selection of sycamore alluvial woodland stands that represent the best acquisition, restoration, and enhancement opportunities within the Santa Clara Valley Habitat Plan Reserve System.

In general, the team expected to find a positive relationship between size class and distance to the primary channel. This is what was found at Pacheco; young trees were most concentrated close to the channel and in the inner floodplain and primary channel geomorphic zones, and larger, older trees were found at relative higher densities further from the channel. At Upper Coyote Creek, this pattern was not observed. This was perhaps due to historic migration of the channel over time. However, the distribution of large trees at Upper Coyote may reflect a historical path of an older channel along the northern edge of the floodplain. The team expected to find healthier trees in the more dynamic, more flood prone, less hydrologically managed, and more "natural" system at Upper Coyote Creek. More frequent and intense flood events would be expected to promote conditions more conducive to sycamore growth - availability of cobble sediment, removal of anthracnose-infected litter, and thinning of competitor species. This was not definitively supported by all the metrics examined. Regeneration at Pacheco Creek followed a predictable pattern of decreased newer growth with greater distance from the channel. Though it was expected that the natural systems support more regeneration at Upper Coyote Creek, this result was not supported, as Upper Coyote Creek experienced very little recruitment.

Coyote Valley Linkage Assessment Study

Coyote Valley has been identified as providing important habitat for wildlife movement between the Santa Cruz Mountains and the Diablo Range. Previous studies involving computer modeling have identified Coyote Valley as an important habitat linkage for wildlife movement. Matt Freeman (Santa Clara Valley Open Space Authority), Pathways for Wildlife, and Adina Merenlender (UC Berkeley) received a FY2013–2014 LAG to implement this study. The objective of the study is to identify pathways that wildlife species are using to move through Coyote Valley between the Santa Cruz Mountains and the Diablo Range.

In 2016, several pathways were identified that various animals are using to travel across the valley floor through a variety of habitats and road infrastructure. One of the main pathways identified is along Fisher Creek, in which animals are traveling from the west Santa Cruz Mountain foothills at the Coyote Valley Open Space Preserve, across the valley floor along the creek bed, and over to Coyote Creek County Park on the east side of the Valley through the Monterey Road Fisher Creek culvert. Wildlife, including bobcat, grey fox, coyote, deer and other small and medium-sized mammals have been documented traveling from Coyote Ridge and Coyote Creek County Park on the east side of Coyote Valley by using the Coyote Creek Golf Course Drive Underpass to safely cross underneath Highway 101.

Alternative Grassland Grazing Monitoring Methods Assessment

The Habitat Agency was awarded a grant from CDFW to conduct a study entitled, *Alternative Grassland Grazing Monitoring Methods Assessment*. The Habitat Agency contracted with ICF International (supervised by Troy Rahmig; Kasey Allen, Geospatial Analyst) to conduct the project in partnership with The Nature Conservancy (TNC; principally Scott Butterfield, Regional Ecologist) and LD Ford Rangeland Conservation Science (Larry Ford and Pete Van Hoorn). The primary purpose of the project is to test whether a new monitoring tool ("RDMapper", developed by TNC) using remote sensing of spring herbaceous vegetation, past field-based measures of fall RDM (Bartolome et al. 2006), and other information to predict RDM is more effective than conventional field measurement in terms of costs and relevance to management decisions for monitoring. In spring 2016 the team measured herbaceous biomass and height at the end of the growing season in grazed grasslands at a subset of the properties covered by the study, both with TNC conservation easements. A methodology for RDM estimation and mapping consistent with that described in Guenther and Hayes (2008) was applied to spring conditions. To allow for direct comparison with the RDMapper approach, the team will use the same RDM objectives (minimums) that TNC has set for each property.

All aspects of this study are on schedule. The technical team was able to identify enough properties with a history of grazing monitoring that will allow the assessment across the Habitat Plan study area. Following field data collection in 2016 and early 2017, an assessment will be made regarding the use of field based data collection (spring grass height and fall RDM measurements) compared with computer-generated models using RDMapper. Conclusions will be made within the context of the habitat requirements of species covered under the Habitat Plan and will be assessed through the lens of whether the results of either approach would change management recommendations on the ground.

Modeling Climate Change Effects on Pond Hydroperiods in the Coyote Valley

The Guadalupe-Coyote Resource Conservation District was awarded a FY2015–2016 LAG to (1) collect hydrologic and bathymetric data from a representative sample of ponds within the future Reserve System, (2) develop predictive models to identify which ponds would likely be most susceptible to future climate change effects (e.g., drought), and (3) develop a rapid hydrologic assessment tool that could be used by land managers and the Implementing Entity to prioritize ponds for enhancement and/or restoration in the early stages of NCCP implementation.

The team has compiled background information and selected ponds for sampling. In late 2016, the subcontractor will begin to collect baseline topographic data from the 26 ponds. Other data collected will be water level, depth, temperature, and salinity data at eight ponds for one dry-down period. In 2017, the team will develop balance hydroperiod and climate simulation for all 26 ponds.

Species	Requirement	Status in the Reserve System
Bay checkerspot butterfly	4 core habitat units (Kirby, Metcalf, San Felipe, and Silver Creek Hills) occupied at least 4 out of every 10 consecutive years of the permit term	1 of 4 core habitat units occupied (Kirby), per 1 year of surveys
	50% of satellite habitat units W. Hills of Santa Clara Valley, Tulare Hill, Santa Teresa Hills, Calero, Communication Hill, or North of Llagas Avenue occupied once by Year 45	N/A
California red-legged frog	40% of ponds and wetlands occupied (suport full life-cycle) in each of the federal Recovery Units 4 and 6 in the Reserve System (which correspond to the two major watersheds in the study area) by year 45	2 of 9 ponds and wetlands occupied (22%); only 6 of 9 considered functional
California tiger salamander	30% of ponds and wetlands occupied (support the full life cycle) in the entire Reserve System by year 45	3 of 9 ponds and wetlands occupied (33%); only 6 of 9 considered functional
Western pond turtle	25% of ponds and wetlands occupied (provide basking for adults and juveniles) in the entire Reserve System by year 45	0 of 9 ponds and wetlands occupied (0%); only 6 of 9 considered functional
Foothill yellow-legged frog	occupied habitat (perennial streams with an observation of egg masses) in the Reserve System in 4 watersheds as defined in Figure 3-6	N/A: no suitable habitat in the Reserve System

* For California red-legged frog, California tiger salamander, and western pond turtle occupancy requirements must also be met for the Reserve System at Year 30, minus 5% for each one (i.e., 35% for California red-legged frog, 25% for California tiger salamander, and 20% for western pond turtle). The measurement will be made based on the total Reserve System at Year 30.

Chapter 8
Stay-Ahead Provision

The Habitat Plan's Stay-Ahead provision requires that conservation is ahead or proportional to impacts for natural communities, plants, and burrowing owl nesting habitat. This is achieved by acquiring land for the Reserve System in advance of impacts.

Stay-Ahead is tracked by natural community rather than land cover type to allow for flexibility in Reserve System assembly. Compliance is tracked as a proportion of conservation achieved/expected compared to impacts incurred/expected, while allowing for a 10% deviation. For example, if 25% of the expected impacts on the oak woodland natural community have occurred, then at least 25% of the required land acquisition for the oak woodland natural community must also have occurred. Conservation includes restoration, creation, and acquisition.

Reporting Requirements

- Cumulative summary of all impacts and conservation for all land cover types.
- Status of Habitat Plan natural community preservation.
- An assessment of compliance with the Stay-Ahead provision (Habitat Plan Section 8.6.1, *Stay-Ahead Provision*) and a forecast of expected take and land acquisition needs for the next 2 years.

Stay-Ahead requirements for covered plants is tracked by covered plant occurrence and does not allow for 10% deviation or aggregation. Plant occurrences must be protected in advance of impacts. Only Coyote ceanothus creation or acquisition is allowed to deviation—a 5-year grace period is allowed from the first impact.

The Stay-Ahead requirement for protection of burrowing owl habitat applies to occupied and potential nesting habitat (not overwintering habitat) because these two habitat types are the most critical in meeting the conservation strategy goal of increasing the adult burrowing owl population by three birds per year. The Stay-Ahead requirement is based on acres of modeled occupied and potential nesting habitat either preserved or managed. Managed or permanently protected occupied nesting habitat must remain within 10% deviation of permanent impacts on occupied nesting habitat based on a 3:1 ratio (management or protection to impacts). For example, if 50 acres of permanent impacts on occupied nesting habitat have occurred, then 150 acres of occupied nesting habitat must be under a management agreement or permanently protected. In addition, to account for the conservation actions that will be applied and to provide an incentive to implement them quickly, the Habitat Agency may credit another 5% of the Stay-Ahead requirement against implementation of conservation actions on managed lands. Together with the allowable 10% deviation, this provides up to a 15% allowance in meeting Stay-Ahead for western burrowing owl.

Compliance with the Stay-Ahead Provision

Stay-Ahead requirements are being met for all natural communities, except riparian, and western burrowing owl (**Table 17, Table 18,** and **Figure 13**).

- **Grassland** Stay-Ahead Compliance is 120% with conservation in excess of 266.4 acres

- **Chaparral/Northern Coastal Scrub** Stay-Ahead Compliance is 135% with conservation in excess of 11.2 acres
- **Oak Woodland** Stay-Ahead Compliance is 185% with conservation in excess of 54.5 acres.
- **Conifer Woodland** has not been impacted or conserved.
- **Riparian Forest and Scrub** Stay-Ahead Compliance is 43% with conservation in a 3.3-acre deficit. Enrollment of Calero County Park and restoration at Joseph D. Grant County Park will bring this natural community into compliance.
- **Wetland** Stay-Ahead Compliance is 163% with conservation in excess of 0.9 acres.
- **Pond** Stay-Ahead Compliance is 374% with conservation in excess of 0.3 acres.
- **Stream** Stay-Ahead Compliance is 10,136% with conservation in excess of 12.8 miles of streams.
- **Western Burrowing Owl Nesting Habitat** Stay-Ahead Compliance is 622% with conservation in excess of 772.2 acres.

Stay-ahead compliance for plants can be preliminarily assessed based on the initial surveys on Coyote Ridge Open Space Preserve (**Table 19**).

Coyote Ceanothus. Occurrence creation will offset the removal of 206 plants.

Santa Clara Valley Dudelya. Occurrence protection offsets the removal of one occurrence from (4 plants directly impacted and 118 plants indirectly impacted). Reserve System baseline surveys counted 60,000 plants; however, the number of occurrences is still being determined.

Smooth Lessingia. The Reserve System contains one occurrence of 27.5 million plants. This offsets the removal of a single occurrence of 6 plants.

Most beautiful Jewelflower. The Reserve System contains two occurrences totaling an estimated 3.1 million plants. This offsets the removal of a single 110-plant occurrence.

Stay-Ahead Compliance Calculations

The Stay-Ahead Compliance calculated as follows:

Terrestrial Land Cover Types (Table 17)

Conservation Required = (% of Allowable Impacts Accrued) * (Total Conservation Required)

Compliance = (Conservation Achieved) / (Conservation Required)

≥ 90 % = in Compliance

Acres Ahead = (Conservation Achieved) – (Conservation Required)

Aquatic Land Cover Types (Table 17 and Table 18)

Conservation Required = (Impacts Accrued) *(Required Preservation Ratio + Required Restoration or Creation Ratio)

Compliance = (Conservation Achieved) / (Conservation Required)

≥ 90 % = in Compliance

Acres Ahead = (Conservation Achieved) – (Conservation Required)

Western Burrowing Owl Nesting Habitat (Table 17 and Table 18)

Conservation Required = (Impacts Accrued) *(Required Preservation Ratio)

Compliance = (Conservation Achieved) / (Conservation Required)

≥ 90 % = in Compliance

Acres Ahead = (Conservation Achieved) – (Conservation Required)

Plants (Table 19)

Conservation Required = (% of Allowable Impacts Accrued) * (Total Conservation Required)

Compliance = (Conservation Achieved) / (Conservation Required)

≥ 100% = in Compliance

Occurrences Ahead = (Conservation Achieved) – (Conservation Required)

Figure 13. Stay Ahead Compliance for Natural Communities and Western Burrowing Owl

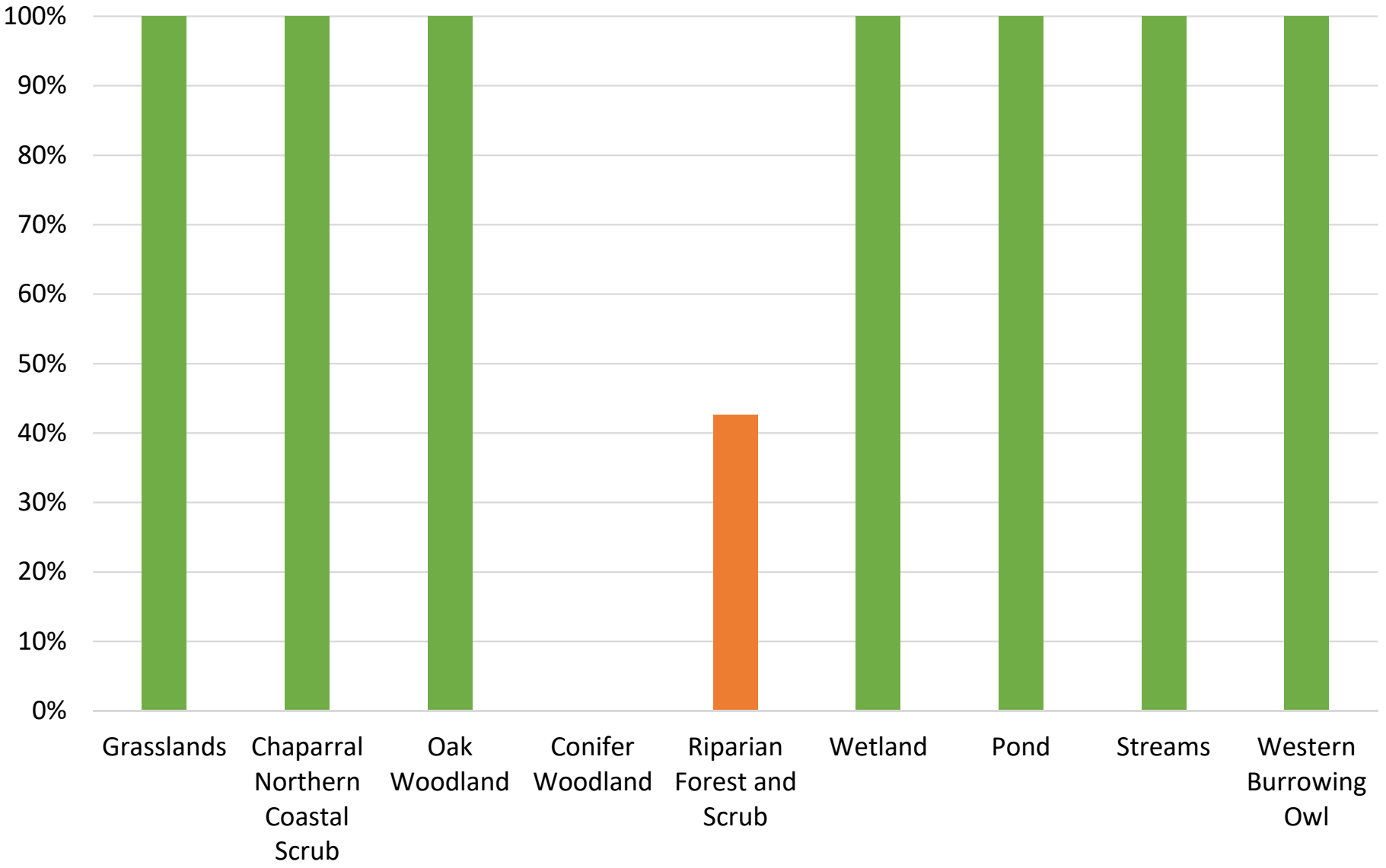


Table 17. Summary Status of the Stay-Ahead Provision

	Impacts			Conservation			Stay-Ahead		
Land Cover Type	Total Allowable Impacts (acres)	Impacts Accrued (acres)	% of Allowable Impacts Accrued	Total Conservation Requirements (acres)	Conservation Achieved (acres)	% of Required Conservation Achieved	Conservation Required (acres)[1]	Compliance	Acres Ahead[2]
Grasslands	2,529	190.5	8%	17,440	1,580.3	9%	1,313.9	120%	266.4
Chaparral Northern Coastal Scrub	405	5.2	1%	2,500	43.2	2%	32.0	135%	11.2
Oak Woodland	2,709	14	1%	12,900	119.0	1%	64.5	185%	54.5
Conifer Woodland	117	0.0	0%	10	0.0	0%	0.0	-	0.0
Developed	3,760	219.4	6%	-	0.1	-	-	-	-
Agricultural	8,018	407	5%	-	0.0	-	-	-	-
Riparian Forest and Scrub	289	1.9	1%	895	2.4	0%	5.7	43%	-3.3
Wetland	40	0.4	1%	408	2.3	1%	1.4	163%	0.9
Pond	52	0.0	0%	156	0.5	0%	0.1	374%	0.3
Streams (miles)	9	0.0	0%	38	12.9	34%	0.1	10136%	12.8
Western Burrowing Owl Nesting Habitat[4]	198	49.3	25%	594	920.0	155%	147.8	622%	772.2

[1] Terrestrial Conservation Required = "% of Allowable Impacts Accrued" * "Total Conservation Requirements". Aquatic Conservation and Burrowing Owl Conservation Required = "Impacts Accrued"*("Required Preservation Ratio" + "Required Restoration or Creation Ratio") as detailed in Table 18.

[2] Compliance = "Conservation Achieved"/"Conservation Required"

[3] Acres Ahead = "Conservation Achieved" - "Conservation Required"

[4] The Stay-Ahead requirement for protection of burrowing owl habitat applies to occupied and potential nesting habitat. The Stay-Ahead requirement is based on acres of modeled occupied and potential nesting habitat either preserved or managed. Managed or permanently protected occupied nesting habitat must remain within 10% deviation of permanent impacts on occupied nesting habitat based on a 3:1 ratio (management or protection to impacts). Stay-Ahead compliance is tracked based on this 3:1 ratio rather than the total impact vs. conservation requirements.

Table 18. Detailed Stay Ahead Provision for Aquatic Natural Community Conservation and Burrowing Owl Nesting Habitat

	Impacts		Conservation					Stay-Ahead		
Land Cover Type	**Total Allowable Impacts (acres)**	**Impacts Accrued (acres)**	**Required Preservation Ratio**	**Required Restoration or Creation Ratio**	**Conservation Achieved**					
					Preservation	**Restoration**	**Total**	**Conservation Required1**	**Compliance[2]**	**Acres Ahead[3]**
Willow riparian forest and scrub or mixed riparian forest and woodland	289	1.91	2	1	2.44	0.00	2.44	5.73		
Central California sycamore alluvial woodland	7	-	2	2	-	0.00	-	-		
Riparian Total	**296**	**1.91**			**2.44**	**0**	**2.44**	**5.73**	**43%**	**-3.29**
Coastal and valley freshwater marsh (perennial wetland)	25	0.16	2	1	-	0.16	0.16	0.48		
Seasonal wetland	15	0.23	2	2	1.89	0.23	2.12	0.92		
Wetland Total	**40**	**0.39**			**1.89**	**0.39**	**2.28**	**1.40**	**163%**	**0.88**
Pond	52	0.04	2	1	0.24	0.22	0.46	0.12	374%	0.34
Stream (miles)	9.4	0.03	3	1	12.90	0.00	12.90	0.13	10136%	12.77
Western Burrowing Owl Nesting Habitat[4]	198	49.27	3		920.0		920.0	147.81	622%	772.2

[1] Conservation Required = "Impacts Accrued"*("Required Preservation Ratio" + "Required Restoration or Creation Ratio")

[2] Compliance = "Conservation Achieved"/"Conservation Required"

[3] Acres Ahead = "Conservation Achieved" - "Conservation Required"

[4] The Stay-Ahead requirement for protection of burrowing owl habitat applies to occupied and potential nesting habitat. The Stay-Ahead requirement is based on acres of modeled occupied and potential nesting habitat either preserved or managed. Managed or permanently protected occupied nesting habitat must remain within 10% deviation of permanent impacts on occupied nesting habitat based on a 3:1 ratio (management or protection to impacts). Stay-Ahead compliance is tracked based on this 3:1 ratio rather than the total impact vs. conservation requirements.

Table 19. Summary Status of the Stay-Ahead Provision for Plant Occurences

	Impacts To Date (occurrences)			Conservation To Date (occurrence)					Stay-Ahead		
Covered Species	Allowable Impact	Impacts to date	% of Allowable Impacts Accrued	Protection[1]	Creation	Conservation Achieved	Total Conservation Requirements	% of Conservation Achieved	Conservation Required (occurrences)[1]	Conservation Achieved/ Conservation Required	Occurences Ahead[2]
Tiburon paintbrush	0	0	-	0		0	1	0%	-	-	-
Coyote ceanothus	3,650 individuals[2]	206	6%	0	1	1	3	33%	1	100%	0
Mt. Hamilton thistle	6	0	0%	5		5	22	23%	0	500%	5
Santa Clara Valley dudleya[4]	11	1	9%	TBD		0	55	0%	5	TBD	TBD
Fragrant fritillary	1	0	0%	2		2	4	50%	0	200%	2
Loma Prieta hoita	2	0	0%	2		2	4	50%	0	200%	2
Smooth lessingia	6	1	17%	1		1	12	8%	2	50%	-1
Metcalf Canyon jewelflower	2	0	0%	8		8	3	267%	0	800%	8
Most beautiful jewelflower	6	1	17%	2		2	17	12%	3	71%	-1

1 Conservation Required = “% of Allowable Impacts Accrured" * “Total Protection Requirements"

[2] Occurrences Ahead = "Conservation Required" - "Conservation Achieved"

[3] Calculated by subtracting "% of Conservation Achieved" from "% of Allowable Impacts Incurred"

[4] There are an estimated 60,000 plants protected. The number of occurrences preserved has not yet been determined.

Chapter 9
Changed and Unforeseen Circumstances

The No Surprises Regulation established by USFWS defines changed circumstances as those circumstances affecting a species or geographic area covered by an HCP that can be reasonably anticipated by the applicant or the USFWS and to which the parties preparing the HCP can plan a response. The changed circumstances identified by the Habitat Plan include the following.

- Covered species becoming listed.
- Non-covered species becoming listed.
- Global climate change.
- Fire.
- Nonnative species or disease.
- Flooding.
- Drought.
- Earthquakes.

Reporting Requirements

- A description of any unforeseen circumstances that arose and responses taken.
- An assessment of changes in temperature in the study area (see Habitat Plan Chapter 10, Section 10.2.1, *Changed and Unforeseen Circumstances*).
- A description of any actions taken or expected regarding changed circumstances, including remedial actions.

A changed circumstance requires the Habitat Agency to notify the Wildlife Agencies to determine the necessity for additional conservation or mitigation measures. If the mitigation or conservation measure has already been identified in the Habitat Plan, the Habitat Agency must comply with the measure. However, if the measure is not currently included in the Habitat Plan, the Wildlife Agencies will not require additional mitigation or conservation measures. In the event that an anticipated changed circumstance prohibits or damages a conservation action that meets the biological goals and objectives of the Habitat Plan, a remedial measure must be undertaken. Remedial measures are funded by the Habitat Plan and must be undertaken by the Habitat Agency.

Changed Circumstances

Climate Change

Global climate change is occurring as a result of high concentrations of greenhouse gases in the Earth's atmosphere (National Research Council 2010; Intergovernmental Panel on Climate Change 2007). Current global and regional trends suggest that climate change is likely to have an effect on the Plan Area. However, current or near-term forecasting technology for modeling changes in climate at the regional or county scale is not effective and there is much uncertainty in climate change predictions. Although uncertain, key climate change predictions project the average annual mean temperature in California will rise from 1.1°C (2°F) to more than 2.8°C (5°F). More frequent

drought years are also predicted which in combination with more intense rainfall events would pose higher risks of soil erosion and drops in ground water levels (Dukes and Shaw 2007).

The conservation strategy, reserve design, and monitoring and adaptive management program anticipate possible effects of climate change using a multi-scale approach that views conservation through landscape, natural-community, and species level. This approach focuses on protecting and enhancing a range of natural communities, habitat types, and environmental gradients (e.g., altitude, aspect, slope), as well as other features that are important as global warming changes the availability of resources and habitat types in the Plan Area.

The Habitat Agency will use a method consistent with the California Climate Action Team for measuring temperature change within the study area. The baseline index, as measured from the Gilroy, Morgan Hill, and San José weather stations, will be historic temperatures from 1961 to 1990. For the purposes of the Plan, three baseline measurement periods will be set using 1961 to 1990 historic temperatures: average annual temperature, average summer temperature (June, July, and August), and average winter temperature (December, January, and February). If modeled California climate-change trends are applied to the study area, one may anticipate that the temperature could increase up to 2.8° C during the permit term. Under the Plan, the following is considered changed circumstances for which remedial measures will be funded.

- An increase in temperature of up to 2.8°C for any of the three baseline periods measured as a 10-year running average.

The Habitat Agency will track these three average annual temperatures, as shown in **Table 18**. Over the next year, the Habitat Agency will revisit the climate change assumptions for the Plan Area to inform conservation strategy implementation.

Annual Average Temperature (°F)

	Average Annual Summer Temperature			Average Annual Winter Temperature		
Year	Gilroy	Morgan Hill	San Jose	Gilroy	Morgan Hill	San Jose
2014	87.4	87.6	80.0	66.6	63.9	63.2
2015	85.6	85.5	80.1	65.0	63.4	62.8
2016	87.2	85.1	81.0	63.5	61.5	62.9

http://weather-warehouse.com/WeatherHistory

Chapter 10
Finances

This chapter provides an evaluation of the economic assumptions on which the Habitat Plan was based, an accounting of all revenues received, and an assessment of the post-permit term funding strategy. The *Budget* section provides an overview of the Habitat Plan cost categories, the annual budget, and expenditures. The budget and expenditures are compared to the Habitat Plan cost model assumptions. The *Revenue Sources* section provides an accounting of all revenue received by type. The *Funding in Perpetuity* section provides the status of the endowment required for post-permit term funding.

Reporting Requirements

- An evaluation of the economic assumptions on which the Habitat Plan was based (e.g., Habitat Plan costs, revenue rates, and grant funding projections).
- An accounting of all revenues received, by type (e.g., development fees, wetland fees, grants) and an assessment of progress towards total revenue goals. Funding from local, state, and federal sources must be tracked separately. Any fee adjustments must also be reported.
- An assessment of progress toward a complete funding strategy for implementation after the permit term.

Budget

The Habitat Agency prepares and approves an annual budget based on anticipated revenues and program implementation costs. The Habitat Plan assumes the following cost categories for implementation.

- Land acquisition.
- Reserve management and maintenance, including adaptive management.
- Habitat and covered plant occurrence restoration/creation.
- Monitoring, research, and scientific review.
- Program administration.
- Contingency.
- Costs in perpetuity.

Meetings with each of the Co-Permittees during the budget planning process were used to determine covered activities that will be permitted in the upcoming fiscal year. These revenues plus non-fee funding (e.g., grants) were used to develop the budget. The annual budget uses cost centers based on the Habitat Plan cost categories.

The Habitat Agency's available revenue, allocated budget, and expenditures varied from what was anticipated by the Habitat Plan (**Table 21**). For Years 1–5, the Habitat Plan assumed $9.7 million for its average annual budget. The FY1516 budget was $1.9 million, 20% of the anticipated budget. The drivers of this difference was due to no land acquisition during the reporting period. The Habitat

Agency's budget focused on program administration, burrowing owl management and monitoring, and baseline monitoring on Coyote Ridge.

Implementation expenditures were lower than what was estimated in the Habitat Plan. The expenditures were $2 million in FY2015–2016. This was 21%, of what was estimated in the Habitat Plan. Costs increased in this fiscal year from the previous due to the Habitat Agency beginning management and monitoring on Coyote Ridge Open Space Preserve and the restoration project construction at Calero County Park, and expansion of burrowing owl management and monitoring.

Revenue Sources

The Habitat Plan anticipates 55% of funding from fees and 45% from non-fee sources. Private and public development-based fees fund mitigation to offset losses of land cover types, covered species habitat, and other biological values. These fees pay for the full cost of mitigating project effects on the covered species and natural communities addressed by the Habitat Plan. These fees are charged for permanent and temporary impacts and include an endowment fee and plan preparation cost recovery fee component. The endowment fee component is included in all development fees to build an endowment for post-permit term funding. Development fees paid by private entities include a cost recovery fee component to partially reimburse the Co-Permittees over time for the costs incurred related to development of the Habitat Plan between 2005 and 2011. Fee-based funding includes the following.

- Land cover fee.
- Nitrogen deposition fee.
- Serpentine fee.
- Burrowing owl fee.
- Wetland fee.
- PSE charges.

Non-fee based funding comes from local, state, and federal sources other than Habitat Plan fees. This includes land acquisitions and other conservation actions conducted by local organizations (e.g., Santa Clara Valley Open Space Authority, County Parks) and grants from federal, state, local, and private entities. These local funding sources typically require that their funds be used to contribute to the recovery of the covered species (i.e., the NCCP portion of the Habitat Plan) or used to mitigate the impacts of their own agency. For example, County Parks will be enrolling its land to mitigate impacts of County public projects.

The Habitat Agency received $8.3 million in funds during the reporting period from fee and non-fee funding sources (**Table 22** and **Table 23**). Fee funding totaled $4.8 million (58% of total revenues) across private, public, and PSE projects. Private projects paid $3.2 million across 31 covered projects. Twenty-three public projects paid $1.3 million. Three PSEs contributed $189 thousand.

Fee funding revenue was received across all fee types. Of this revenue source, land cover fees were $3.5 million (72%), serpentine fees were $679 thousand (14%), nitrogen deposition fees were $146

thousand (3%), burrowing owl fees were $421 thousand (9%), wetland fees were $71 thousand (1%), PSE charges were $23 thousand.

Non-fee funding totaled $3.5 million (42%). This includes funds from three mitigation only projects ($1.1 million, **Table 24**) and four grants ($2.4 million, **Table 25**) .

Fees are adjusted on an annual basis using an automatic inflation adjustment (Habitat Plan page 9-41). From FY2014–2015 to FY2015-2016, land cover, serpentine, and nitrogen deposition fees increased by 5.7%. Burrowing owl and wetland fees increased by 3.6%. A summary of this fee adjustment is provided in Habitat Plan Chapter 11, *Program Administration*.

Land Acquisition

Coyote Ridge Open Space Preserve was acquired by the Santa Clara Valley Open Space Authority using funding from eight state, private, local, and federal sources totaling $8.6 million (**Table 26**). The State provided the majority of the funding ($4.1M, 48%) via grants from the State Parks Recreational Trails Program, State Coastal Conservancy, and Wildlife Conservation Board. Federal funding ($3M, 35%) was issued via grants from the BOR Central Valley Project and USFWS Section 6 Grant programs. Private funding was provided by the Resources Legacy Fund and Gordon and Betty Moore Foundation ($1.5M, 17%). The Santa Clara Valley Open Space Authority contributed $7,500 of local funding toward the purchase. Together these funding sources contributed to the Reserve System's first property.

Funding in Perpetuity

A set percentage of collected development fees is allocated to an endowment fund. For land cover, serpentine, nitrogen deposition, and burrowing owl fees, 10.35% of the fees is allocated. For wetland mitigation fees, 10.74% is allocated. Currently, the County Trust Fund holds the endowment portion of the fees. The Habitat Agency selected the Silicon Valley Community Foundation as the long-term endowment holder.

	Cost Estimate from Habitat Plan			FY 1516 Budget		FY 1516 Expenditures			
Cost Category	Years 1-5	Average Cost Per Year (Years 1-5)	% of Total		% of Total Budget	Total	% of Total Expenditures	Difference from FY 1516 Budget	Difference from Habitat Plan Cost Estimate
Land Acquisition	$ 27,380,000	$ 5,476,000	56%	$ 125,000	7%	$ -	0%	$ (125,000)	$ (5,476,000)
Reserve Management and Maintenance	$ 3,750,000	$ 750,000	8%	$ 74,000	4%	$ 204,464	10%	$ 130,464	$ (545,536)
Monitoring, Research, and Scientific Review	$ 2,140,000	$ 428,000	4%	$ 36,000	2%	$ 170,343	8%	$ 134,343	$ (257,657)
Western Burrowing Owl Conservation Strategy	$ 320,000	$ 64,000	1%	$ 60,000	3%	$ 161,174	8%	$ 101,174	$ 97,174
Habitat Restoration & Creation	$ 10,420,000	$ 2,084,000	21%	$ 260,000	14%	$ 223,726	11%	$ (36,274)	$ (1,860,274)
Program Administration[1]	$ 3,740,000	$ 748,000	8%	$ 1,353,097	71%	$ 1,314,844	63%	$ (38,253)	$ 566,844
Contingency Fund	$ 1,010,000	$ 202,000	2%	$ -	0%	$ -	0%	$ -	$ (202,000)
Total	$ 48,760,000	$ 9,752,000	100%	$ 1,908,097	100%	$ 2,074,551	100%	$ 166,454	$ (7,677,449)

[1] Program Administration includes $118,237 of Waters Permitting

	Reporting Period		Cumulative		Habitat Plan Assumption
Funding Source	**Revenue Received**	**% of Total**	**Revenue Received**	**% of Total**	**% of Total**
Fee Funding					
Land Cover Fee	$ 3,455,393.90	42%	$ 8,171,689.69	31%	
Serpentine Fee	$ 679,176.01	8%	$ 1,805,858.91	7%	
Nitrogen Deposition Fee	$ 145,683.76	2%	$ 472,815.29	2%	
Burrowing Owl Fee	$ 420,677.75	5%	$ 1,275,866.52	5%	
Wetland Fee	$ 71,420.29	1%	$ 1,052,083.11	4%	
Participating Special Entity Charges	$ 23,135.25	0%	$ 123,636.41	0%	
Total Fee Funding	***$ 4,795,486.96***	***58%***	***$ 12,901,949.93***	***50%***	***55%***
Non-Fee Funding					
Mitigation Only and Voluntary Contributions	$ 1,077,673.90	13%	$ 1,801,732.80	7%	
Grants	$ 2,430,548.00	29%	$ 2,749,840.00	11%	
Land Acquisition by Local Land Agencies, Non-Profits, and Foundations	$ -	0%	$ 8,607,500.00	33%	
Total Non-fee Funding	***$ 3,508,221.90***	***42%***	***$ 13,159,072.80***	***50%***	***45%***
Total	**$ 8,303,708.86**		**$ 26,061,022.73**		

Source	Project Name	Amount	Type	Date
Land Cover Fee				
City of Gilroy	Heartland Estates	$ 101,229.02	Private	5/1/2016
City of Morgan Hill	Butterfield Retirement	$ 50,302.46	Private	5/1/2015
City of Morgan Hill	Campoli Cox Subdivision	$ 23,715.80	Private	2/1/2016
City of Morgan Hill	Cochrane Road Self-Storage Expansion	$ 12,497.14	Private	2/1/2016
City of Morgan Hill	Gippetti/ Monterey Parque	$ 54,671.16	Private	4/1/2016
City of Morgan Hill	Lantana-Wisteria	$ 510,354.03	Private	6/1/2016
City of Morgan Hill	Mission Ranch Terra Mia	$ 23,730.06	Private	6/1/2015
City of San Jose	237 @ First Homewood Suites Hotel	$ 63,014.00	Private	10/1/2015
City of San Jose	Bramhall Park Improvements	$ 5,367.26	Public	6/1/2016
City of San Jose	Cottlestone (Dove Hill)	$ 129,808.84	Private	6/1/2016
City of San Jose	Coyote Creek Trail Story to SOP	$ 21,335.80	Public	3/1/2016
City of San Jose	DBI/PDC- Silicon Valley	$ 200,960.20	Private	3/1/2016
City of San Jose	iStar Great Oaks Mixed Use (Residential)	$ 723,331.90	Private	3/1/2016
City of San Jose	La Encina Residential	$ 17,724.44	Private	3/1/2016
City of San Jose	Lands of Mazzone	$ 10,385.02	Private	6/1/2016
City of San Jose	Montecito Vista, Lots 6 and 7	$ 39,942.40	Private	6/1/2016
City of San Jose	Shady Oaks Park Enhancement	$ 24,905.92	Private	6/1/2016
City of San Jose	Spreckles Pump Station	$ 3,931.08	Public	6/1/2016
City of San Jose	Trail: Coyote Creek (Hwy 237 to Tasman Dr.) D&C	$ 73.96	Public	6/1/2016
County of Santa Clara	Chagrin Residence	$ 5,401.20	Private	6/1/2016
County of Santa Clara	Gavilan College Airfield	$ 37,196.36	Public	1/1/2016
County of Santa Clara	Lands of Jordan	$ 8,762.99	Private	6/1/2016
County of Santa Clara	Lands of Mussallem	$ 14,539.04	Private	6/1/2016
County of Santa Clara	Z-Best Composting Facility and Outfall	$ 440,513.25	Private	6/1/2016
SCVHA	Caltrain Los Gatos Creek Bridge Replacement	$ 1,028.52	PSE	4/1/2016
SCVHA	PG&E T-1065 Hydrotest	$ 34,357.39	PSE	10/1/2015
SCVHA	Sierra Vista Open Space Preserve Trail	$ 3,154.30	PSE	3/1/2016
SCVWD	Almaden Dam Improvement Project Geotechnical Investigations Phase 2	$ 5,206.00	Public	12/15/2017
SCVWD	Almaden Valley Pipeline Maintenance	$ 62,005.93	Public	6/1/2016
SCVWD	Bifurcation Yard and PAC 40 Pipeline Maintenance	$ 7,519.61	Public	6/1/2016
SCVWD	Coyote Pump Plant & Anderson Force Main Facility Maintenance	$ 28,722.43	Public	6/1/2016
SCVWD	FY 15/16 Groundwater Recharge Pond Facility Maintenance	$ 468,804.30	Public	4/1/2016
SCVWD	Maple and Murphy Parcels Facility Maintenance	$ 4,329.32	Public	6/1/2016
SCVWD	Penitencia Water Treatment Plant Facility Maintenance	$ 72,977.16	Public	6/1/2016
SCVWD	Santa Clara Conduit Emergency Repair	$ 41,429.15	Public	2/1/2016
SCVWD	Santa Teresa Sludge Pond Maintenance	$ 48,076.17	Public	4/1/2016
SCVWD	Santa Teresa Water Treatment Plant Facility Maintenance	$ 154,090.29	Public	6/1/2016
Land Cover Fee subtotal		***$ 3,455,393.90***		

Source	Project Name	Amount	Type	Date
Serpentine Fee				
City of San Jose	Cottlestone (Dove Hill)	$ 422,405.06	Private	6/1/2016
City of San Jose	DBI/PDC- Silicon Valley	$ 41,010.20	Public	3/1/2016
County of Santa Clara	Lands of Mussallem	$ 41,291.41	Private	6/1/2016
SCVHA	PG&E T-1065 Hydrotest	$ 99,830.54	PSE	10/1/2015
SCVWD	Penitencia Water Treatment Plant Facility Maintenance	$ 74,638.80	Public	6/1/2015
Serpentine Fee Subtotal		***$ 679,176.01***		
Nitrogen Deposition Fee				
City of Gilroy	CVS Pharmacy	$ 3,620.40	Private	5/1/2016
City of Gilroy	Hecker Pass West Cluster & Arias	$ 4,645.20	Private	5/1/2016
City of Morgan Hill	Butterfield Retirement	$ 1,029.00	Private	9/1/2015
City of Morgan Hill	Campoli Cox Subdivision	$ 420.00	Private	10/1/2015
City of Morgan Hill	Cochrane Road Self-Storage Expansion	$ 105.00	Private	2/1/2016
City of Morgan Hill	Condit - LaQuinta	$ 7,331.16	Private	2/1/2016
City of Morgan Hill	Gippetti/ Monterey Parque	$ 2,436.00	Private	4/1/2016
City of Morgan Hill	Lantana-Wisteria	$ 5,670.00	Private	6/1/2016
City of Morgan Hill	Mission Ranch Terra Mia	$ 318.40	Private	6/1/2015
City of San Jose	237 @ First Homewood Suites Hotel	$ 5,481.00	Private	10/1/2015
City of San Jose	Capitol Toyota	$ 5,707.80	Private	6/1/2016
City of San Jose	Coleman Highline	$ 16,014.60	Private	3/1/2016
City of San Jose	Cottlestone (Dove Hill)	$ 672.00	Private	6/1/2016
City of San Jose	Cristo Rey	$ 205.80	Private	9/1/2015
City of San Jose	DBI/PDC- Silicon Valley	$ 6,455.40	Private	3/1/2016
City of San Jose	Hanover Cannery Park	$ 14,238.00	Private	3/1/2016
City of San Jose	Hyatt House / Hyatt Place	$ 11,340.00	Private	10/1/2015
City of San Jose	iStar Great Oaks Mixed Use (Residential)	$ 30,240.00	Private	3/1/2016
City of San Jose	La Encina Residential	$ 210.00	Private	3/1/2016
City of San Jose	Lands of Mazzone	$ 336.00	Private	6/1/2016
City of San Jose	Latitude Phase II	$ 2,465.40	Private	10/1/2015
City of San Jose	Mahuron Property	$ 4,578.00	Private	3/1/2016
City of San Jose	Montecito Vista, Lots 1 and 2	$ 924.00	Private	9/1/2015
City of San Jose	Montecito Vista, Lots 6 and 7	$ 6,906.00	Private	9/1/2015
City of San Jose	SupeMicro 750 Ridder Park	$ 3,847.20	Private	9/1/2015
City of San Jose	Supermicro Green Park Project Master Plan	$ 3,859.80	Private	6/1/2016
City of San Jose	VA Outpatient Facility	$ 4,393.20	Private	6/1/2016
City of San Jose	Villa Sports	$ 1,881.60	Private	5/1/2016
County of Santa Clara	Chagrin Residence	$ 42.00	Private	6/1/2016
County of Santa Clara	Gavilan College Airfield	$ 226.80	Public	1/1/2016
County of Santa Clara	Lands of Jordan	$ 42.00	Private	6/1/2016
County of Santa Clara	Lands of Mussallem	$ 42.00	Private	6/1/2016
Nitrogen Fee Subtotal		***$ 145,683.76***		
Burrowing Owl Fee				

Source	Project Name	Amount	Type	Date
City of San Jose	237 @ First Homewood Suites Hotel	$ 186,949.00	Private	10/1/2015
City of San Jose	Spreckles Pump Station	$ 6,052.56	Public	10/1/2015
City of San Jose	Trail: Coyote Creek (Hwy 237 to Tasman Dr.) D&C	$ 316.51	Public	6/1/2016
County of Santa Clara	Ground Mount PV Solar- Reid-Hillview Airport	$ 227,359.68	Public	6/1/2016
Burrowing Owl Fee Subtotal		***$ 420,677.75***		
Wetland Fee				
City of San Jose	La Encina Residential	$ 10,356.57	Private	3/1/2016
City of San Jose	Lands of Mazzone	$ 10,548.10	Private	6/1/2016
County of Santa Clara	Lands of Jordan	$ 171.62	Private	6/1/2016
County of Santa Clara	Santa Clara Ground Mount Solar PV Project, Mal	$ 12,286.99	Public	6/1/2016
County of Santa Clara	Z-Best Composting Facility and Outfall	$ 7,583.17	Private	6/1/2016
SCVHA	Caltrain Los Gatos Creek Bridge Replacement	$ 27,965.08	PSE	4/1/2016
SCVWD	Santa Clara Conduit Emergency Repair	$ 2,508.76	Public	2/1/2016
Wetland Fee Subtotal		***$ 71,420.29***		
Participating Special Entity Charge and Admin Charge				
SCVHA	PG&E T-1065 Hydrotest	$ 13,418.79	PSE	10/1/2015
SCVHA	Caltrain Los Gatos Creek Bridge Replacement	$ 6,423.06	PSE	4/1/2016
SCVHA	Sierra Vista Open Space Preserve Trail	$ 3,293.40	PSE	2/1/2016
Participating Special Entity Charge Subtotal		***$ 23,135.25***		
Mitigation Only and Voluntary Contributions				
SCVHA	Hecker Pass Safety Imp Project	$ 266,171.13	Public	4/1/2016
SCVHA	PG&E 3 Projects Mitigation	$ 190,364.77	Public	8/21/2015
SCVHA	Watsonville Rd HPH SR152	$ 621,138.00	Public	4/1/2016
Mitigation Only and Voluntary Contributions Subtotal		***$ 1,077,673.90***		
Grants				
NCCP LAG (2015)	Research: BUOW	$ 68,840.00	State	
NCCP LAG (2015)	Research: Hydroperiod	$ 99,957.00	State	
NCCP LAG (2015)	Research: Phytophthora	$ 85,755.00	State	
NCCP LAG (2016)	Research: Corridor	$ 75,440.00	State	
NCCP LAG (2016)	Research: N-Dep	$ 80,000.00	State	
NCCP LAG (2016)	Research: TRBL	$ 20,556.00	State	
Section 6 (2016)	Acquisition	$ 2,000,000.00	Fed	
Grants subtotal		***$ 2,430,548.00***		
Land Acquisition by Local Land Agencies, Non-Profits, and Foundations				
None		$ -		
Land Acquisition by Local Land Agencies, Non-Profits, and Foundations Subt		***$ -***		
Total		**$ 8,303,708.86**		

Year	Code	Project Name/Source	Type	Date	Revenue	Mitigation (Acres)			Notes
						Obligation	Fulfilled	Location	
FY1415	Voluntary Contribution-1	Valley Christian Serp Mitigation	private	7/1/2014	$ 40,092.80				
FY1415	Voluntary Contribution-4	Intuit	private	9/1/2014	$ 16,952.00				
FY1415	Voluntary Contribution-5	Apple	private	9/1/2014	$ 126,381.60				
FY1415	Voluntary Contribution-2	WBO Fee CMH	public	11/1/2014	$ 219,977.00				
FY1415	Voluntary Contribution-3	WBO Fee CMH	public	11/1/2014	$ 171,182.17				
FY1415	Voluntary Contribution-6	Moffet Place, LLV	private	11/1/2014	$ 16,635.60				
FY1415	Voluntary Contribution-7	UNFI West	private	11/1/2014	$ 5,309.32				
FY1415	Mitigation Only-1	Caltrans - 152/Ferg Rd Inter	public	4/1/2015	$ 127,528.41	8.43			CTS and CRLF
FY1516	Mitigation Only-2	PG&E - Compensatory Mitigation	public	8/21/2015	$ 190,364.77	14.55			1.37 acres for CTS and CRLF, 0.3 acres for SJKF, 12.88 acres of serpentine for BCB
FY1516	Mitigation Only-3	Caltrans - Truck Climbing Lane Segment D	public	4/7/2016	$ 266,171.13	13.44			CTS, CRLF, SJKF. Fees collected must be applied to Reserve System lands for these species. 14.64 acres Required (remaining 1.2 acres to be covered by Hecker Pass Project)
FY1516	Mitigation Only-4	Caltrans - Watsonville Rd / Hecker Pass (152)	public	4/7/2016	$ 621,138.00	34.5			CTS and CRLF
FY1415	Projects	8			$ 724,058.90				
FY1516	Projects	3			$ 1,077,673.90				
Total					**$ 1,801,732.80**				

Funding Source	Agency	Type	Purpose	Amount	Awarded to	Habitat Agency Match
CVPCP/HRP (2014)	USBR & USFWS	Federal	Acquisition: Coyote Ridge	$ 1,000,000	SCVOSA	
State Parks Recreational Trails Program (2014)	CDPR	State	Acquisition: Coyote Ridge	$ 400,000	SCVOSA	
State Coastal Conservancy (2014)	State Coastal Conservancy	State	Acquisition: Coyote Ridge	$ 1,000,000	SCVOSA	
Resource Legacy Fund (2014)	Resource Legacy Fund	Private	Acquisition: Coyote Ridge	$ 500,000	SCVOSA	
Section 6 (2014)	USFWS	Federal	Acquisition: Coyote Ridge	$ 2,000,000	SCVOSA	
Section 6 (2016)	USFWS	Federal	Acquisition	$ 2,000,000	SCVHA	
Wildlife Conservation Board (2015)	Wildlife Conservation Board	State	Acquisition: Coyote Ridge	$ 2,700,000	SCVOSA	
Gordon and Betty Moore Foundation (2014)	Gordon and Betty Moore Foundation	Private	Acquisition: Coyote Ridge	$ 1,000,000	SCVOSA	
NCCP Local Assistance (2013)	CDFW	State	Research: Corridor	$ 26,800	SCVOSA	
NCCP Local Assistance (2013)	CDFW	State	Research: BUOW	$ 38,401	SCVAS	
NCCP Local Assistance (2013)	CDFW	State	Research: Corridor	$ 75,000	UCSC	
NCCP Local Assistance (2014)	CDFW	State	Research: Sycamore	$ 93,965	SFEI	$4,698
NCCP Local Assistance (2014)	CDFW	State	Research: Grazing	$ 85,126	SCVHA	$8,513
NCCP Local Assistance (2015)	CDFW	State	Research: BUOW	$ 68,840	SFBBO	$20,000
NCCP Local Assistance (2015)	CDFW	State	Research: Hydroperiod	$ 99,957	GCRCD	$12,500
NCCP Local Assistance (2015)	CDFW	State	Research: Phytophthora	$ 85,755	SCVHA	
NCCP Local Assistance (2016)	CDFW	State	Research: Corridor	$ 75,440	SCVOSA	
NCCP Local Assistance (2016)	CDFW	State	Research: N-Dep	$ 80,000	SCVHA	$10,000
NCCP Local Assistance (2016)	CDFW	State	Research: TRBL	$ 20,556	Talon	$20,556
TOTAL				**$11,349,840**		**$76,267**

Coyote Ridge Open Space Preserve

Acquired by:	Santa Clara County Open Space Authority
Date Acquired:	10/21/2015 Acquisition
Acres:	1,802.10
Key land cover:	serpentine grassland, California annual grassland, coast live oak forest and woodlands, steams
Appraised value:	$ 15,650,000
Purchase Price:	$ 8,607,500
Difference:	$ 7,042,500
Eligible for the following Section 6 grants:	FY1314

Funding Source	Funding amount	Type	Percent	Source of non-federal match?	
State Parks Recreational Trails Program	$ 400,000	State	5%	Yes	$ 4,100,000
State Coastal Conservancy	$ 1,000,000	State	12%	Yes	$ 1,500,000
Resource Legacy Fund	$ 500,000	Private	6%	Yes	$ 7,500
Wildlife Conservation Board	$ 2,700,000	State	31%	Yes	$ 3,000,000
Gordon and Betty Moore Foundation	$ 1,000,000	Private	12%	Yes	
Santa Clara County Open Space Authority	$ 7,500	Local	0%	Yes	
BOR Central Valley Project	$ 1,000,000	Federal	12%	No	
USFWS Section 6 Grant	$ 2,000,000	Federal	23%	No	
TOTAL	$ 8,607,500		100%		

Non-Federal Match Needed: $ 1,100,000 (amount necessary to achieve 55:45 ratio to match Section 6)

Match available:

Source	
State Parks Recreational Trails Program	$ 400,000
State Coastal Conservancy	$ 1,000,000
Resource Legacy Fund	$ 500,000
Wildlife Conservation Board	$ 2,700,000
Gordon and Betty Moore Foundation	$ 1,000,000
Santa Clara County Open Space Authority	$ 7,500
	$ 5,607,500

Excess match: $ 4,507,500

Chapter 11
Program Administration

The Habitat Plan permits were issued in July 2013, and with the close of FY2015–2016, the Habitat Agency neared 3 years of Habitat Plan implementation. This period focused on early implementation tasks, such as developing tools and resources for Co-Permittees, private applicants, and PSEs; preparing governing policies and guidance documents; and continuing the momentum of a dedicated Co-Permittee staff, regulators, and private citizens with their participation in governance and technical committees.

This chapter highlights early implementation accomplishments and provides a summary of executive officer directives, interpretation and clarification memorandums, mitigation agreements, and administrative changes and minor modifications to the Habitat Plan during the first Annual Reporting period.

Major Accomplishments

New Staff

The Habitat Agency hired one new staff person, Terah Donovan, as the Principal Program Manager.

Endowment

The Habitat Agency selected the Silicon Valley Community Foundation as its endowment holder after careful evaluation. Both the National Fish and Wildlife Foundation and Silicon Valley Community Foundation were evaluated as potential endowment holders. For investment with Silicon Valley Community Foundation, the Habitat Agency will set up a separate 501(c)(3) organization to own the mitigation fund, and that the 501(c)(3) will invest the fund through a Nonprofit Investment Fund at Silicon Valley Community Foundation.

New Financial Policies

The Habitat Agency adopted three new financial policies. The *Investment Policy* establishes objectives and criteria for the investment of Habitat Agency funds and provides guidance for the Agency's cash management. The basic premise underlying the investment policy is to ensure that money is always available when needed. In addition, it is the policy of the Agency to diversify its investment portfolio to ensure the maximum safety of Agency's assets. The *Fraud Policy* establishes procedures for clarifying acts that are considered to be fraudulent, describing the steps to be taken when fraud or other related dishonest activities are suspected, and accounting for missing funds, restitution and recoveries. The *Donations, Contributions, and Scholarships Policy* allows the solicitation of donations, contributions and sponsorships to support Habitat Agency programs, events and services; provides guidance when individuals, community entities, and businesses wish to make donations, contributions or sponsorships to the Agency; and establishes a formal process for acceptance and documentation of donations, contributions and sponsorships made to the Agency. This policy also establishes the standards for Agency officials and employees regarding the acceptance of gifts during the performance of Agency business.

New Accounting Software

The Habitat Agency implemented a new accounting software called Black Mountain Solutions.

Successful Audit

The Habitat Agency commenced the audit of financial statements of the government activities and major funds in September of 2015. The Habitat Agency hired the certified public accountant Vargas and Company, and facilitated and directed the completion of their audit report. Vargas published their findings on December 17, 2015. Significant audit findings were as follows:

- The financial statement disclosures were neutral, consistent, and clear.
- Vargas encountered no significant difficulties in dealing with the Habitat Agency in performing and completing their audit.
- The Habitat Agency corrected all misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by the Habitat Agency were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.
- No disagreements between Vargas and the Habitat Agency arose during the course of their audit.
- Vargas did not audit the Habitat Agency's required supplementary information (RSI) and did not express an opinion or provide any assurance on the RSI.

The audit report for the year ended June 30, 2015 is a more detailed document than was presented for the Habitat Agency's first audit report, which was completed for the year ended June 30, 2014. This is due to detailed, complete reporting on all fund activities. Because the County does not provide the Habitat Agency with detailed accounting services nor an accounting system that is specifically designed for the Habitat Agency, the Habitat Agency hired an accountant who assisted with the framework to review and subsequently purchase accounting software specifically designed to address the various fees and reporting requirements associated with those fees.

Regional General Permit

On January 15, 2016, the U.S. Army Corps of Engineers (USACE), San Francisco District, issued a Regional General Permit (RGP) to the City of San José, City of Morgan Hill, City of Gilroy, County of Santa Clara, Santa Clara Valley Water District, Santa Clara Valley Transportation Authority, and the Santa Clara Valley Habitat Agency, for impacts to waters of the U.S. associated with many projects and activities covered by the Santa Clara Valley Habitat Plan.

This 5-year permit provides a framework for integrating and streamlining waters permitting under Section 404 of the Clean Water Act with the endangered species permitting already in place under the Habitat Plan. The RGP covers 17 categories of activities, setting thresholds for impacts that range from less than 0.1 acre to 0.5 acre and providing an expedited process for reviewing and processing project-specific waters permits. The RGP represents a major milestone in the implementation of the Habitat Plan. The RGP will help to ensure consistent and streamlined waters permitting for projects covered by the Santa Clara Valley Habitat Plan that have impacts to waters of the U.S. This RGP is

only the second issued in the United States associated with an approved HCP (the first was in East Contra Costa County).

Key RGP Accomplishments in the reporting period are as follows.

- Developed RGP application form, submittal protocol, and fee and monitoring schedule.
- Trained Co-Permittees on April 5, 2016.
- Proposed Calero Park and Guadalupe River restoration sites as pre-mitigation.
- Permitted two projects: City of San Jose Outfall Structures and Pond and Wetland Restoration Project at Calero County Park.
- Continued worked towards Regional and State Water Quality Boards Clean Water Act Section 401 Certification.

Trainings

The Habitat Agency completed two Habitat Plan project permitting trainings for planning staff at the Cities of San José (3/22/16) and Gilroy (4/25/16) and one for all Co-Permittee for the Regional General Permit (4/5/16).

Interpretation and Clarification Memos

The Co-Permittees approved two new interpretation and clarification memorandums to allow for consistent application of requirements across all covered projects. These memorandums were workshopped by the Implementation Committee and then submitted for review and approval by the Co-Permittee Committee. A summary of the memorandums was provided at the Technical Advisory Committee. A complete record of these memorandums can be found on the Habitat Agency website.[7]

- **2016-001- Grading Violations and Abatements- Payment of Habitat Plan Fees -** This memo provides guidance on how to apply and calculate Habitat Plan fees for grading abatement.
- **2016-002-Condition 18 - San Joaquin Kit Fox Den Treatment Requirements** - Administrative Modification to Condition 18 to clarify that the destruction of unoccupied dens is only applicable within the development footprint.

Voluntary Contributions and Mitigation Only Agreements

The Habitat Agency entered into three mitigation only and one voluntary contribution agreement totaling over $1M in the reporting period (**Table 24**). Voluntary Contributions are earmarked funding for land acquisition, management, or monitoring. Mitigation Only Agreements detail payments of mitigation fees and cost recovery charges for staff time in exchange for the transfer of a mitigation obligation to the Habitat Agency. The required acreage will be used for mitigation within the Reserve System. The voluntary contribution and mitigation only agreements are as follows.

[7] http://scv-habitatagency.org/297/Interpretations

- *PG&E Compensatory Mitigation* agreement obligates the Habitat Agency to provide 1.37 acres for California tiger salamander and California red-legged frog, 0.3 acres for San Joaquin kit fox, 12.88 acres of serpentine for Bay checkerspot butterfly.
- *Caltrans Truck Climbing Lane Segment D* mitigation agreement obligates the Habitat Agency to provide 13.44 acres of mitigation for California red-legged frog, California tiger salamander, and San Joaquin kit fox.
- *Caltrans Watsonville Road/Hecker Pass (152)* mitigation agreement obligates the Habitat Agency to provide 34.5 acres of mitigation for California tiger salamander and California red-legged frog.

Modifications to the Habitat Plan

The Habitat Plan or' incidental take permits can be modified in accordance with USFWS and CDFW regulations and the terms of the Implementing Agreement. Habitat Plan modifications are not anticipated on a regular basis. Modifications can be requested by a Co-Permittee or by the permitting agencies. The categories of modification are administrative changes, minor modifications, and amendments. There were no modifications to the Habitat Plan in 2016. **Table 27** summarizes Technical Advisory Committee Accomplishments and Wildlife Agencies' Approvals.

Table 27. Reporting Period Technical Advisory Committee Accomplishments and Wildlife Agencies' Approvals

	Meeting Date Assigned	Action Item	Date Complete	Notes
1	5/28/2015	Rob will update the interpretation per meeting discussion	7/24/2015	
2	5/28/2015	Terah/Simone will look at how routine maintenance agreement activities would be covered under then Habitat Plan.	7/24/2015	
3	5/28/2015	Torrey/Terah: Follow up with Don Rocha on invasive and pathogen inventory he did for Mt. Madonna	7/24/2015	
4	5/28/2015	Ed/Terah: Identify partners to write LAG grants - how can we encourage others to write the grants? Outreach?	7/24/2015	
5	5/28/2015	Don A: will send out more information on the Phythophera Working Group. Participation - Janell attendee for SCVWD and Habitat Agency. There will also be a DFW representative.	7/24/2015	
6	1/22/2015	Kathryn will send SWPP to Joseph	8/28/2015	
7	2/26/2015	Terah/Ed develop projects and identify grant opportunities (1) Look at how the Section 6 is scored and do targeted field work. Establish funding partnership. (2) Follow up with Don on who to work with for grant ideas and partnerships (Lisa is the contact person). Consider phythophera and Ceanothus research for Section 6 research grant.	8/28/2015	
8	4/23/2015	Kathryn: Ramp Guidelines are done and need to be integrated into Table 6-2 guidelines. Set up follow up meeting with Wildlife Agencies, Rob, and Ed re: Table 6-2.	8/28/2015	
9	7/23/2015	Ed: talk to Michele about the issues with covering project impacts to Coyote Ceanothus. (due today)	8/28/2015	
10	7/23/2015	Jennel: Establish criteria for defining Coyote Ceanothus seedling vs. mature plant (due 1 week)	8/28/2015	
11	7/23/2015	Kathryn/Terah: Rob will provide edits to Kathryn, after that it is OK to finalize. (due by next TAC meeting)	8/28/2015	
12	7/23/2015	Rob: Set up separate meeting to review the map and potential changes · County, Wildlife Agencies, Habitat Agency (due by next TAC meeting)	8/28/2015	

Table 27. Reporting Period Technical Advisory Committee Accomplishments and Wildlife Agencies' Approvals

	Meeting Date Assigned	Action Item	Date Complete	Notes
13	7/23/2015	Terah will work with Joseph on the process for the Section 7 memo submittal (due by next TAC meeting)	8/28/2015	
14	7/23/2015	Terah: Bring Condition 11 update to the IC (due by next IC meeting)	8/28/2015	
15	7/23/2015	Terah: Send Joseph the application package and email approval for the PG&E Mitigation Only project (due 1 week)	8/28/2015	
16	8/27/2015	Joseph will follow up with Ryan about RGP BO - Find out what USFWS needs to process the BO.	8/28/2015	
17	8/27/2015	Terah will send PG&E Line 300B Hydro-test PSE application to Dave and Joseph	8/28/2015	
18	8/27/2015	Terah: Send the job description to the TAC for distribution	8/28/2015	
19	2/26/2015	Dave and Joseph: Talk to supervisors about the process and circle back on the CE template update.	9/24/2015	
20	12/10/2015	Terah. Send the power point to the group	12/10/2015	
21	12/10/2015	Don A, Don R, Leslie, Ed, Janell, Dave, Joseph: (1) Talk about concept proposal for propagation and phytophthora (2) Set up meeting to discuss plant occurrence definition in advance of the Coyote Ridge spring surveys. Potential for LAG or traditional Section 6	12/10/2015	
22	9/24/2015	Joseph will talk to Michael Thomas about why a special purpose permit under MBTA permit is required for LBV	10/22/2015	USFWS handles this internally and no action is required by the Habitat Agency - Joseph is looking into if the Habitat Agency needs to file a permit application to ensure this happens.
23	9/24/2015	Kathryn will look at Section 10 permit and see what it says re: Special Purpose Permit under MBTA	10/22/2015	USFWS handles this internally and no action is required by the Habitat Agency
24	7/23/2015	Terah will send the Habitat Agency Board Packet meeting materials to the Wildlife Agencies to serve as the approval request for Reserve System Enrollment for UTC. (due 2nd week in September)	9/10/2015	
25	8/27/2015	Ed will set up call with Rob, Joseph, and Dave to discuss AMM-95	9/24/2015	
26	8/27/2015	Rob will send the Z-best biological assessment to Habitat Agency for review	9/24/2015	Now going through the Habitat Plan for their permits.

Table 27. Reporting Period Technical Advisory Committee Accomplishments and Wildlife Agencies' Approvals

	Meeting Date Assigned	Action Item	Date Complete	Notes
27	3/24/2016	Dave - provide Don and Terah with contact information for UC Davis/State-wide for the TCBL study. Could inform a LAG.	4/1/2016	Neil Clipperton
28	3/24/2016	Greg - Geobrowser - add species models to internal geobrowser and provide access to Joseph, Dave, and Brenda.	3/29/2016	The Partner Geobrowser has been updated with modeled habitats. They are in a subfolder within the HCP Data folder. Just click the plus-sign to expand the individual layers. If you don't see the Modeled Habitats folder when you load your browser, you may need to hit the refresh button on your browser to force it to appear.
29	12/10/2015	Ed: PG&E Coyote Ceanothus project - include report out to TAC on project	3/1/2016	Final site visit conducted with PG&E, SCVWD, Wildlife Agencies, and Habitat Agency. Discussed at LAFCO meeting: in the discussion on ESA requirements there is a mention of $80 million--that is the estimated cost of the conservation measures that were developed for earlier version of the VHP WHEN NMFS was part of the discussions. As steelhead of any ilk are not covered species this is nothing more than a cost estimate used to figure the cost benefit of taking over Pacheco Dam– SCVWD is reluctant due to that analysis.
30	3/24/2016	Terah follow up with Debra: What does the $80M refer to? Report out next month.	3/29/2016	Here's the link to the agenda items from the Ad Hoc meeting held on 3/21. Item 5.3 was regarding fisheries, and is where the $80 million cost was referred to. I also mentioned during the item presentation that in the NMFS Recovery Plan, they estimated that recovery actions over 80-100 years to be approximately $560 million over the whole planning area. http://www.valleywater.org/About/PachecoAdHocCommitteeAgendasMinutes.aspx
31	3/24/2016	Terah: BUOW data needs to get submitted to CNDDB - make sure it gets submitted on an annual basis.	3/24/2016	Data will be submitted at the conclusion of annual monitoring.
32	3/24/2016	Terah: What about applications (Joseph)? Are we finding occurrences anywhere? Include these in the application review and include in the AR. Any positive sitings should be included in the Annual Report.	3/24/2016	Habitat Agency will include in next AR and talk to Co-Ps at next IC meeting.
33	3/24/2016	Terah - Post the research on the website. Follow-up with Brenda and Dave about getting LAG reports.	6/1/2016	Obtained LAG reports and will post to Habitat Plan website. LAG reports are available on CDFW website. SCVHA website update with "Research" under Conservation Strategy
34	4/28/2016	Terah - Send out complete Fire Guidelines	4/1/2016	

Chapter 12
References Cited

H. T. Harvey & Associates, and Creekside Center for Earth Observation. 2008. VTA-Coyote Ridge Property. Year 2 (2008) Monitoring Report Prepared for Santa Clara Valley Transportation Authority.

Natural Community Conservation Planning Local Assistance Grant Program Proposal Application. FY 2014-15. *Alternative Grazing Monitoring Methods Assessment.*

Natural Community Conservation Planning Local Assistance Grant Program Proposal Application. FY 2014-15. *Identifying Habitat Corridors for Wildlife to Travel Through Coyote Valley between the Santa Cruz Mountains and Diablo Range.*

Natural Community Conservation Planning Local Assistance Grant Program Proposal Application. FY 2014-15. *Sycamore Alluvial Woodland (SAW) Habitat Mapping and Regeneration Studies.*

Natural Community Conservation Planning Local Assistance Grant Program Proposal Application. FY 2013-14. *UC Santa Cruz Puma Project.*

Natural Community Conservation Planning Local Assistance Grant Program Proposal Application. FY 2013-14. *Winter Burrowing Owl Banding Project.*

U.S. Fish and Wildlife Service. 2005. *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog California Red-legged Frogs*.

U.S. Fish and Wildlife Service. 2008. *Bay Checkerspot Butterfly: 2008 Final Critical Habitat Revision.*

Santa Clara Valley Habitat Agency. 2015. *Process for Requests for Funding from Santa Clara Valley Habitat Agency*. March 4. Available: http://scv-habitatagency.org/DocumentCenter/View/352.

Santa Clara Valley Habitat Agency. 2012. *Final Santa Clara Valley Habitat Plan*. August. Available: http://scv-habitatagency.org/178/Final-Habitat-Plan.

WRA. 2005. *Grazing Management Plan Evaluation Report Warm Springs Seasonal Wetland Unit*.

Chapter 13
List of Preparers

Santa Clara Valley Habitat Agency

Edmund Sullivan

Terah Donovan

Jill Mross

County of Santa Clara

Greg Bazhaw

Santa Clara Valley Water District

Janell Hillman

ICF

Simone Berkovitz

Kathryn Gaffney

Teresa Giffen

Ariana Marquis

Kailash Mozumder

Brad Norton

Troy Rahmig

Matt Ricketts

Diana Roberts

Appendix A
Recorded Conservation Easements

Old Republic Title Company
0626027357

Recording Requested by:
Old Republic Title Co.

DOCUMENT: **23121875**

23121875

Pages: 37

Fees. . . .	.00
Taxes. . .	.00
Copies . .	.00
AMT PAID	.00

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

REGINA ALCOMENDRAS
SANTA CLARA COUNTY RECORDER
Recorded at the request of
#625 OLD REPUBLIC ER - SPL

RDE # 025
10/21/2015
01:35 PM

Santa Clara Valley Habitat Agency
535 Alkire Avenue, Suite 100
Morgan Hill, CA 95037
Attn: Executive Officer

EXEMPT FROM RECORDING FEES – GOV. CODE SECTION 6103

Space Above Line for Recorder's Use Only

CONSERVATION EASEMENT AGREEMENT

THIS CONSERVATION EASEMENT AGREEMENT (the **"Agreement"** or **"Conservation Easement"**) is made this 17th day of September, 2015, by and between the Santa Clara County Open Space Authority (**"Landowner"**), and Santa Clara Valley Habitat Agency, a California Joint Powers Authority (**"Easement Holder"**). Landowner and Easement Holder are also referred to herein individually as a **"Party"** and collectively as the **"Parties."**

RECITALS

A. Landowner is the fee owner of certain real property containing approximately 1,831 acres, located in the County of Santa Clara, State of California, more particularly known as Assessor's Parcel Number(s) 627-11-009, 729-53-001, 729-53-002, 729-53-003, 729-53-004, 729-54-002, 729-54-003, 729-54-004, and 627-14-011 and described in **Exhibit A** attached hereto and incorporated herein by this reference (the **"Property"**) and depicted on the map attached hereto as **Exhibit B** and incorporated herein by reference.

B. This Agreement is being executed and delivered to satisfy certain habitat conservation requirements set forth in the following documents (collectively, the **"Habitat Plan Instruments"**):

(i) The Santa Clara Valley Habitat Plan (**"Habitat Plan"**), dated August 2012, prepared by County of Santa Clara County (**"County"**), City of San Jose (**"San Jose"**), City of Gilroy (**"Gilroy"**), City of Morgan Hill (**"Morgan Hill"**), Santa Clara Valley Water District (**"Water District"**), and Santa Clara Valley Transportation Authority (**"VTA"**), and approved by the United States Fish and Wildlife Service (**"USFWS"**) under Section 10 of the federal Endangered Species Act of 1973 (16 U.S.C. Section 1531 *et seq.*, as it may be amended from time to time) (**"ESA"**), and by California Department of Fish and Wildlife

RECORDING REQUESTED BY AND)
WHEN RECORDED MAIL TO:)
)
)

Santa Clara Valley Habitat Agency
535 Alkire Avenue, Suite 100
Morgan Hill, CA 95037
Attn: Executive Officer

)
)

EXEMPT FROM RECORDING FEES -- GOV. CODE SECTION 6103

Space Above Line for Recorder's Use Only

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(**"CDFW"**) under the California Natural Community Conservation Planning Act (California Fish and Game Code Section 2800 *et seq.*, as it may be amended from time to time) (**"NCCPA"**); and

(ii) Implementing Agreement for the Santa Clara Valley Habitat Plan (the **"Implementing Agreement"**), dated August 14, 2012, by and among USFWS and CDFW (collectively, the **"Wildlife Agencies"**) Santa Clara Valley Habitat Plan Implementing Agency, a Joint Powers Authority (**"JPA"** or **"Implementing Entity"**), County, San Jose, Gilroy, Morgan Hill, Water District, and VTA (collectively, JPA, County, San Jose, Gilroy, Morgan Hill, Water District, VTA, are referred to herein as **"Permittees"**); and

(iii) The federal incidental take permit issued by USFWS to Permittees for the Habitat Plan pursuant to Section 10 of ESA; and

(iv) The state incidental take permit issued by CDFW to Permittees for the Habitat Plan pursuant to the NCCPA.

C. CDFW has jurisdiction, pursuant to Fish and Game Code Section 1802, over the conservation, protection, and management of fish, wildlife, native plants and the habitat necessary for biologically sustainable populations of those species, and CDFW is authorized to hold easements for these purposes pursuant to Civil Code Section 815.3, Fish and Game Code Section 1348, and other provisions of California law.

D. USFWS is an agency of the United States Department of the Interior and is authorized by Federal law to be a third party beneficiary of the Conservation Easement and to administer the Federal Endangered Species Act, 16 U.S.C. § 1531, et seq. ("ESA"), the Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661-666c, and the Fish and Wildlife Act of 1956, 16 U.S.C. § 742(f), et seq.

E. The Easement Holder is a California joint powers authority, and authorized to hold conservation easements pursuant to, among other provisions of law, California Civil Code Section 815.3.

F. In addition to serving as the holder of the conservation easement interest created under this Agreement, the Easement Holder also serves as the "Implementing Entity" of the Habitat Plan, and as such, is responsible for overseeing implementation of the Habitat Plan Instruments, including carrying out planning and design, habitat restoration, monitoring, adaptive management programs, and periodic coordination with USFWS and CDFW.

G. The Property possesses wildlife, habitat values, and associated open space values that are of great importance to Easement Holder, the people of Santa Clara County and the people of the State of California and of the United States (the **"Conservation Values"**). The **Initial Conservation Values,** described in **Exhibit C** attached hereto and incorporated herein by reference, are those Conservation Values that are identified in the Habitat Plan and present on the Property at the time of the execution of the Agreement.

H. Following recordation of this Agreement, the Property will be incorporated into the Reserve System (as such term is defined in the Habitat Plan) (**"Reserve System"**) and will contribute toward the recovery of species through land acquisition in excess of mitigation requirements, as provided in the Habitat Plan.

I. The Property was donated to the Landowner under the Natural Heritage Preservation Tax Credit Act of 2000. Funds provided by the Landowner along with those approved by the California Wildlife Conservation Board; the United States Department of Interior, Bureau of Reclamation; the California State Parks Recreational Trails Program; the California State Coastal Conservancy ("Conservancy"); the Resources Legacy Fund; the United State Fish and Wildlife Service (Section 6); and the Gordon and Betty Moore Foundation will be used to reimburse the State General Fund for approved tax credits provided to the Property donor. The grant funding from these entities was for conservation of species, open space preservation, and to increase public access and complete a portion of the Bay Area Ridge Trail.

J. As a condition of providing funding under the Natural Heritage Preservation Tax Credit Act of 2000, the Conservancy requires the Landowner to record that document titled "Irrevocable Offer to Dedicate Title in Fee and Declaration of Restrictive Conveyance", ("OTD"), version dated 7/17/15. The Wildlife Agencies have reviewed the OTD and have found it to be consistent with the terms of this Conservation Easement in that it supports protection of the Property for habitat and open space, while also providing for public access, such public access being addressed in the Conservation Easement below, and that it will require no further approvals from them to be subsequently recorded against title to the Property.

K. The Easement Holder will develop a management plan in coordination with Landowner, which will be known as the "Management and Monitoring Plan for the Coyote Ridge Open Space Preserve," that applies to the Property (the **"Management Plan"**). The Management Plan will be developed in accordance with the applicable requirements of the Habitat Plan Instruments.

L. The Management Plan upon completion, will be incorporated herein by reference. Landowner and Easement Holder recognize that changes (e.g., in weather cycles, natural resource management technologies, conservation practices) may dictate an adaptation in the management of the Property, consistent with the purposes of this Conservation Easement and the Habitat Plan Instruments. It may be revised from time to time with the written approval of the Landowner, Easement Holder and the Wildlife Agencies, so long as the revisions are consistent with the requirements of the Habitat Plan Instruments. A full and complete copy of the Management Plan, including any such revisions, shall be kept on file at the offices of the Easement Holder.

M. The State of California recognizes the public importance and validity of conservation easements by enactment of California Civil Code Section 815 *et seq.*

AGREEMENTS

NOW, THEREFORE, in consideration of the above and mutual covenants, terms, conditions and restrictions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and pursuant to the laws of the State of California, including California Civil Code Section 815 *et seq.*, Landowner hereby voluntarily grants and conveys to Easement Holder, its successors and assigns, a conservation easement in gross forever in, on, over and across the Property described in Exhibit A and depicted on Exhibit B (the **"Conservation Easement"**), subject to the terms and conditions set forth herein, restricting forever the uses which may be made of the Property, and the parties agree as follows:

1. **Purpose**. The purpose of this Conservation Easement is to ensure that existing and future natural values and associated wildlife and habitat values of the Property will be forever protected by preventing any use of the Property that would impair or interfere with the Conservation Values. Landowner intends that this Conservation Easement will confine the use of the Property to such activities that are consistent with the purposes set forth herein, including, without limitation, those involving the preservation, restoration, and enhancement of the Property's Covered Species as defined in the Habitat Plan and their habitats.

2. **Baseline Documentation Report.** The parties acknowledge that a Baseline Documentation Report (the **"Report"**) has been prepared for the Property and approved in writing by Landowner and Easement Holder. A copy of the Report is on file with Landowner and Easement Holder at their respective addresses for notices set forth below. The parties agree that the Report contains an accurate representation of the biological and physical condition of the Property at the time this Agreement is recorded in the Official Records of Santa Clara County (**"Official Records"**), including a full inventory of all of the Property's Covered Species and natural communities found thereon. Notwithstanding the foregoing, if a controversy arises with respect to the nature and extent of the physical or biological condition of the Property or the allowed uses of the Property, the parties shall not be foreclosed from utilizing any and all other relevant documents, surveys or other evidence or information to assist in the resolution of the controversy.

3. **Rights of Easement Holder**. To accomplish the purposes of this Conservation Easement, Landowner hereby grants and conveys the following rights to Easement Holder:

(a) To preserve, protect, sustain, restore, and enhance the Conservation Values for the Property described in **Exhibit C** or which develop on the Property in accordance with the terms and conditions of this Conservation Easement;

(b) To enter upon the Property to monitor Landowner's compliance with, and to otherwise enforce the terms of, this Conservation Easement, and for scientific research necessary to support monitoring and in order to support adaptive management of the Conservation Values; *provided,* that Easement Holder shall not unreasonably interfere with Landowner's allowed uses and quiet enjoyment of the Property;

(c) To enter upon the Property to carry out, at Easement Holder's sole cost and expense, those management and monitoring activities and requirements applicable to the Property that are set forth in the Management Plan and in Habitat Plan Chapters 5 and 7,

provided, that (i) Easement Holder shall use reasonable good faith efforts to conduct such management and monitoring activities in a manner that does not unreasonably interfere with Landowner's allowed uses and quiet enjoyment of the Property, (ii) Landowner shall be responsible for all costs and expenses associated with providing public recreation as set forth in the reserved rights in Exhibits D and E, and (iii) the Management Plan and all management and monitoring activities on the Property shall be consistent with the purposes of the Conservation Easement and shall preserve, protect, sustain, restore, and enhance the Conservation Values for the Property described in **Exhibit C** or which develop on the Property;

(d) To prevent any activity on or use of the Property that is inconsistent with the purposes of this Conservation Easement and to require the restoration of such areas or features of the Property that may be damaged by any act, failure to act, or any use that is inconsistent with the purposes of this Conservation Easement;

(e) To require that all mineral, air and water rights held by Landowner that Easement Holder deems necessary to preserve, protect and sustain the biological resources and Conservation Values of the Property shall remain a part of and be put to beneficial use upon the Property, consistent with the purposes of this Conservation Easement; and

(f) All present and future development rights and wind power rights allocated, implied, reserved or inherent in the Property; such rights are hereby terminated and extinguished, and may not be used on or transferred to any portion of the Property. Landowner understands and agrees that nothing in this Conservation Easement relieves Landowner of any obligation or restriction in relation to the development or use of the Property imposed by law, including but not limited to local land use restrictions.

Except where there is an imminent threat to the Property or its Conservation Values, Easement Holder and its employees, contractors or agents will only enter the Property at reasonable times and with at least forty-eight (48) hours advance notice to Landowner. The Landowner may waive these requirements in whole or in part by written notice to Easement Holder.

4. **Prohibited Uses.** Any activity on or use of the Property that adversely affects the purposes of this Conservation Easement is prohibited. Without limiting the generality of the foregoing, Landowner, Landowner's personal representatives, heirs, successors, assigns, employees, agents, lessees, licensees and invitees are expressly prohibited from doing or allowing any of the following uses and activities on the Property, unless, and then only to the extent that, a generally prohibited activity set forth below is: (i) an allowed use or practice (e.g., agricultural, rangeland or recreational uses) set forth on **Exhibit D** attached hereto and incorporated herein by reference; (ii) a management practice set forth in the Management Plan, (iii) necessary in connection with the performance of any of the conservation actions described in Habitat Plan Chapter 5; or (iv) otherwise necessary to maintain or enhance the Conservation Values:

(a) Unseasonal watering;

(b) Use of fertilizers, pesticides, biocides, herbicides or other chemicals, except for as specifically provided for in the Management Plan;

(c) Use of off-road vehicles and use of any other motorized vehicles except on existing roadways, excepting off-road vehicle use required to conduct any allowed activities or practices set forth in the Management Plan;

(d) Any construction, reconstruction, relocation or placement of any road, building, billboard, fencing, or sign, or any other structure or improvement of any kind, or altering the surface or general topography of the Property without written approval by the Easement Holder and Wildlife Agencies unless otherwise allowed in the Management Plan;

(e) Agricultural uses, including, without limitation, vineyards, nurseries, or intensive livestock use (e.g., dairy, feedlot) except as may be provided for in the Management Plan (e.g., prescribed grazing);

(f) Any legal or de facto division, subdivision or partitioning of the Property or any fee transfer of less than the entire Property;

(g) Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other materials, except where construction materials may be temporarily stored in support of the Property management and maintenance activities as specifically provided for in the Management Plan;

(h) Planting, introduction, or dispersal of nonnative plant or animal species, except as approved by the California Department of Food and Agriculture's Biological Control Program for control of invasive species as specifically provided in the Management Plan or with the approval of the Wildlife Agencies;

(i) Filling, dumping, excavating, draining, dredging, mining, drilling, removing, or exploring for or extraction of minerals, loam, soil, sands, gravel, rocks, or other material on or below the surface of the Property, and granting or authorizing any surface entry for any of these purposes;

(j) Removing, destroying, or cutting of trees, shrubs, or other vegetation, except as (i) required by law for fire breaks, (ii) maintenance of roads, and recreational trails and amenities reserved by Landowner in this Conservation Easement, and (iii) maintenance and installation of grazing infrastructure necessary to implement the Management Plan;

(k) Manipulating, impounding, or altering any water course, body of water, or water circulation on the Property, and activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or subsurface waters, except for (i) maintenance of stock ponds, (ii) installation and maintenance of grazing infrastructure related to the provision of water, or (iii) future creation, habitat restoration or

habitat enhancement of the Property for sensitive, threatened, or endangered species as specifically provided in the Management Plan;

(l) Recreational activities, including, but not limited to hunting or fishing are prohibited, except that Landowner reserves those recreational uses as set forth in Section 6 below; and

(m) Without the prior written consent of Easement Holder, which Easement Holder may reasonably withhold, transferring, encumbering, selling, leasing or otherwise separating the mineral, air or water rights for the Property owned by Landowner; changing the place or purpose of use of the water rights owned by Landowner; abandoning or allowing the abandonment of, by action or inaction, any water or water rights, ditch or ditch rights, spring rights, reservoir or storage rights, wells, ground water rights or other rights in and to the use of water historically used on or otherwise appurtenant to the Property that are owned by Landowner, including but not limited to: (i) riparian water rights; (ii) appropriative water rights; (iii) rights to waters which are secured under contract with any irrigation or water district, to the extent such waters are customarily applied to the Property; and (iv) any water from wells that are in existence or may be constructed in the future on the Property.

5. **Unlawful Entry.** Landowner shall undertake all reasonable actions to prevent the unlawful entry and trespass on the Property by persons whose uses or activities may degrade or harm the Conservation Values or are otherwise inconsistent with the purposes of this Conservation Easement.

6. **Landowner's Reserved Rights; Allowed Uses.** Landowner reserves to itself, and to its personal representatives, heirs, successors, and assigns, all rights accruing from its ownership of the Property, including without limitation, the following (collectively, the **"Allowed Uses"**): (a) those specific uses and activities provided for in Exhibits D and E of this Conservation Easement, (b) those specific uses and activities identified in the Management Plan(s) or detailed in **Exhibit D and E** attached hereto, and (c) all other uses of the Property that are not expressly prohibited or limited by this Agreement, and are consistent with the purposes of this Conservation Easement as set forth in Section 1. Landowner shall have the right to exercise any of the Allowed Uses directly or to allow or invite others to engage in any of the Allowed Uses. While Landowner is not obligated under this Agreement to perform the management and monitoring actions set forth in the Management Plan(s), Landowner's exercise of the Allowed Uses shall be conducted in a manner that is consistent with the Management Plan(s) and Conservation Values.

7. **Easement Holder's Remedies.** If Easement Holder or any Wildlife Agencies (as defined in **Section 7(d)** below) determines there is a violation of the terms of this Agreement or that such violation is threatened, written notice of such violation and a demand for corrective action sufficient to cure the violation shall be given to Landowner, with a copy provided to Easement Holder and each other Wildlife Agencies. The notice of violation shall specify the measures the Landowner must take to cure the violation. If Landowner fails to cure the violation within thirty (30) days after receipt of written notice and demand from Easement Holder or any of the Wildlife

Agencies, as applicable; or if the cure reasonably requires more than thirty (30) days to complete and Landowner fails to begin the cure within such thirty (30) day period; or Landowner fails to continue diligently to complete the cure, Easement Holder or any of the Wildlife Agencies may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Agreement, to recover any damages to which Easement Holder and the Wildlife Agencies may be entitled for violation of the terms of this Agreement or for any injury to the Conservation Values, to enjoin the violation, *ex parte* as necessary, by temporary or permanent injunction without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies, or for other equitable relief, including, but not limited to, the restoration of the Property to the condition in which it existed prior to any such violation or injury. Without limiting Landowner's liability therefor, any damages recovered may be applied to the cost of undertaking any corrective action on the Property at the election of the party receiving such damages.

If Easement Holder or any of the Wildlife Agencies, each in its sole discretion, determines that circumstances require immediate action to prevent or mitigate damage to the Conservation Values, Easement Holder and/or any Wildlife Agencies may pursue its remedies under this section without prior notice to Landowner or without waiting for the period provided for cure to expire. The rights of Easement Holder and the Wildlife Agencies under this section apply equally to actual or threatened violations of the terms of this Agreement. Landowner agrees that Easement Holder's and Wildlife Agencies' remedies at law for any violation of the terms of this Agreement are inadequate and that Easement Holder and/or any Wildlife Agencies shall be entitled to the injunctive relief described in this section, both prohibitive and mandatory, in addition to such other relief to which Easement Holder and the Wildlife Agencies may be entitled, including specific performance of the terms of this Agreement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Remedies described in this section shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity, including but not limited to, the remedies set forth in California Civil Code Section 815, *et seq*. The failure of Easement Holder or any Wildlife Agencies to discover a violation or to take immediate legal action in response to such action shall not bar such party from taking legal action at a later time.

(a) **Costs of Enforcement.** Any reasonable costs incurred by the Easement Holder or any Wildlife Agency, where it is the prevailing party, in enforcing the terms of this Conservation Easement against the Landowner, including, but not limited to, costs of suit and attorneys' and experts' fees, and any costs of restoration necessitated by Landowner's negligence or breach of this Agreement shall be borne by Landowner. In any action where an agency of the United States is a party, the right to recover fees and costs shall be governed by federal law.

(b) **Enforcement Discretion.** Enforcement of the terms of this Agreement against Landowner shall be at the respective discretion of Easement Holder and each of the Wildlife Agencies, and any forbearance by any such party to exercise its rights under this Agreement in the event of any breach of any term of this Agreement shall not be deemed or construed to be a waiver by such party of such term or of any subsequent breach of the same or any other term of this Agreement or of any of such party's rights under this Agreement. No delay or omission by Easement Holder or any Wildlife Agencies in the exercise of any right or remedy upon any breach shall impair such right or remedy or be construed as a waiver.

(c) **Acts Beyond Landowner's Control.** Nothing contained in this Agreement shall be construed to, or shall entitle, Easement Holder or any Wildlife Agencies to bring any action against Landowner for any injury to or change in the Property resulting from (i) any natural cause beyond Landowner's control, including, but not limited to, climate change, fire not caused by Landowner, flood, storm, and earth movement, or any prudent action taken by Landowner under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes; (ii) acts by Easement Holder or any Wildlife Agencies or any of their employees, contractors or agents; or (iii) acts by persons that entered the Property unlawfully or by Trespass whose activities degrade or harm the Conservation Values of the Property or whose activities are otherwise inconsistent with this Conservation Easement where Landowner has undertaken all reasonable actions to prevent such activities; or (iii) acts by persons that entered the Property lawfully or unlawfully whose activities degrade or harm the Conservation Values of the Property or whose activities are otherwise inconsistent with this Conservation Easement where Landowner has undertaken all reasonable actions to discourage or prevent such activities.

(d) **Third Party Beneficiary Rights**. The parties intend for each of Implementing Entity (during any such period, if any, that Implementing Entity does not also constitute Easement Holder), USFWS, CDFW and the Conservancy to be a third-party beneficiary of this Agreement. All rights and remedies conveyed to Easement Holder under this Agreement shall extend to and are enforceable by each of the Wildlife Agencies and the Conservancy in accordance with the terms hereof. Landowner and Easement Holder acknowledge that, as third party beneficiaries of this Conservation Easement, the Wildlife Agencies and the Conservancy shall have the same rights of access to the Property granted to Easement Holder in **Section 3** above, and with rights to enforce all of the provisions of this Agreement. If at any time in the future Landowner uses, allows the use, or threatens to use or allow use of, the Property for any purpose that is inconsistent with or in violation of this Agreement then, Civil Code Section 815.7, the California Attorney General, each of the Wildlife Agencies and the Conservancy has standing as an interested party in any proceeding affecting the Conservation Easement. These rights are in addition to, and do not limit, the rights of enforcement under the Habitat Plan Instruments. In addition, if CDFW reasonably determines that the Property is not being held, monitored, or stewarded for conservation purposes in the manner specified in this Agreement, the Habitat Plan Instruments, or the Management Plan, the Conservation Easement shall revert to the State of California or another entity as described in California Government Code Section 65967, subdivisions (b) and (c), and subject to approval by CDFG.

8. **Public Access.** Nothing contained in this Agreement gives or grants to the public an independent right to enter upon or use the Property or any portion thereof. Nor shall this Agreement extinguish any public right to enter upon or use the Property.

9. **Costs and Liabilities.** Except for those specific obligations to be undertaken by Easement Holder under Section 3 above, Landowner shall retain all responsibilities and shall bear all costs and liabilities of any kind related to Landowner's ownership, operation, management, and maintenance activities on and relating to the Property. Landowner agrees that neither the Easement

Holder nor the Wildlife Agencies shall have any duty or responsibility for the operation or maintenance of the Property, the monitoring of hazardous conditions thereon, or the protection of Landowner, the public or any third parties from risks relating to conditions on the Property. Each of Landowner and Easement Holder shall remain responsible for obtaining any applicable governmental permits and approvals for any of such Party's activity or use allowed on the Property under this Agreement, and each of Landowner and Easement Holder shall undertake all allowed activities and uses of the Property in accordance with all applicable federal, state, local and administrative agency statutes, ordinances, rules, regulations, orders and requirements. Landowner shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively **"taxes"**), including any taxes imposed upon, or incurred as a result of, this Agreement, and shall furnish Easement Holder with satisfactory evidence of payment upon request. Landowner and Easement Holder shall keep the Property free from any liens, including those arising out of any obligations incurred by such Party for any labor or materials furnished or alleged to have been furnished to or for such Party at or for use on the Property.

10. **Indemnification.**

(a) **Indemnification by Landowner.** Landowner shall hold harmless, protect and indemnify Easement Holder and the Wildlife Agencies, and their respective members, directors, officers, employees, agents, contractors, and representatives and the heirs, personal representatives, successors and assigns of each of them (each a **"Landowner Indemnified Party"** and, collectively, the **"Landowner Indemnified Parties"**) from and against any and all liabilities, penalties, costs, losses, damages, expenses (including, without limitation, reasonable attorneys' and experts' fees and costs), causes of action, claims, demands, orders, liens or judgments (each a **"Claim"** and, collectively, **"Claims"**), arising from or in any way connected with: (i) the activities of Landowner on the Property; (ii) the inaccuracy of any representation or warranty made by Landowner in this Agreement; (iii) the breach by Landowner of any provision of this Agreement; (iv) any injury to or the death of any person, or physical damage to any Property resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, unless such injury or death or physical damage to any Property relates to an activity on, or use of, the Property by Easement Holder, including without limitation, those activities performed under the Management Plan, or negligent or willful misconduct of the Landowner Indemnified Party; or (v) any violation of, or failure to comply with, any state, federal or local law, regulation or requirement, by Landowner, or by any entity, other than one of the Landowner Indemnified Parties, acting at the time upon permission from Landowner, in any way affecting, involving or relating to the Property. If any action or proceeding is brought against any of the Landowner Indemnified Parties by reason of any such Claim, Landowner shall, at the election of and upon written notice from Easement Holder and the Wildlife Agencies, defend such action or proceeding by counsel reasonably acceptable to the Landowner Indemnified Party.

(b) **Indemnification by Easement Holder.** Easement Holder shall hold harmless, protect, and indemnify Landowner and the Wildlife Agencies, and their respective members, directors, officers, employees, agents, contractors, and representatives and the heirs, personal representatives, successors and assigns of each of them (each, an **"Easement**

Holder Indemnified Party," and collectively, the **"Easement Holder Indemnified Parties"**) from and against any and all Claims arising from or in any way connected with: (a) the activities of Easement Holder on the Property, including without limitation the Easement Holder's performance of management and monitoring activities set forth in the Management Plan; (b) breach by Easement Holder of any provision of this Agreement; (c) any injury to or the death of any person, or physical damage to any Property occurring on or about the Property resulting from any act, omission, condition, or other matter related to, an activity on, or use of, the Property by Easement Holder, including without limitation, those performed under the Management Plan, unless due solely to the negligence or willful misconduct of the Easement Holder Indemnified Party; and (d) any violation of, or failure to comply with, any state, federal or local law, regulation or requirement, by Easement Holder in any way affecting, involving or relating to the Property. If any action or proceeding is brought against any of the Easement Holder Indemnified Parties by reason of any such Claim, Easement Holder shall, at the election of and upon written notice from Landowner, defend such action or proceeding by counsel reasonably acceptable to the Easement Holder Indemnified Party.

11. **Extinguishment.** The Conservation Easement created by this Agreement constitutes a property right. It is the Parties' intention that the terms and conditions of this Agreement shall be carried out in perpetuity. Liberal construction is expressly required for purposes of effectuating the Conservation Easement in perpetuity, notwithstanding economic hardship or changed conditions of any kind. If circumstances arise in the future that render the purposes of this Agreement impossible to accomplish, this Agreement can only be terminated or extinguished, in whole or in part, by judicial proceedings in a court of competent jurisdiction. In addition, no such extinguishment shall affect the value of Easement Holder's interest in the Property, and if the Property, or any interest therein, is sold, exchanged or taken by power of eminent domain after such extinguishment, Easement Holder shall be entitled to receive the fair market value of the Conservation Easement at the time of such extinguishment. If such extinguishment occurs with respect to fewer than all acres of the Property, the amounts described above shall be calculated based on the actual number of acres subject to extinguishment.

12. **Condemnation.** The purposes of this Conservation Easement are presumed to be the best and most necessary public use as defined in California Code of Civil Procedure Section 1240.680 notwithstanding Code of Civil Procedure Sections 1240.690 and 1240.700.

13. **Transfer of Conservation Easement.** This Agreement may be transferred by Easement Holder upon written approval of the Wildlife Agencies and the Conservancy, which approval shall not be unreasonably withheld or delayed; provided, that Easement Holder shall give the Wildlife Agencies and the Conservancy at least sixty (60) calendar days prior written notice of the proposed assignment or transfer. Easement Holder may transfer its rights under this Agreement only to an entity or organization: (a) authorized to acquire and hold conservation easements pursuant to California Civil Code Section 815.3 and California Government Code Section 65967(c) (and any successor or other provisions then applicable), or the laws of the United States; and (b) otherwise reasonably acceptable to the Wildlife Agencies and the Conservancy. Easement Holder shall require the transferee to record the conveyance in the Official Records of the County where the Property is located. The failure of Easement Holder to perform any act provided in this section shall not impair

the validity of this Agreement or limit its enforcement in any way. Any transfer under this section shall be subject to the requirements of **Section 17** below.

14. **Transfer of Property.** Landowner agrees to incorporate the terms of this Agreement by reference in any deed or other legal instrument by which Landowner divests itself of any interest in all or any portion of the Property, including, without limitation, a leasehold interest. Landowner further agrees to give written notice to Easement Holder and the Wildlife Agencies of the intent to transfer any interest at least thirty (30) calendar days prior to the date of such transfer. Easement Holder and the Wildlife Agencies shall have the right to prevent subsequent transfers in which prospective subsequent claimants or transferees are not given notice of the covenants, terms, conditions and restrictions of this Agreement. The failure of Landowner to perform any act provided in this section shall not impair the validity of this Agreement or limit its enforceability in any way. Any successor in interest of Landowner, by acceptance of a deed, lease, or other document purporting to convey an interest in the Property, shall be deemed to have consented to, reaffirmed and agreed to be bound by all of the terms, covenants, restrictions, and conditions of this Agreement.

15. **Notices.** Any notice, demand, request, consent, approval, or communication that Landowner, Easement Holder, any Wildlife Agencies or the Conservancy desires or is required to give to the others shall be in writing and be served personally or sent by recognized overnight courier that guarantees next-day delivery or by first class mail, postage fully prepaid, addressed as follows:

To Landowner:
Santa Clara County Open Space Authority
6980 Santa Teresa Blvd., Suite 100
San Jose, CA 95119
Attn: General Manager

To Easement Holder:
Santa Clara Valley Habitat Agency
535 Alkire Avenue, Suite 100
Morgan Hill, CA 95037
Attn: Executive Officer

To USFWS:
United States Fish and Wildlife Service
Sacramento Fish and Wildlife Office
Coast-Bay Division
2800 Cottage Way, Room W-2605
Sacramento, CA 95825
Attn: Coast/Bay Division Chief

To CDFW:
California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558

Attn: Regional Manager

With a copy to: Department of Fish and Wildlife
Office of the General Counsel
1416 Ninth Street, 12th Floor
Sacramento, California 95814-2090
Attn: General Counsel

To Conservancy: State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, California 94612
Attn: Executive Officer

or to such other address as a party shall designate by written notice to the others. Notice shall be deemed effective upon delivery in the case of personal delivery or delivery by overnight courier or, in the case of delivery by first class mail, five (5) calendar days after deposit into the United States mail.

16. **Amendment.** This Agreement may not be amended, modified or otherwise changed in any manner, except by a written amendment executed by the parties hereto, or their successors in interest, it being understood that no easement holder or landowner will ever be obligated to negotiate or enter into any such amendment; and no discretionary approval that this Agreement may allow to be made from time to time by a party will operate to amend or modify any of the terms of this Agreement to any extent or in any manner. Any such amendment shall be subject to the prior written consent of the Wildlife Agencies and the Conservancy; any amendment made without such consent is void and without effect. Any such amendment shall be consistent with the purposes of the Conservation Easement and shall not affect the perpetual duration of the Conservation Easement. Any such amendment must refer to this Agreement by reference to its recordation data, and must be recorded in the Official Records of the County where the Property is located.

17. **Merger.** The doctrine of merger shall not operate to extinguish the Conservation Easement if the Conservation Easement and the Property become vested in the same party. If, despite this intent, the doctrine of merger applies to extinguish the Conservation Easement then, a replacement conservation easement, with a new Easement Holder identified by the Implementing Entity and approved by the Wildlife Agencies, containing the same protections embodied in this Agreement shall be recorded against the Property.

18. **No Hazardous Materials Liability.** Landowner represents and warrants that, after reasonable review of Landowner's records as of the date of this Agreement, Landowner has no knowledge or notice of any Hazardous Materials (as defined below) or underground storage tanks existing, generated, treated, stored, used, released, disposed of, deposited or abandoned in, on, under, or from the Property, or transported to or from or affecting the Property Landowner further represents and warrants that Landowner shall comply with all Environmental Laws (as defined below) in using the Property and that Landowner shall keep the Property free of any material environmental defect, including, without limitation, contamination from Hazardous Materials (as defined below). Without limiting the obligations of Landowner under this Agreement, Landowner hereby releases and agrees to indemnify, protect and hold harmless the Landowner Indemnified

Parties (as defined in **Section 10(a)**) from and against any and all Claims (as defined in **Section 10(a)**) arising from or connected with any Hazardous Materials or underground storage tanks present, alleged to be present, or otherwise associated with the Property at any time, except any Hazardous Materials placed, disposed or released by Landowner Indemnified Parties, or their employees or agents. This release and indemnification includes, without limitation, Claims for (a) injury to or death of any person or physical damage to any Property; and (b) the violation or alleged violation of, or other failure to comply with, any Environmental Laws (as defined below). If any action or proceeding is brought against any of the Landowner Indemnified Parties by reason of any such Claim, Landowner shall, at the election of and upon written notice, defend such action or proceeding by counsel reasonably acceptable to the Landowner Indemnified Party.

Despite any contrary provision of this Agreement, the parties do not intend this Agreement to be, and this Agreement shall not be, construed such that it creates in or gives to Easement Holder or the Wildlife Agencies any of the following:

(a) The obligations or liability of an "Landowner" or "operator," as those terms are defined and used in Environmental Laws (as defined below), including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Section 9601 *et seq.*; hereinafter, "CERCLA"); or

(b) The obligations or liabilities of a person described in 42 U.S.C. Section 9607(a)(3) or (4); or

(c) The obligations of a responsible person under any applicable Environmental Laws; or

(d) The right to investigate and remediate any Hazardous Materials associated with the Property; or

(e) Any control over Landowner's ability to investigate, remove, remediate or otherwise clean up any Hazardous Materials associated with the Property.

The term **"Hazardous Materials"** includes, without limitation, (a) material that is flammable, explosive or radioactive; (b) petroleum products, including by-products and fractions thereof; and (c) hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in CERCLA, the Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 *et seq.*; hereinafter **"RCRA"**); the Hazardous Materials Transportation Act (49 U.S.C. Section 6901 *et seq.*; hereinafter **"HTA"**); the Hazardous Waste Control Law (California Health & Safety Code Section 25100 *et seq.*; hereinafter **"HCL"**); the Carpenter-Presley-Tanner Hazardous Substance Account Act (California Health & Safety Code Section 25300 *et seq.*; hereinafter **"HAS"**), and in the regulations adopted and publications promulgated pursuant to them, or any other applicable Environmental Laws now in effect or enacted after the date of this Agreement.

The term **"Environmental Laws"** includes, without limitation, CERCLA, RCRA, HTA, HCL, HSA, and any other federal, state, local or administrative agency statute, ordinance, rule,

regulation, order or requirement relating to pollution, protection of human health or safety, the environment or Hazardous Materials.

19. **Representations and Warranties.** Landowner hereby makes the following representations and warranties for the benefit of Easement Holder and the Wildlife Agencies:

(a) **Authority.** Landowner has good and sufficient title to the Property (including all appurtenances thereto, including, without limitation, all minerals and mineral rights and all water and water rights, and Landowner has full right and authority to enter into this Agreement and convey the Conservation Easement to Easement Holder. There are no monetary liens and encumbrances recorded against the Property. All deeds of trust and mortgages recorded against the Property, if any, or any portion thereof, are and shall continue to be subordinated to this Conservation Easement.

(b) **Compliance with Laws.** Landowner has not received notice of, and has no knowledge of, any material violation of any federal, state, county or other governmental or quasi-governmental statute, ordinance, regulation, law or administrative or judicial order with respect to the Property.

(c) **No Litigation.** There is no action, suit or proceeding which is pending or threatened against the Property or any portion thereof relating to or arising out of the Landownership or use of the Property, or any portion thereof, in any court or in any federal, state, county, or municipal department, commission, board, bureau, agency or other governmental instrumentality.

20. **General Provisions.**

(a) **Controlling Law.** The interpretation and performance of this Agreement shall be governed by the laws of the State of California, disregarding the conflicts of law principles of such state, and by applicable federal law.

(b) **Liberal Construction.** It is the intent of this Agreement to preserve the condition of the Property and each of the Conservation Values protected herein, notwithstanding economic or other hardship or changes in circumstances or conditions. The provisions of this Agreement shall be liberally construed to effectuate the purposes of the Conservation Easement and to allow Landowner's use and enjoyment of the Property to the extent consistent with such purposes. Liberal construction is expressly required for purposes of effectuating this Agreement in perpetuity, notwithstanding changed conditions of any kind. The Conservation Easement created by this Agreement is the intended best and most productive use of the Property. No remedy or election given by any provision in this Agreement shall be deemed exclusive unless so indicated, but it shall, wherever possible, be cumulative with all other remedies at law or in equity. The parties acknowledge that each party and its counsel have had the opportunity to review and revise this Agreement and that no rule of construction that ambiguities are to be resolved against the drafting party shall be employed in the interpretation of this Agreement. In the event of any conflict between the provisions of this Agreement and the provisions of any use and zoning restrictions of the

State of California, the county in which the Property is located, or any other governmental entity with jurisdiction, the more restrictive provisions shall apply. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purposes of this Agreement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(c) **Severability.** If a court of competent jurisdiction voids or invalidates on its face any provision of this Agreement, such action shall not affect the remainder of this Agreement. If a court of competent jurisdiction voids or invalidates the application of any provision of this Agreement to a person or circumstance, such action shall not affect the application of the provision to other persons or circumstances.

(d) **Entire Agreement.** This instrument sets forth the entire agreement of the parties with respect to this Agreement and supersedes all prior discussions, negotiations, understandings, or agreements relating to this Agreement. No alteration or variation of this instrument shall be valid or binding unless contained in an amendment in accordance with **Section 16**.

(e) **No Forfeiture.** Nothing contained herein will result in a forfeiture or reversion of Landowner's title in any respect.

(f) **Successors.** The covenants, terms, conditions, and restrictions of this Agreement shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall constitute a servitude running in perpetuity with the Property.

(g) **Termination of Rights and Obligations.** A party's rights and obligations under this Agreement terminate upon transfer of the party's interest in the Agreement, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

(h) **Captions.** The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon its construction or interpretation.

(i) **Additional Easements.** Landowner shall not grant any additional easements, rights of way or other interests in the Property (other than a security interest that is subordinate to this Agreement), or grant or otherwise abandon or relinquish any water right or agreement relating to the Property, without first obtaining the written consent of Easement Holder and the Wildlife Agencies. Easement Holder and the Wildlife Agencies may withhold such consent if it determines that the proposed interest or transfer is inconsistent with the purposes of this Conservation Easement or will impair or interfere with the Conservation Values. This section shall not prohibit transfer of a fee or leasehold interest in the Property that is subject to this Agreement and complies with **Section 14**.

(i) **Recording.** Easement Holder shall record this Agreement in the Official Records of the county where the Property is located, and may re-record it at any time as Easement Holder deems necessary to preserve its rights hereunder.

(k) **Counterparts.** The parties may execute this Agreement in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

IN WITNESS WHEREOF Landowner and Easement Holder have executed this Agreement the day and year first above written.

LANDOWNER:

Santa Clara County Open Space Authority

By: _____
Name: Mike Potter
Title: Chairperson, Board of Directors

EASEMENT HOLDER:

Santa Clara Valley Habitat Agency, a California Joint Powers Authority

By: Cat Tucker
Name: Cat Tucker
Title: Governing Board Chair

EXHIBITS:

Exhibit A -- Legal Description of the *Property*
Exhibit B -- Map of the *Property*
Exhibit C -- Initial Conservation Values
Exhibit D -- Allowed Uses
Exhibit E -- Allowed Recreational Improvements and Uses

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF California)SS
COUNTY OF SANTA CLARA)

On August 31, 2015 before me, K. Guerra , Notary Public, personally appeared Michael K. Potter aka Mike Potter

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Kguerra

K. GUERRA
Commission # 2114248
Notary Public - California
Santa Clara County
My Comm. Expires Jun 6, 2019

This area for official notarial seal.

OPTIONAL SECTION - NOT PART OF NOTARY ACKNOWLEDGEMENT
CAPACITY CLAIMED BY SIGNER

Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the documents.

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER(S) TITLE(S)
- ☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
- ☐ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR
- ☐ OTHER

SIGNER IS REPRESENTING:

Name of Person or Entity Name of Person or Entity

OPTIONAL SECTION - NOT PART OF NOTARY ACKNOWLEDGEMENT

Though the data requested here is not required by law, it could prevent fraudulent reattachment of this form.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED BELOW

TITLE OR TYPE OF DOCUMENT: _____

NUMBER OF PAGES _____ DATE OF DOCUMENT _____

SIGNER(S) OTHER THAN NAMED ABOVE _____

ILLEGIBLE NOTARY CERTIFICATION AND SEAL DECLARATION

(GOVERNMENT CODE 27361.7)

Fill in applicable information and print "N/A" for any items not required.

STATE OF California)
) ss.
COUNTY OF Santa Clara)

NAME OF NOTARY K. Guerra

PLACE OF NOTARY'S OATH/BOND Santa Clara
(County in the Seal)

COMMISSION I.D. NUMBER 2114248

VENDOR I.D. NUMBER NNAI

COMMISSION EXPIRATION DATE June 6, 2019

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct. (CCP 2015.5)

PLACE OF EXECUTION OF THIS DECLARATION San Jose, CA
(City and State)

Date 10/20/15

By _____ PH# 408-296-4505
(Signature)

By M. Jennings
(Printed)

For SPL INC
(Firm Name)

A notary or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Santa Clara

On September 17, 2015, before me, Angelica Garcia Vargas, a Notary Public in and for said County and State, personally appeared Cat Tucker, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person, or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SIGNATURE OF NOTARY PUBLIC

ANGELICA GARCIA VARGAS
Commission # 2113361
Notary Public - California
Santa Clara County
My Comm. Expires May 29, 2019

(ABOVE AREA FOR NOTARY SEAL)

Exhibit A

Legal Description of the Property

The land referred to is situated in the unincorporated area of the County of Santa Clara, State of California, and is described as follows:

PARCEL ONE:

Beginning at an iron pipe designated as "C-24", said point being a Southeasterly corner of that certain 3,095.668 acre Parcel shown upon that certain Map entitled, 'Record of Survey, Being a Partial Survey of a Portion of Rancho Canada de San Felipe y Las Animas (B-Patents 81), Santa Clara County, California", recorded January 26, 1960 in Book 116 of Maps, at Page 17, Santa Clara County Records; thence from said point of beginning, along the most Southerly line of said 3,095.668 acre Parcel North 89° 31' 28" West, 882.824 feet to an iron pipe at the true point of beginning of this description; said iron pipe is located at coordinates Y 259,251.38 and X 1,660,139.54; thence from said true point of beginning leaving said Southerly line along a Northerly boundary of Parcel No. 1, as described in the Deed from California Pacific Title Insurance Company to Harlen S. Gelderman and Audrey R. Gelderman, dated November 21,, 1961, recorded November 21, 1961 in Book 5372 of Official Records of Santa Clara County, at Page 419, under Recorder's Series No.2096659, the following seven courses and distances: (1) South 57° 51' 32" West, 1,899.880 feet to an iron pipe; (2) thence South 78° 51' 32" West, 1,699.890 feet to an iron pipe; (3) thence South 0° 28' 32" West, 633.515 feet to an iron pipe; (4) thence North 89° 31' 28" West, 3,842.829 feet to an iron pipe; (5) thence North 71° 17' 59" West, 3,222.232 feet to an iron pipe; (6) thence North 39° 23' 28" West, 1,894.780 feet to an iron pipe; (7) thence North 89° 08' 28" West, 2,233.858 feet to an iron pipe in the Northeasterly line of that certain 375.99 acre parcel of land designated as Parcel One, conveyed by California Pacific Title Insurance Company, a corporation, to Laguna Seca Rancho, a California corporation, by Deed recorded March 27, 1957 in Book 3760 at Page 368, Official Records of Santa Clara County; thence along said Northeasterly line North 39° 38' 31" West, 472.40 1 feet to an iron pipe at the most Northerly corner of said 375.99 acre Parcel; thence along the Northwesterly line of said 375.99 acre Parcel South 49° 60' 24" West, 727.020 feet to a 1 1/2' iron pipe at the most Easterly corner of that certain 33.47 acre parcel of land designated as Parcel Three conveyed by Wm. H. Ford, et ux, to Associated Gravel Company, a corporation, recorded March 5, 1927 in Book 309 of Deeds, at Page 55, Santa Clara County Records; thence along a Northeasterly line of said 33.47 acre Parcel North 60° 04' 17" West, 882.660 feet to an iron pipe, being the most Southerly corner of that certain 3.73 acre parcel of land designated as Parcel Three conveyed by Pacific Coast Aggregates Inc., a California corporation to J. A. Daly and Elsie M. Daly, husband and wife, by Deed recorded in Book 1014 at Page 456, Official Records of Santa Clara County; thence along the Southeasterly line of said 3.73 acre Parcel North 20° 23' 28" East, 545.313 feet to an iron pipe at an angle point therein; thence continuing along said Southeasterly line North 10° 37' 28" East, 396.111 feet to an iron pipe at the Northerly corner of said 3.73 acre Parcel, said iron pipe being the most Southerly corner of that certain 22.10 acre parcel of land designated as Parcel Two conveyed by Pacific Coast Aggregates Inc., to J. A. Daley, et ux, in the aforesaid Deed; thence along the Southeasterly line of said 22.10 acre Parcel North 38° 50' 08' East, 603.901 feet to an iron pipe at an angle point therein; thence continuing along said Southeasterly line North 52° 20' 08" East, 434.651 feet to an iron pipe at the most Easterly corner of said 22.10 acre Parcel; thence North 41° 07' 33" West, 1,804.332 feet to a fence corner in a mound of rocks at the most Northerly corner of that certain 91.29 acre parcel of land designated as Parcel Two conveyed by Ruth E. Malech and Earl G. Malech, wife and husband, to Ruth E. Malech and Earl G. Malech, wife and husband, by Deed recorded in Book 3314, at Page 8, Official

Records of Santa Clara coijnty; thence along a Northerly line of said 91.29 acre Parcel South 53° 03' 28' West, 1,216.478 feet to a 3/4" iron bar at an angle corner in the Northerly line of said 91.29 acre Parcel; thence along a Northeasterly line of said 91.29 acre Parcel North 34° 57' 01" West, 573.068 feet to a 3/4" iron bar at an angle corner in the Northwesterly line of said 91.29 acre Parcel; thence along the most Northwesterly line of said 91.29 acre Parcel South 57° 33' 36" West, 746.725 feet to an iron pipe at the most Easterly corner of the lands shown on the Map of the Dan Rota's Segregation of the so-called Stark Farm, according to the Map thereof recorded in Book E of Miscellaneous Records, at Page 514, Santa Clara County Records; thence along the Northeasterly line of Dan Rota's Segregation the following five courses and distances, respectively: North 37° 28' 54" West, 302.461 feet to an iron pipe; North 50° 13' 54" West, 374.932 feet to an iron pipe; North 39° 58 54" West, 591.649 feet to an iron pipe; North 64° 13' 54" West, 595.637 feet to an iron pipe, and North 89° 58' 54" West, 285.792 feet to an iron pipe at the most Southerly corner of that certain 0.68 acre tract of land conveyed by O'Connell Bros., a corporation, to Antonio Rodoni and Mary A. Rodoni, his wife, recorded July 17, 1934 in Book 698 of Deeds, at Page 93, Santa Clara County Records; thence along the Northeasterly line of said 0.68 acre tract and the Northwesterly prolongation thereof, North 41° 01' 40' West, 419.590 feet to an iron pipe in the Northwesterly boundary of that portion of the Rancho Del Refugio de Laguna Seca as set apart to Wm. Fisher in the partition of said Rancho by the Third Judicial Court of the State of California in and for the County of Santa Clara in 1858; thence along said Northwesterly boundary North 48° 58' 20" East, 7,681.916 feet to an iron pipe in the Northeasterly boundary of the Rancho Laguna Seca which point is the most Northerly corner of the aforesaid portion of the Rancho del Refugio de Laguna Seca; thence along the Northeasterly boundary of said Rancho Laguna Seca North 42° 20' 09" West, 987.362 feet to an iron pipe in the boundary of that certain tract of land commonly known as the Rancho Canada de San Felipe y Animas, thence along said Northeasterly boundary South 89° 31' 09" East, 2,409.846 feet to an iron pipe at the Northwesterly corner of the aforesaid 3,095.668 acre Parcel; thence along the most Westerly line of said 3,095.668 acre Parcel South 0° 28' 51" West, 2600.879 feet to an iron pipe at a Southwesterly corner of said 3,095.668 acre Parcel in the Northeasterly line at the aforesaid Rancho Laguna Seca; thence along the Southwesterly line of said 3,095.668 acre Parcel and along the Northeasterly line of said Rancho Laguna Seca South 42° 20' 09" East, 10,661.320 feet to an iron pipe at a Southwesterly corner of said 3,095.668 acre Parcel; thence along the most Southerly line of said 3,095.668 acre Parcel South 89° 31' 28' East, 4,618.243 feet to the iron pipe at the true point of beginning of this description being a portion of the Rancho Laguna Seca and also a portion of the Rancho Canada de San Felipe y Animas.

All bearings and distances described herein are based on California State Coordinate System, Zone 3 to obtain ground measured distances, multiply the described distances by the factor 1.0000638.

EXCEPTING THEREFROM those certain four Parcels conveyed to the State of California by Deed recorded February 23, 1973 in Book 0246, Page 499 of Official Records.

ALSO EXCEPTING THEREFROM that certain Parcel conveyed to the County of Santa Clara by Deed recorded January 12, 1976 in Book b815, Page 189 of Official Records.

APN: 627-11-009; 729-53-001, 729-53-002, 729-53-003 and 729-53-004; and 729-54-002, 729-54-003 and 729-54-004; and 627-14-011

PARCEL TWO-A:

TOGETHER WITH a perpetual easement and right-of-way for road purposes 20 feet wide running in a general Southeasterly and Northeasterly direction and beginning in the line between Stations 16 and 17 and terminating in the line between Stations 15 and 16 of the Survey of the San Felipe Rancho, as provided for in the Agreement executed by and between Frank R. Cox and Eva R. Cox, his wife, Rufus Fisk and Hannah B. Fisk, his wife, Jessie Bryan, a widow, and O'Connell Bros., a corporation, recorded September 20, 1932 in Book 620 of Official Records, Page 519, and by Agreement executed by and between Frank R. Cox and Eva R. Cox, his wife, first parties, Rufus Fisk and Hannah B. Fisk, his wife, second parties, Jessie R. Bryan, a widow, third party, and O'Connell Bros., a corporation, fourth party, recorded April 26, 1934 in Book 689 Official Records, Page 16, reference to the records thereof is hereby made for further particulars.

PARCEL TWO-B:

TOGETHER WITH an assignable right of way and easement in gross, of a uniform width of 40 feet, to lay, construct, reconstruct, replace, use, maintain, repair, remove, or relocate water mains, pipe lines, power station facilities and accessory valves, appliances, fixtures and connections over, under, through and across adjacent premises, as granted by O'Connell Bros., a corporation, to United Research Corporation of Menlo Park, as instrument recorded February 4, 1960 in Book 4685 Official Records, Page 740.

PARCEL TWO-C:

TOGETHER WITH an assignable right of way and easement in gross, of a uniform width of 40 feet, to lay, construct, reconstruct, replace, use, maintain, repair, remove, or relocate gas mains, pipe lines and accessory valves, appliances, fixtures, and connections over, under, through and across adjacent premises, as granted by O'Connell Bros., a corporation to United Research Corporation of Menlo Park, by instrument recorded February 4, 1960 in Book 4686 Official Records, Page 1.

PARCEL TWO-D:

TOGETHER With an assignable right of way and easement, of a uniform width of 40 feet, to lay, construct, reconstruct, replace, use, maintain, repair, remove or relocate water mains, pipe lines, power station facilities and accessory valves, appliances, fixtures and connections over, under, through and across that certain real property of grantor, as conveyed by Gelco Developments and Lake Anderson Corporation, both California corporations, to United Aircraft Corporation, a Delaware corporation, by instrument recorded February 27, 1967 in Book 7649 of Official Records, Page 179, described as follows:

Situated in the County of Santa Clara, state of California, said right-of-way and easement to be located within the area 100 feet in width, the center line of said 100 foot area being described as follows:

Beginning at a 3/4 inch iron pipe at the most Southerly corner of that certain 304.591 acre parcel of land shown upon that certain Map entitled, "Record of Survey, Land Proposed to be Acquired by County of Santa Clara for Park Purposes, portion lands of Gelco Developments and Lake Anderson Corporation, portion Township 8 South, Range 3 East and portion Township 9 South, Range 3 South" filed for record September 28, 1965 in Book 200 of Maps, at Pages 17 through 20, inclusive, Santa Clara County Records, said iron pipe being in the Northwesterly line of that certain 904.50 acre tract

of land conveyed by O'Connell Bros., to Santa Clara Valley Water Conservation District by Deed recorded in Book 2985, at Page 403, Official Records of Santa Clara County; thence from said point of beginning along the Southwesterly line of said 304.59 1 acre Parcel, North 49° 36' 56" West, 1240.00 feet; thence at right angels to said Southwesterly line, South 40° 23' 04" West, 320.00 feet to the true point of beginning of this easement; thence from said true point of beginning, South 43° 12' 01" East, 1411.05 feet to a point in said Northwesterly line of said 904.50 acre tract and the terminus of this easement, said easement being bounded on the Southeast by said Northwesterly line of said 904.50 acre tract.

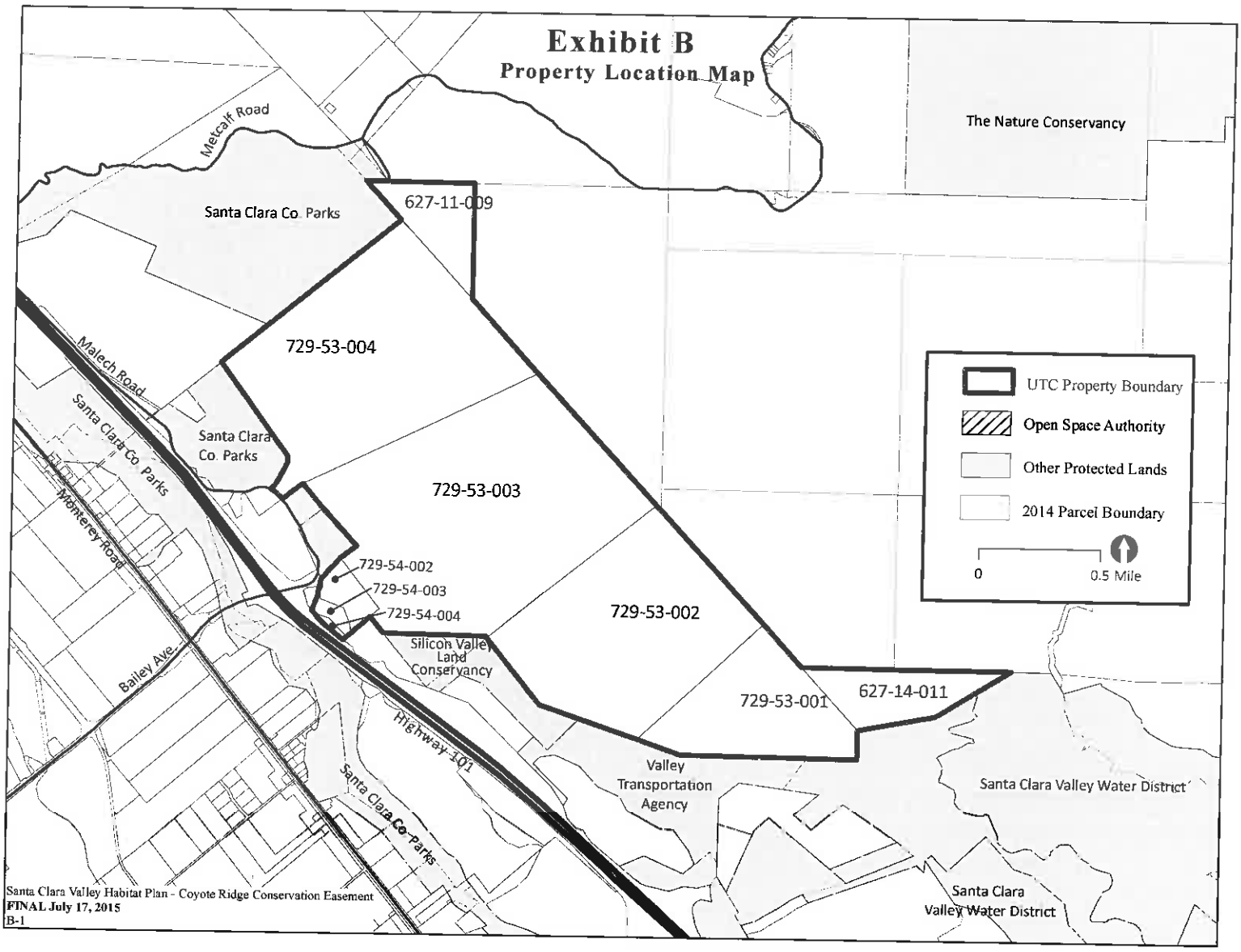


Exhibit B
Property Location Map
Metcalf Road
The Nature Conservancy
Santa Clara Co. Parks
627-11-009
729-53-004
Malech Road
Santa Clara Co. Parks
Santa Clara Co. Parks
729-53-003
Monterey Road
729-54-002
729-54-003
729-54-004
729-53-002
Silicon Valley Land Conservancy
Bailey Ave.
729-53-001
627-14-011
Highway 101
Valley Transportation Agency
Santa Clara Valley Water District
Santa Clara Co. Parks
Santa Clara Valley Water District
UTC Property Boundary
Open Space Authority
Other Protected Lands
2014 Parcel Boundary
0
0.5 Mile

Exhibit C

Initial Conservation Values

A. Sensitive Species

As a result of its serpentine soils, diverse aquatic systems, and low-intensity land use, the Property provides habitat for a diverse suite of native plants and animals. The Property is known to support eight plant and six animal species that are rare, threatened, or endangered (Table 1). It may support an additional 17 sensitive species, eight plants and nine animals, which are found in similar habitat within the region. More comprehensive surveys of the Property may reveal occurrences of these and perhaps other rare species.

The Property contains habitat that is important for recovery of the rare serpentine species, and deemed essential to recovery of Bay checkerspot butterfly (*Euphydryas editha bayensis*) (USFWS 1998). Coyote Ridge features some of the most extensive serpentine grassland habitat in the range of the listed serpentine species (USFWS 1998). Due to its large size and variable microtopography, the Property provides diverse microhabitat conditions that may enable these and other species to persist, by adjusting their distributions to stay within their climatic tolerance envelope as the climate changes and presumably warms.

Plants

The Property features known occurrences of eight rare and endangered plants and provides suitable habitat for an additional eight species (Table 1). All but one species, chaparral mallow (*Malacothamnus arcuatus*) are endemic to, or have an affinity for, serpentine soils (Table 1). Owing to their limited distributions and narrow habitat specificity, all except one plant, San Francisco wallflower (*Erysimum franciscanum*), which also occurs off serpentine, are on the California Native Plant Society (now California Rare Plant Rank) List 1B—plants that are rare, threatened, or endangered throughout California and elsewhere (CNPS 2015).

Metcalf Canyon jewelflower (*Streptanthus albidus ssp. albidus*) has the most narrow distribution, as it is found on the Coyote Ridge near Metcalf Canyon Road and on Tulare Hill on the west side of Coyote Valley. Owing to their extreme rarity and threats, Metcalf Canyon jewelflower and Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*) have been listed as federally endangered (USFWS 1998).

Invertebrates

The Property provides habitat for two rare lepidopterans (moths and butterflies) and may also provide suitable habitat for two species of phalangids (harvestman), which are a type of arachnid (Table 1).

Most notably, the Property supports the federally-threatened Bay checkerspot butterfly (*Euphydryas editha bayensis*), which inhabits serpentine grasslands and serpentine outcrop communities in Santa Clara and San Mateo Counties, California. The Coyote Ridge has been identified as one of the key areas for long-term persistence of this species (USFWS 1998). The thin, often rocky soils combined with cattle grazing create short-statured, low-thatch conditions that give rise to the butterfly's primary and secondary larval host plants, dwarf plantain (*Plantago erecta*), and purple owl's-clover (*Castilleja densiflora*), respectively. The serpentine grasslands also feature large populations of the Bay checkerspot butterfly's nectar plants including bladder parsnip (*L. utriculatum*), California goldfields, and tidy-tips (*Layia*

platyglossa). The serpentine grasslands within the Property feature variable microclimates, including a variety of slope aspects, which can help Bay checkerspot butterflies develop within the 'phenologic window' amidst the interannual variability in weather (Weiss 1996 *in* USFWS 1998).

The serpentine grasslands of the Property also provide habitat for Opler's long-horned moth (*Adela oplerella*), a diurnal moth which inhabits grasslands on serpentine and non-serpentine soil. This species was previously recorded in the southern portion of the Property. It is often found in association with cream cups (*Platystemon californicus*), which along with gold fields, tidy tips, and *Leptosiphon* species, supply the moth with nectar (USFWS 1998). These wildflowers can occur off serpentine soils, but do well on serpentine owing to reduced competition from dense exotic grasses.

The Property may support Hom's micro-blind harvestman (*Microcina homi*) and/or Jung's micro-blind harvestman (*Microcina jungi*)—two nearly microscopic arachnids with long, thin legs that are endemic serpentine outcrops in Santa Clara County. They are often observed on the underside of rocks, in moist conditions within rock outcroppings (USFWS 1998). The Property features abundant outcroppings of serpentine rock which are not known to have been previously surveyed for these species.

Aquatic Species

The Property provides suitable habitat for two federally-threatened amphibians, California red-legged frog (*Rana draytonii*) and the Central California Distinct Population Segment of the California tiger salamander (Central California tiger salamander) (*Ambystoma californiense*). Central California tiger salamander has been observed in four ponds on the eastern slope of Coyote Ridge. The grasslands feature burrows created by California ground squirrel (*Otospermophilus beecheyi*) that provide upland habitat for Central California tiger salamander, which has been observed throughout the UTC property to the east.

California red-legged frog has been observed breeding in four ponds on this east slope of the Property, as well as two ponds near the toe of the western slope. California red-legged frog may also breed in pools within the drainages (WRA 2004), which were not subject to prior breeding surveys (Biosearch 2008).

The Property ponds may also support western pond turtle (*Actinemys marmorata*), which has been observed in ponds on the UTC property to the east.

Over 3.2 miles of streams and drainages on the Property flow to Coyote Creek, located just to the west of the Property, which provides habitat for Central California Coast steelhead (*Oncorhynchus mykiss*). Though stream reaches on the Property are intermittent and lack suitable habitat, their flows may be important for steelhead rearing and migration.

Birds

The Property may provide suitable breeding habitat for western burrowing owl (*Athene cunicularia*)—a California species of special concern. This species has been observed during the breeding season (March to August), suggesting it may breed on the Property (J. Fields, pers. comm. 2015). Burrowing owls nests in burrows often created by California ground squirrel, in short-statured grasslands with sparse plant cover, similar to those maintained through grazing within the Property (Shuford and Gardali 2008).

The Property may provide foraging and also nesting habitat for white tailed-kite (*Elanus leucurus*), a California Fully Protected species that typically forages in tall grasslands, such as the California annual grassland on the eastern edge of the Property. Such grasslands support populations of California voles (*Microtus californicus*), which are the species' preferred prey. White-tailed kites nest in trees and may use the oak woodlands in the drainages or on the southeastern portion of the Property for breeding.

Golden eagle (*Aquila chrysaetos*), another California Fully Protected Species, may forage for ground squirrels and other prey within the Property. This species primarily nests in cliffs though occasionally uses transmission line towers, such as occur in the Property.

Mammals

The Property may provide suitable habitat for American badger (*Taxidea taxus*)—a California Species of Special Concern, which inhabits open habitats including grasslands and open shrublands. The species has been observed on Coyote Reserve south of the Property, as well as in Tulare Hill and the Bailey Road overpass just west of the Property (T. Diamond, pers. comm. 2011). Because it burrows and hunts largely below ground, it is typically associated with friable soils; the clayey, and often rocky and thin, serpentine soils that predominate the Property may limit use by this species.

The Property may provide suitable foraging habitat for pallid bat (*Antrozous pallidus*), a California Species of Special Concern that occurs in a wide variety of habitats but generally forages over open ground. Known from the UTC property to the east, pallid bats may roost in trees within the oak woodland of the Property. The Property's woodlands may also support Yuma myotis (*Myotis yumanensis*), which occurs within a range of habitats but is often associated with woodlands including riparian areas. This species forages over water sources, including ponds and troughs as well as streams and reservoirs, and is often found in association with water bodies.

Table 1: Rare and special-status species known, or with potential, to occur within the Property. Species in bold are known to occur on the site. Scientific names for plants are from Baldwin et al. 2012, with those brackets from Hickman 1993. (Arcadis 2011, OSA 2014, CDFW 2015)

Species	Status[1]	Habitat Preference	Known Occurrences in Property and Nearby Areas
Plants			
Chaparral mallow (*Malacothamnus arcuatus*)	LIST 1B.2	Chaparral	West of the Property, east of Malech Road, northeast of Bailey Road exit.
Coyote ceanothus (*Ceanothus ferrisiae*)	LIST 1B.1	Serpentine chaparral and grassland	Known from the Kirby Canyon Landfill 2.25 mi south of the Property
Fragrant fritillary (*Fritillaria liliacea*)	**LIST 1B.2**	**Grassland, coastal scrub, and woodland, especially serpentine**	**Present in serpentine grasslands in northern the northeast portion of Rock Field 1, along Ridge Road**
Hall's bushmallow (*Malacothamnus hallii*)	**LIST 1B.2**	**Serpentine chaparral and coastal scrub**	**Present on edges of serpentine chaparral in center of Property**
Leather oak (*Quercus durata* var. *durata*)		Serpentine chaparral and woodland	Occurs east of Rancho Cañada del Oro Open Space Preserve in the Santa Cruz Mountains
Loma Prieta Hoita (*Hoita strobilina*)	LIST 1B.1	Chaparral and mixed evergreen forests, primarily on serpentine soils	Occurs in the oak woodland along the drainage of the Malech Property, adjacent to the Property, and in the Silicon Valley Land Conservancy Property to the west (also on SCVWD)
Metcalf Canyon jeweflower (*Streptanthus glandulosus* ssp.	**FE, List 1B.1**	**Outcroppings and bare slopes on**	**Occurs in serpentine outcrops in the northern half of the Property.**

Table 1: Rare and special-status species known, or with potential, to occur within the Property. Species in bold are known to occur on the site. Scientific names for plants are from Baldwin et al. 2012, with those brackets from Hickman 1993. (Arcadis 2011, OSA 2014, CDFW 2015)

Species	Status[1]	Habitat Preference	Known Occurrences in Property and Nearby Areas
***albidus*)** **[*S. albidus ssp. albidus*]**		**serpentine**	
most beautiful jewelflower (*S. glandulosus* ssp. *glandulosus*) **[*S. albidus* ssp. *peramoenus*]**	**LIST 1B.1**	**Serpentine grassland and rock outcroppings**	**Occurs in serpentine grasslands in the southern portion of the Property (West Ridge Pasture)**
Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*)	**LIST 1B.2**	**Serpentine grassland, especially wet areas such as seeps**	**Occurs in the drainages in seven mapped locations within the Property**
Pink cream sacs (*Castilleja rubicundula ssp. rubicundula*)	LIST 1B.2	Serpentine grassland, chaparral openings, woodlands, and seeps	Known from Uvas Road area in the Santa Cruz Mountains
Robust coyote mint (*Monardella villosa* ssp. *globose*)	LIST 1B.2	Openings within chaparral and woodlands	Known from Uvas Creek Canyon in Upper Uvas Creek properties, in the Santa Cruz Mountains
San Francisco wallflower (*Erysimum franciscanum*)	List 4.2	**Serpentine outcrops, coastal scrub, sand dunes, and granitic hillsides**	**Scattered throughout much of the serpentine grassland within the Property**
Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*) **[*D. setchellii*]**	**FE, LIST 1B. 1**	**Serpentine rock outcroppings**	**Scattered throughout much of the serpentine grassland in the Property**
Smooth lessingia (*Lessingia micradenia* var. *glabrata)*	**LIST 1B.2**	**Serpentine grassland and rock outcroppings**	**Scattered throughout much of the serpentine grassland in the Property**
Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*)	LIST 1B.2	Serpentine grassland	Known from serpentine grasslands south of the Property, in the Waste Management site as well as SCVWD Coyote Ridge Preserve
Woodland woollythreads (*Monolopia gracilens*)	LIST 1B.2	Serpentine grassland, open chaparral, and oak woodland	Known from Santa Teresa County Park, across Coyote Valley.
Animals			
Bay checkerspot butterfly (*Euphydryas editha bayensis*)	**FT**	**Serpentine grasslands and rock outcroppings**	**Occurs throughout the serpentine grasslands of the Property**
Opler's longhorn moth (*Adela oplerella*)		**Grasslands including coastal prairie and serpentine**	**Known from one location in serpentine grassland in the southern portion of the Property (West Ridge Pasture)**
Hom's micro-blind harvestman *(Microcina homi)*		Serpentine grasslands	Known from three locations in the western slope of the Diablo Mountains north of Metcalf Road, as well as west

Table 1: Rare and special-status species known, or with potential, to occur within the Property. Species in bold are known to occur on the site. Scientific names for plants are from Baldwin et al. 2012, with those brackets from Hickman 1993. (Arcadis 2011, OSA 2014, CDFW 2015)

Species	Status[1]	Habitat Preference	Known Occurrences in Property and Nearby Areas
			of Santa Teresa Co. Park in the Santa Cruz Mountains
Jung's (Silver Creek) micro-blind harvestman (*Microcina jungi*)		Serpentine rocks in grasslands	Known from Silver Creek serpentine habitat 2.5 miles northwest of the Property.
Central California Distinct Population Segment of the California tiger salamander (*Ambystoma californiense*)	**FT, ST**	**Ponds and adjacent grasslands and savannas**	**Breeds in the four ponds on the eastern slope of the ridge within the Property, as well as numerous ponds on the adjacent UTC property.**
California red-legged frog (*Rana draytonii*)	**FT**	**Ponds, streams with pools, and adjacent uplands**	**Breeds in the four ponds on the eastern slope of the ridge, as well as Ponds 9 and 10 on the toe of the western slope in the Property.**
Western pond turtle (*Actinemys marmorata*)	SSC	Ponds, streams, and adjacent uplands	Known from a pond in the UTC property to the east, Coyote Creek to the west, and Anderson Lake to the south of the Property
Burrowing owl (*Athene cunicularia*)	**SSC**	**Short-statured grasslands**	**Has been observed wintering and may breed on the Property**
golden eagle (*Aquila chrysaetos*)	**FP**	**Grasslands, shrublands, and woodlands**	**Has been observed in the Property**
white-tailed kite (*Elanus leucurus*)	**FP**	**Tall-statured grasslands, meadows, and fields**	**Observed foraging on the Property during assessment for this plan.**
tricolored blackbird (*Agelaius tricolor*)	SSC	Breeds in wetlands; forages in grasslands and agricultural fields	Known from Calero County Park in Santa Cruz Mountains
San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)	SSC	Shrublands, woodlands, and forests	Known from several locations in the UTC property to the east.
American badger (*Taxidea taxus*)	SSC	Grasslands and sparse shrublands on friable soils	Known from the Silicon Valley Land Conservancy site, and Tulare Hill.
Pallid bat (*Antrozous pallidus*)	SSC	Rocky open areas near water	Known from UTC Property to the east
Yuma myotis (*Myotis yumanensis*)		Various including riparian and woodlands	Known from Calero County Park in Santa Cruz Mountains

Table 1: Rare and special-status species known, or with potential, to occur within the Property. Species in bold are known to occur on the site. Scientific names for plants are from Baldwin et al. 2012, with those brackets from Hickman 1993. (Arcadis 2011, OSA 2014, CDFW 2015)

Species	Status[1]	Habitat Preference	Known Occurrences in Property and Nearby Areas

[1] Federal Status Designations:
FE = Federally Endangered. Species in danger of extinction throughout all or significant portions of its range.
FT = Federally Threatened. Species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
State Status Designations:
SE = State Endangered. Species whose continued existence in California is jeopardized.
ST = State Threatened. Species, although not presently threatened with extinction, may become endangered in the foreseeable future.
SSC = California species of special concern. Animal species with California breeding populations that may face extinction in the near future.
FP = Fully protected by the State of California under Sections 3511 and 4700 of the Fish and Game Code.
WL= Department of Fish and Wildlife Watch List
California Rare Plant Rank Designations:
List 1A = Plants presumed extinct in California
List 1B = Most plants in this category are endemic to California and have experienced significant declines over several decades; these plants are rare, threatened, or endangered throughout California and elsewhere.
List 4 = "Watch List" plants with limited distribution or infrequent presence throughout California. Populations of these species may exist along the perimeter of the species' range, may have declined significantly in specific locations within its range, may exhibit unique morphology, or occur on uncommon substrates.
Decimals after the Status categories represent the Threat rank (e.g., "List 1B.1"):
0.1 = Seriously threatened populations in California, where over 80% of occurrences are threatened
0.2 = Marginally threatened populations in California, where between 20% and 80% of occurrences are threatened
0.3 = Populations with limited threats; fewer than 20% of occurrences are threatened or no known current threats

B. Other Conservation Values

Wildlife Linkages

The Property was identified as an important habitat linkage developed as part of the *Bay Area Critical Linkages Project* (Penrod et al. 2012). The Property is ranked "Tier 1a Critical" in the California Department of Fish and Wildlife's *Santa Cruz Mountain Linkages Conceptual Area Protection Plan* (McGraw 2012) because of its pivotal role as part of a linkage between the Santa Cruz Mountains and the Diablo Range. Because of the Property's location within a critical landscape linkage, its diverse microclimates, and environmental variability, the Property will serve as a vital ecological refuge in the face of climate change, and its protection will allow for species migration to other protected lands in the Diablo Range and other areas.

Recreation

The Property and adjacent conservation lands provide important recreational and environmental education opportunities including interpretation of serpentine habitats.

Santa Clara Valley Habitat Plan

The Property contributes significantly in meeting the conservation goals of the Santa Clara Valley Habitat Plan. The Property is located in the high priority Conservation Analysis Zones (CAZs) Coyote-4 and Coyote-5 and fulfills 8% of the natural land cover acquisition requirements for CAZ Coyote-4. The Property also fulfills 123% of the serpentine grassland acquisition requirements for CAZ Coyote-4, 65% of the serpentine grassland acquisition requirements for CAZ Coyote-5, and fulfills 34% of the overall serpentine bunchgrass grassland land cover acquisition requirements for the Reserve System. The Property contributes to landscape linkages 6, 7, and 8 as identified in the Habitat Plan. The Property contains modeled habitat for 14 covered species, supports 14 known occurrences of six covered plants species, and contains the Bay checkerspot butterfly Kirby/East Hills occupied core habitat unit. Critical habitat is present for Bay checkerspot butterfly and California red-legged frog, meeting 31% and <1% of the Reserve System enrollment requirements, respectively. The Property also fulfills 36% of Bay checkerspot butterfly modeled habitat acquisition requirements for the Reserve System.

Exhibit D

Allowed Uses

1) Landowner shall have the right to maintain, repair, reasonably enlarge, and reasonably replace the improvements that exist on the Property, in the same or different locations, under the following conditions: Landowner shall first obtain Easement Holder's and Wildlife Agencies' prior written approval for any enlargement or relocation, except for problem roads and trails as depicted in Exhibit E and further described herein, which are hereby deemed approved. Approval shall not be unreasonably withheld, conditioned, or delayed but in no event shall that approval be granted if the proposed enlargement or relocation would impair or diminish the Conservation Values of the Property. Notwithstanding the foregoing, the following may be undertaken without additional Easement Holder or Wildlife Agency approval:

(i) Maintenance, repair, and replacement of improvements of similar size and in approximately the same location authorized in the Management Plan, and

(ii) Existing fences and other minor grazing infrastructure may be repaired and replaced, provided, all repair, and replacements shall be designed and installed to protect, and not impair, the Conservation Values of the Property, including, but not limited to, habitat connectivity.

Even though approval may not be required, the Landowner shall consult with the Easement Holder regarding all repairs and replacements described in the preceding sentence. The Landowner will provide to the Easement Holder an annual summary of maintenance, repair, and replacement activities conducted on the Property, including total permanent and temporary impacts associated with maintenance, repair, and replacement activities. In addition to the above, should general notification procedures be adopted or subsequently changed as part of Habitat Plan policy, notification will occur consistent with such policy.

2) Landowner may maintain such surface water resources on the Property as are noted in the Baseline Documentation Report as currently existing on the Property provided that said maintenance is consistent with the terms and conditions of this Conservation Easement and the Management Plan. Landowner may only develop new or enhance existing surface water resources with the prior written approval of Easement Holder and Wildlife Agencies which approval shall not be unreasonably withheld, conditioned, or unreasonably delayed, and then only if said development is necessary for allowed ranching operations or to enhance, restore, create, preserve, or protect the Conservation Values of this Conservation Easement, and the development does not impair the Conservation Values of this Conservation Easement and that such development is consistent with State Water Law.

3) Landowner may conduct grazing in accordance with the Management Plan.

4) Landowner shall have the right to use vehicles on existing roads on the Property and to maintain and repair roads. Landowner may use off-road vehicles for Property management activities, for example site safety patrols, property management, grazing management, invasive species management, infrastructure management, maintenance, scientific study, research and monitoring, and for emergency access, provided such use is minimized to the maximum extent practicable.

5) Landowner shall also have the right to provide and maintain recreational public access to and within the Property for hikers, bicyclists, and equestrians on existing roads, new trails, and new facilities as depicted in Exhibit E of this Conservation Easement. Landowner also reserves the right to realign, maintain and repair problem sections of roads depicted in Exhibit E of this Conservation Easement without further approval from Easement Holder or Wildlife Agencies. These roads and trails as set forth in Exhibit E of this Conservation Easement and are further described below. However, any realignment of roads and construction of new recreational trails and facilities not depicted in Exhibit E of this Conservation Easement requires prior review and approval by Easement Holder and Wildlife Agencies.

a) **Ridge Road:** 3.2 miles of existing road largely situated atop Coyote Ridge on the eastern portion of the Property. A steep 0.3 mile section of the Ridge Road near Metcalf Road, as shown on Exhibit E, may be realigned to a gentler grade east of the problem road segment to improve drainage and address erosion impacts. The new alignment would generally follow another existing road bed.

b) **North Ascent:** 1.2 miles of existing road provides access to the Ridge Road from the northwestern corner of the Property and generally follows a ridgeline on the west-facing slope. A 0.3-mile section, as shown on Exhibit E, will be realigned. The new alignment will incorporate a series of short switchbacks generally to the north of the existing road at approximately 5-7% grade. This road will be decommissioned and maintained in the future as a trail.

c) **South Ascent Road and South Ascent Connector Road:** The South Ascent Road is 1.9 miles of existing road that connects to the Ridge Road via a second, more southerly ridgeline on the west-facing slope. The South Ascent Connector Road is 0.5 miles of road and begins at the base of the Ridge and connects to the South Ascent Road. The South Ascent Road may be realigned under a 3-step approach as follows:

1. Landowner shall first seek to acquire the right of access, either by acquisition of easement or fee title, through property known as Assessor's Parcel Number 729-52-022 and 729-52-018 to serve as an alternative to the problem segment of South Ascent Road. If the owner of Assessor's Parcel Number 729-52-022 and 729-52-018 grants Landowner alternative access, the problem segment of the South Ascent Road will be decommissioned.
2. If Landowner cannot secure such alternative access through the property known as Assessor's Parcel Number 729-52-022 and 729-52-018, Landowner shall have the right to use the entirety of the South Ascent Road. However, Landowner shall make drainage improvements to the existing South Ascent Road to reduce erosion and sedimentation.
3. Only if Landowner cannot secure alternative access through property known as Assessor's Parcel Number 729-52-022 and 729-52-018 and Landowner's improvements are unsuccessful in reducing erosion and sedimentation, Landowner may realign a portion of the South Ascent Road, after consultation with Easement

Holder and Wildlife Agencies, to incorporate a series of switchbacks to reduce grade and facilitate improved drainage. This new alignment will be located to the northeast of the problem section of road and will generally follow a 5-7% grade.

d) **Bypass Trail:** A new 1.0-mile trail will provide access to the South Ascent Road as shown on Exhibit E. The new trail will ascend the western slope with a gentler gradient than the existing road, which is too steep for equestrians and cyclists. The new alignment will generally follow a 5-7% grade, avoid the swale, and follow the north side of the ridge.

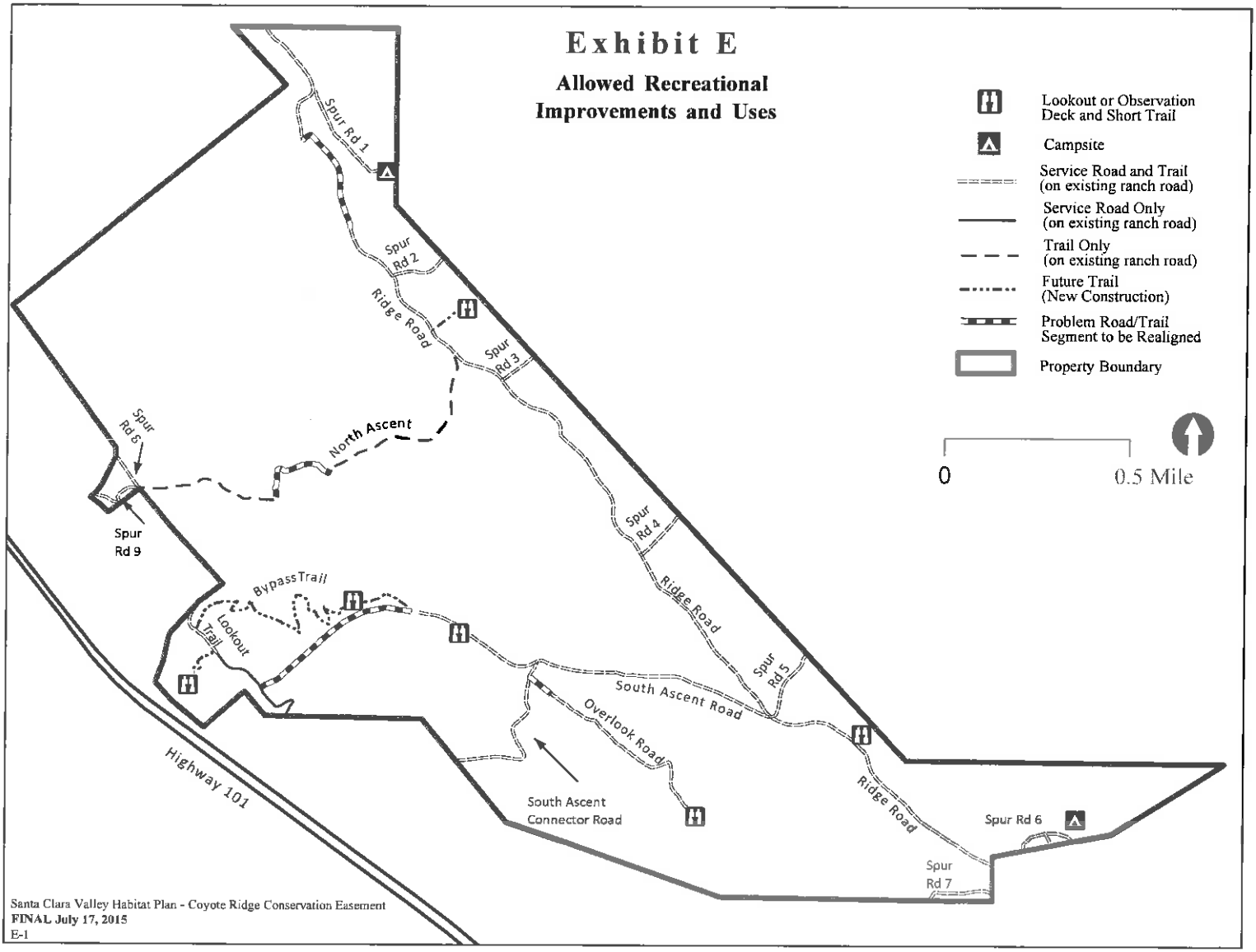
e) **Overlook Road:** 0.6 mile of existing road begins at the South Ascent Road approximately halfway up the ridge. A 0.1 mile section of this road as shown on Exhibit E will be realigned to avoid a seasonal wetland.

f) **Spur Roads**: 1.5 miles of existing roads that branch from the primary routes (labeled as Spur Road 1 through 9 in Exhibit E).

g) **Trails Leading to Overlooks:** Approximately 0.4 mile of new trails will be constructed from the main trail network to six scenic overlooks: 1) at the end of Lookout Trail; 2) mid-way up the South Ascent Road; 3) on the south end of the Ridge Road; 4) on the north end of the Ridge Road; 5) along the Bypass Trail; and 6) at the end of Overlook Road. Observation decks or elevated boardwalks, benches, picnic tables, shade structures and/or interpretive signs may be part of the overlooks.

h) **Two primitive backcountry campsites**: that can accommodate up to ten individuals each, with a raised pad for tent, pit toilet, picnic table, hitching post, and designated area for a cook stove; no campfires will be allowed.

i) **Trail amenities:** Additional solitary picnic tables, benches, pergola-like shade structures, and trail signage will be located throughout the Property along the roads and trails that are reserved for recreation.



Santa Clara Valley Habitat Plan - Coyote Ridge Conservation Easement
FINAL July 17, 2015
E-1

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the Conservation Easement dated September 17, 2015, from the Santa Clara County Open Space Authority, to the Santa Clara Valley Habitat Agency, a joint powers governmental agency is hereby accepted by order of the Governing Board on September 17, 2015, and the grantee consents to recordation thereof by its duly authorized officer.

Dated September 23, 2015 By _____

Edmund Sullivan
Executive Officer