2024 WILDLIFE HABITAT PROTECTION PLAN

Hungry Valley State Vehicular Recreation Area

Abstract

Hungry Valley State Vehicular Recreation Area is a 19,800-acre unit of the California Department of Parks and Recreation system, located west of Interstate 5 in the northwest corner of Los Angeles County, the northeast corner of Ventura County, and southwestern Kern County. The 2024 Wildlife Habitat Protection Plan addresses the conservation and improvement of wildlife habitat at the park unit.

Off-Highway Motor Vehicle Recreation Division and Natural Resources Division, California Department of Parks and Recreation

May 2024

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List of Acronyms and Abbreviations

Abbreviation	Definition
ARU	Autonomous Recording Unit
ATV	All-terrain Vehicle
BAS	Best Available Science
BMP	Best Management Practice
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Parks and Recreation
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
DWR	Department of Water Resources
EMW	Egget/Marjay/Ward
GP	General Plan
HMS	Habitat Monitoring System
IUCN	International Union for the Conservation of Nature
IBP	Institute for Bird Populations
IPaC	Information for Planning and Consultation
MCV	Manual of California Vegetation
MLE	Maximum Likelihood Estimate
MU	Management Unit
NABat	North American Bat Monitoring Program
NAIP	National Agriculture Imagery Program
NCEI	National Centers for Environmental Information
NRD	Natural Resources Division
OHV	Off-highway Vehicle
OHMVRD	Off-Highway Motor Vehicle Recreation Division
PEF	Project Evaluation Form
PRC	Public Resource Code

SB	Senate Bill
SCP	Soil Conservation Plan
SMART	Specific, Measurable, Achievable/Attainable, Realistic, and Timely
SVL	Snout-Vent Length
SVRA	State Vehicular Recreation Area
SWAP	State Wildlife Action Plan
USFWS	United States Fish and Wildlife Service
VegCAMP	Vegetation Classification and Mapping Program
WHPP	Wildlife Habitat Protection Plan

1. Introduction

1.1 Purpose and Scope of the Wildlife Habitat Protection Plan

The purpose of the Wildlife Habitat Protection Plan (WHPP) is to define the goals and objectives that drive the adaptive management framework of Hungry Valley State Vehicular Recreation Area's (Hungry Valley SVRA's) natural resources program (Public Resource Code section §5090.14). The WHPP outlines the specific management actions and monitoring efforts that underpin the program while also providing the context for which the plan was developed. Addressing the spectrum of land management and visitor use activities that affect wildlife habitat at the park, it details existing conditions, provides an overview of collected resource data, explains how monitoring results will influence management decisions, defines who is involved with decision making, and describes how information is communicated. As an evolving document based on best available science (BAS) with clear guidance for a five-year planning horizon and a roadmap for work well beyond that, WHPP development includes a transparent peer-review process and an opportunity for public comment.

1.2 Legal and Operational Requirements

Since 1988, California's Public Resources Code (PRC) has required a WHPP for each SVRA that focuses on sustaining a viable species composition. In 2017, Senate Bill (SB) 249 amended the PRC requiring a WHPP that conserves and improves wildlife habitats be developed for each SVRA. SB 249 added other specific WHPP requirements, including considering statutorily required state and regional conservation objectives, applying BAS, and including the annual monitoring undertaken at each SVRA to ensure WHPP objectives are being met. Specific PRC §5090 language relating to the WHPP can be found in Appendix 1: PRC Related to the WHPP.

1.3 Relationship with other SVRA Plans

The WHPP complements other management plans (Figure 1) for Hungry Valley SVRA, including the 1981 General Plan (GP) and the Soil Conservation Plan (SCP). These management plans are interconnected, and topics in one plan may cross over into elements of another.

General Plan

The current Hungry Valley SVRA GP is being updated, with a planned completion by approximately 2025, and will guide the management of all aspects of the SVRA. The GP establishes long-range vision, goals, and guidelines for the SVRA and serves as the basis for developing focused feasibility and management plans, project plans, and other management actions necessary to implement the goals of the GP (California Department of Parks and Recreation [CDPR] 1981). The GP is the park's primary management document, and any other planning or management documents developed for the park, including the WHPP, must remain consistent with it. Therefore, the GP was used as a guide and source for developing this WHPP

and the information provided within. For further details on the park facilities and park operations, see the 1981 Hungry Valley General Plan.

Soil Conservation Plan

The SCP provides a comprehensive overview of soil management practices at the park to ensure compliance with the 2020 Soil Conservation Standard and Guidelines (CDPR 2020a). The SCP also defines protocols for assessment, maintenance, and monitoring efforts implemented at the park and is intended to meet the requirements of SB 249. The SCP overlaps many topics in the WHPP as soils are a key abiotic factor and provide the foundation for many ecosystem functions. The SCP is planned to be completed by 2024.

Figure 1. California State Parks' Park Planning Structure.

1.4 California Environmental Quality Act Compliance

The WHPP identifies resource objectives and general types of projects and/or actions that can or will be taken to ensure progress on meeting the WHPP objectives. The California Environmental Quality Act (CEQA) process (not necessarily the product) begins at this stage. If discretionary projects or actions are identified, CDPR will follow the Department's procedure for meeting CEQA compliance. Once a project or action has been selected for implementation, it will undergo CEQA review at that time using the CDPR Project Evaluation Form (PEF) to determine necessary documentation for compliance with CEQA.

1.5 Update Cycle and Approval Process

This WHPP will be evaluated at least once every five years. Each revision will encompass wildlife habitat protection and improvement planning in the SVRA over the next five years. Updates will include a summary of wildlife habitat protection and conservation at the SVRA

since the previous WHPP update and a description of the goals and objectives for the next five years. The update will reflect changes to vegetative landcover, land use, species occurrence, disturbance, land acquisitions, and updates to monitoring protocols or technology.

Once completed, an updated WHPP will be approved by the Great Basin District's Natural Resources Program Manager and District Superintendent. Following internal reviews with CDPR, the WHPP will be made available for public review, submitted to the Natural Resource Division (NRD) for BAS determination, and finally submitted to the Off-Highway Motor Vehicle Recreation Division (OHMVRD) for review and approval. If a CEQA review is deemed necessary, it will be completed at that time. If any significant alterations are made to this 2024 WHPP or within a five-year update, public review and BAS determination will be completed again.

1.6 Adaptive Management Strategy

"Adaptive management" is a common strategy and fundamental component of implementing the best available science in natural resource management. Adaptive management includes assessing existing conditions, developing objectives based on those conditions, identifying management actions, and monitoring these actions, which allows evaluations and adjustment of practices (Figure 2). Sections 2 through 6 provide information on natural resource planning for each step of the adaptive management process.

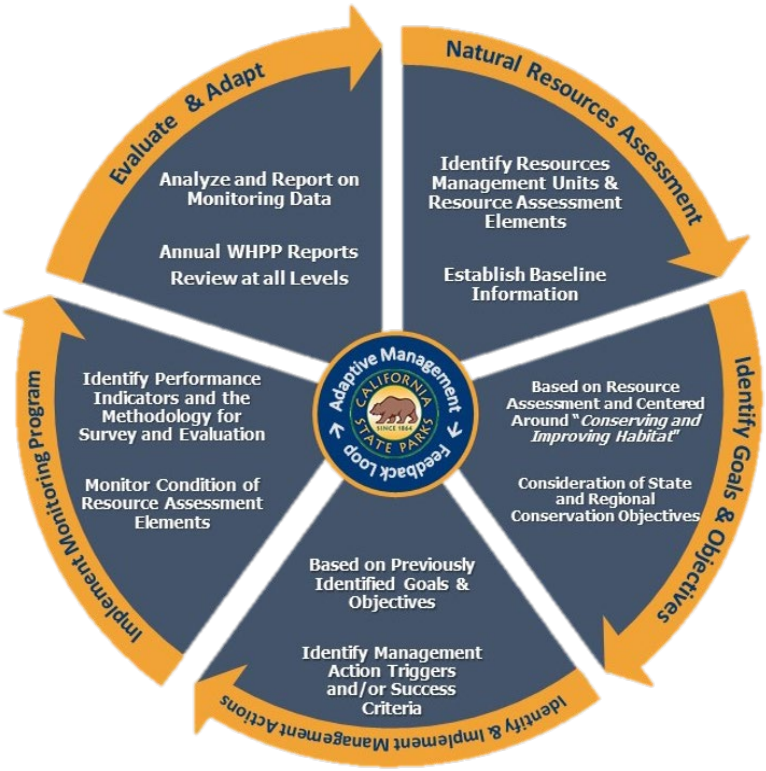

Figure 2. Steps of the WHPP Adaptive Management Process

2 Hungry Valley SVRA Setting and Natural Resource Assessments

The following chapter provides information on the Hungry Valley SVRA setting and natural resource assessments. The setting and natural resource assessments are used to understand important conservation priorities within the SVRA. Additionally, this information provides the basis or baseline for applying adaptive management. The following sections include an overview of park history and setting characteristics, regional context and land use, PRC required wildlife and native plant inventories, invasive species distribution, and details regarding sensitive resources and wildlife movement, including landscape connectivity.

2.1 Park Overview and General Assessment Elements

2.1.1 Location and Regional Context

Hungry Valley SVRA is a 19,800-acre unit of the CDPR system, located west of Interstate 5 (I-5) in the northwest corner of Los Angeles County, the northeast corner of Ventura County, and southwestern Kern County (Figure 3). The Tejon Pass, at an elevation of 4,160 feet above sea level, is just north of the SVRA, as is the town of Gorman. Hungry Valley SVRA lies within the Transverse Mountain Ranges of Southern California, and the San Andreas Fault traces along the northeast boundary of the SVRA.

Hungry Valley SVRA is bordered on two sides by major tracts of public land: Los Padres National Forest on the west and Angeles National Forest on the south and east (Figure 4). The northeast side is bordered by Tejon Ranch. California Department of Water Resources (DWR) land and several scattered residences are located on the east, and the town of Gorman is on the north edge of the unit. In April 1980, Hungry Valley SVRA became a unit of the CDPR state park system. Before state purchase, the area had been used informally for off-highway vehicle (OHV) recreation.

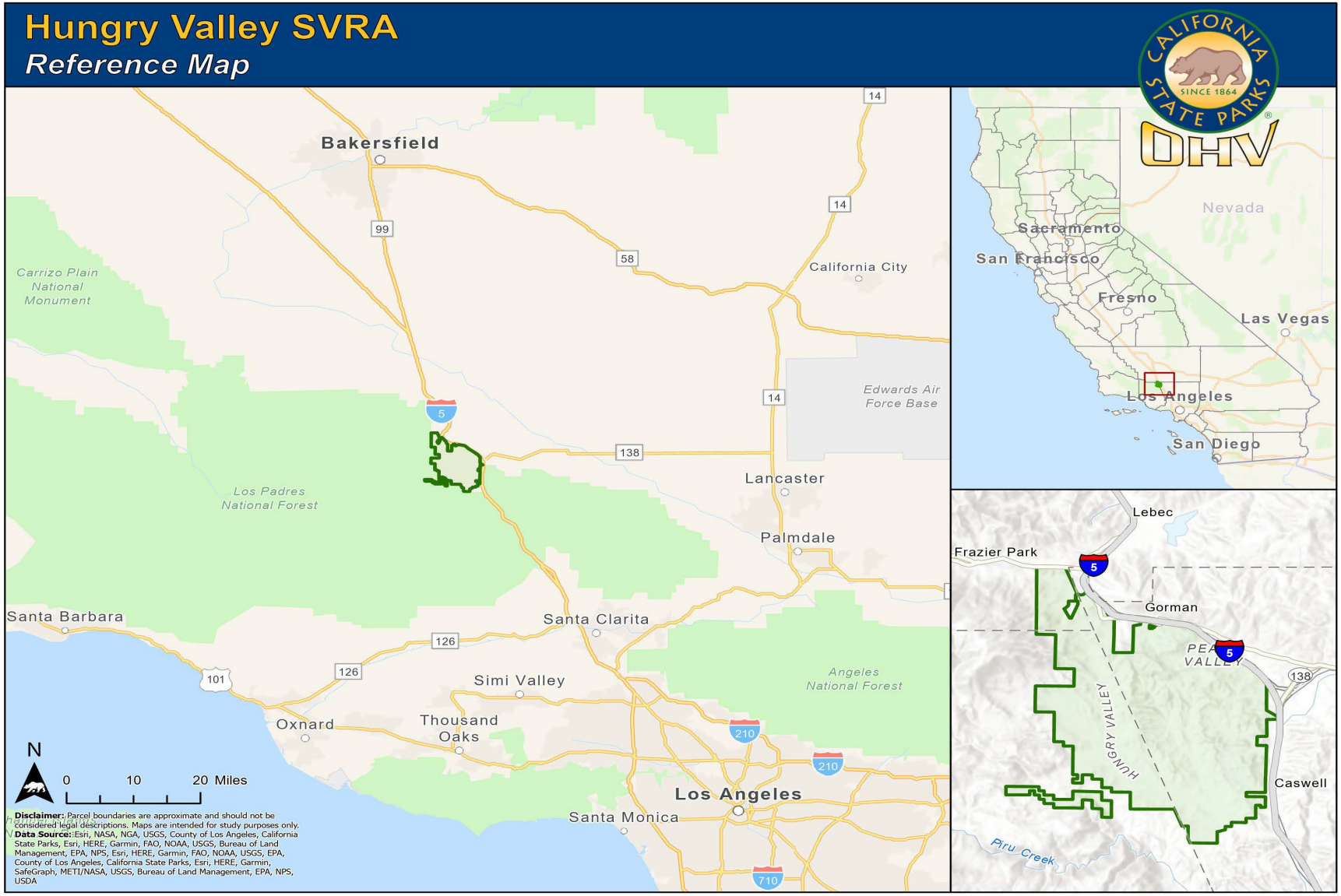

Figure 3. Hungry Valley SVRA reference map depicting the park's location in relation to the state of California and major cities

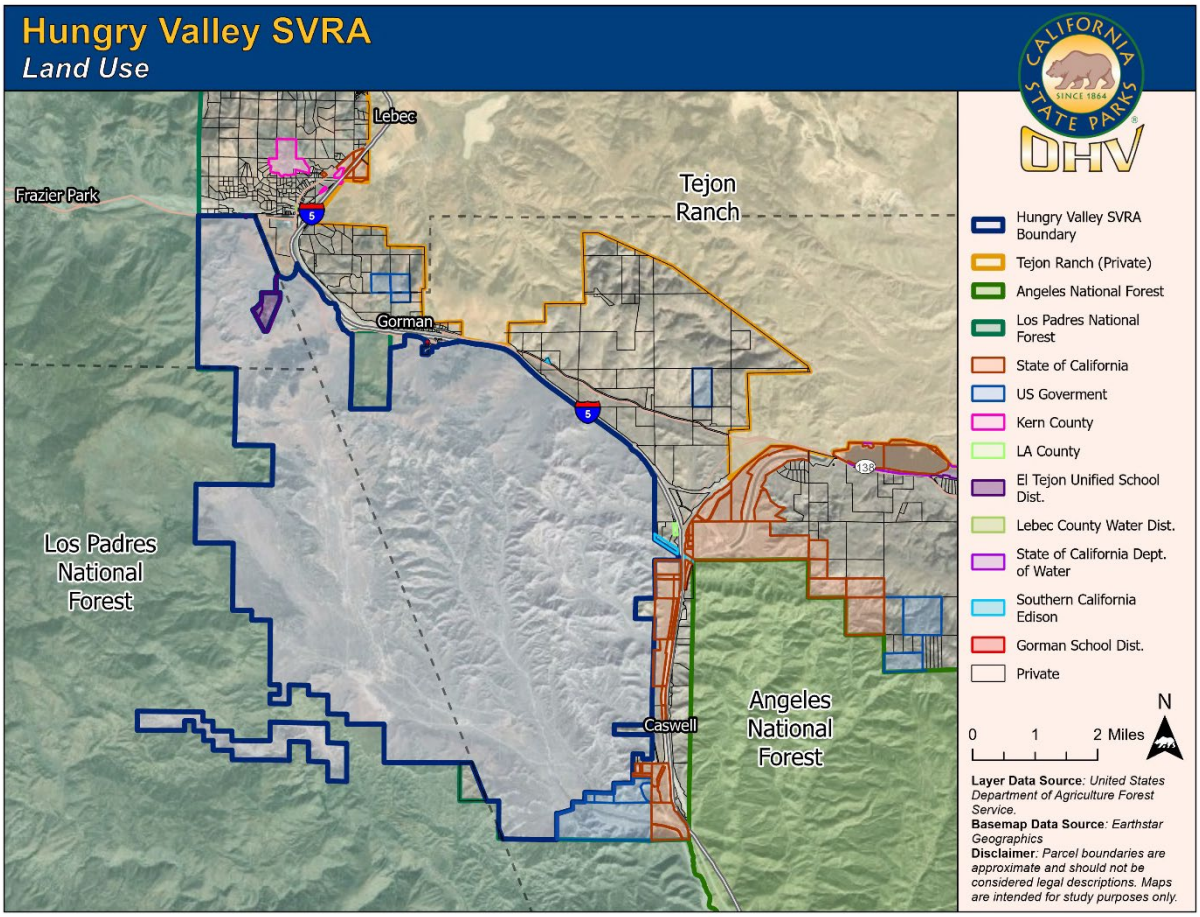

Figure 4. Hungry Valley SVRA and surrounding land use

2.1.1 Relevant Hungry Valley SVRA and Regional History

The region that includes Hungry Valley SVRA was originally home to the Tatavium tribe of Native Americans. Spanish explorers arrived in the area around the late 1770's and displaced the native populations. The Spanish used the area as a corridor connecting Southern California with the Central Valley, much as it is used today by millions of travelers each year.

The region where Hungry Valley SVRA is located was later the site of homesteading and mining activities for nearly 100 years. James Gorman and his family lived in the area for many years before he filed a patent for a homestead in 1875, at the site of present-day Gorman, California. Hungry Valley SVRA was once called Honey Valley by homesteaders looking to tend the land. However, the climate and ruggedness of the terrain proved too difficult for ranching and farming The name of the area was aptly changed to Hungry Valley as many homesteaders abandoned their homesteads for better opportunities in the growing city of Los Angeles.

The early 1900s brought the construction and installation of oil pipelines and roads. During the 1930s, most of the remaining homesteads were wiped out by drought and purchased by absentee landowners. Uncontrolled hunting, target shooting, and OHV recreation began to occur on the

unregulated land. Recognizing the need to effectively manage the area while providing for responsible OHV recreation, CDPR purchased land in the region beginning in 1978. Hungry Valley was formally established as an SVRA in 1980.

2.1.2 Abiotic Environmental Factors

Climate

The Hungry Valley SVRA area has a semiarid Mediterranean climate. Throughout much of the year, warm air masses blow southwest from the Mojave Desert and pass through the area toward the Los Angeles Basin. Air masses are cold enough in the winter to allow some snowfall.

Temperature and precipitation data are reported from the Remote Automatic Weather Station (RAWS) USA Climate Archive and are from the nearby Chuchupate, California station from January 2020 to October 2024. The mean daily maximum average air temperature from March to May was approximately 52.7°F to 71.5°F. During summer months (June through September), mean daily maximum average air temperatures ranged from 81.2°F to 89.6°F. Mean maximum average air temperature during summer months ranged from 93.2°F to 98.2°F. In winter months (December through March), mean daily maximum average air temperatures ranged from 51.3°F and 52.8°F. Mean daily minimum average air temperature ranged from 23.1°F to 47.9°F across 2020-2024

On average, 11.6 inches of precipitation fell each year between 2020 and 2024. Mean monthly precipitation for the area ranged from about 0.01 inches in July to 3.41 inches in December. Most precipitation occurred between December and April, with usually less than a mean of 0.5 inches per month falling from May to November.

The prevailing wind direction in the unit is from the north-northwest, except for the months of November through February. During these months, the winds originate from the east-northeast, due to winter storms. The area is susceptible to very strong winds due to its proximity to the Tejon Pass.

Hydrology/Watersheds

Most of Hungry Valley SVRA falls within the Upper Piru Creek Watershed, but a small area on the northern tip of the park falls within the Grapevine Creek Watershed (Figure 5). In the Piru Creek Watershed portion of the park, the Cañada de Los Alamos and Gorman Creek are the two main tributaries within the park that empty into Pyramid Lake, which is a State Water Project reservoir created to supply Southern California with municipal water. Pyramid Lake is south of the park along I-5 and a few miles from Hungry Valley SVRA's south entrance. The small northern area of Hungry Valley SVRA that falls within the Grapevine Creek Watershed drains into Castac Lake, which is a natural lake a few miles northeast of Hungry Valley SVRA. The water supply for Hungry Valley SVRA facilities comes from groundwater wells (Figure 6).

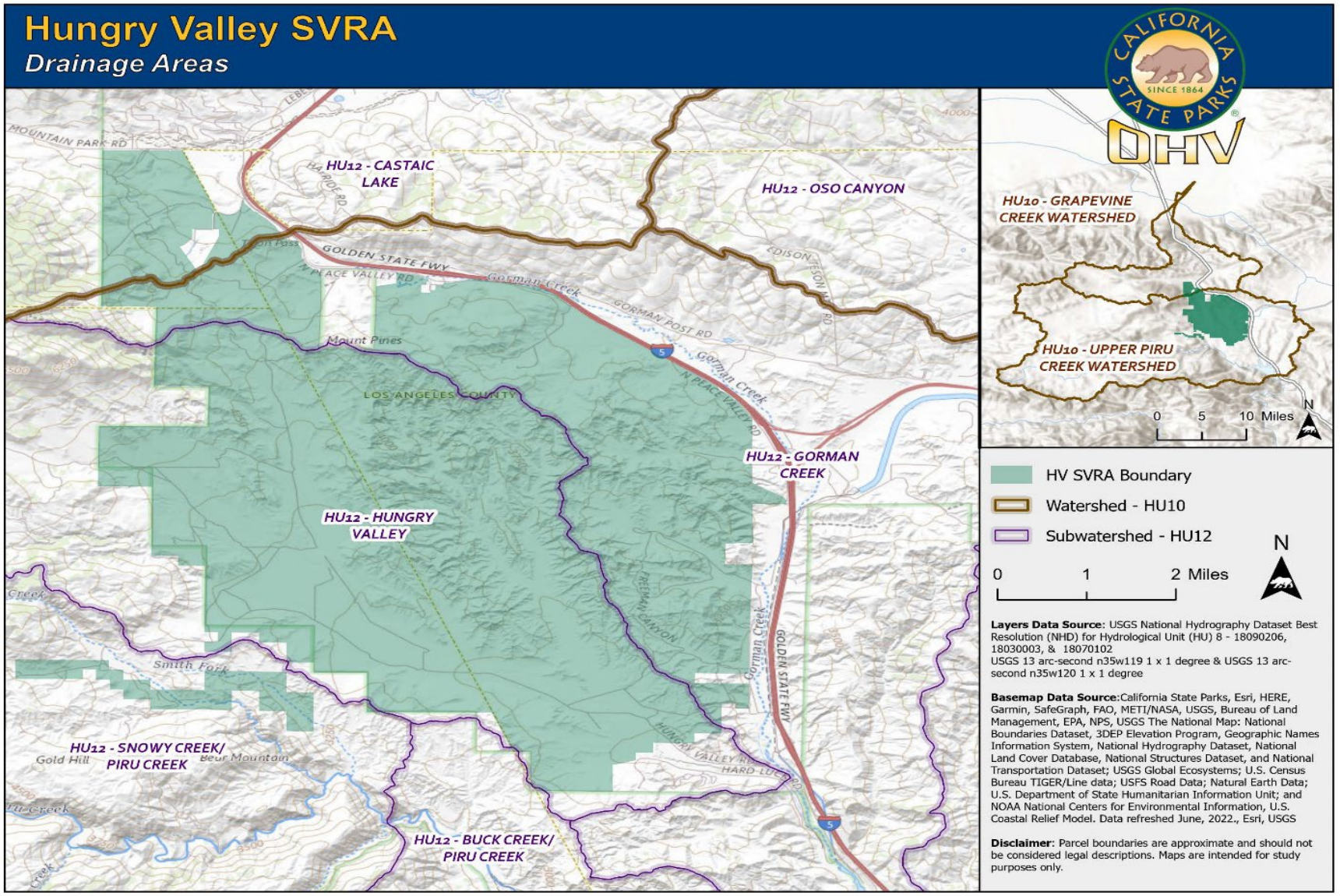

Figure 5. Hungry Valley SVRA and surrounding watersheds that intersect the park

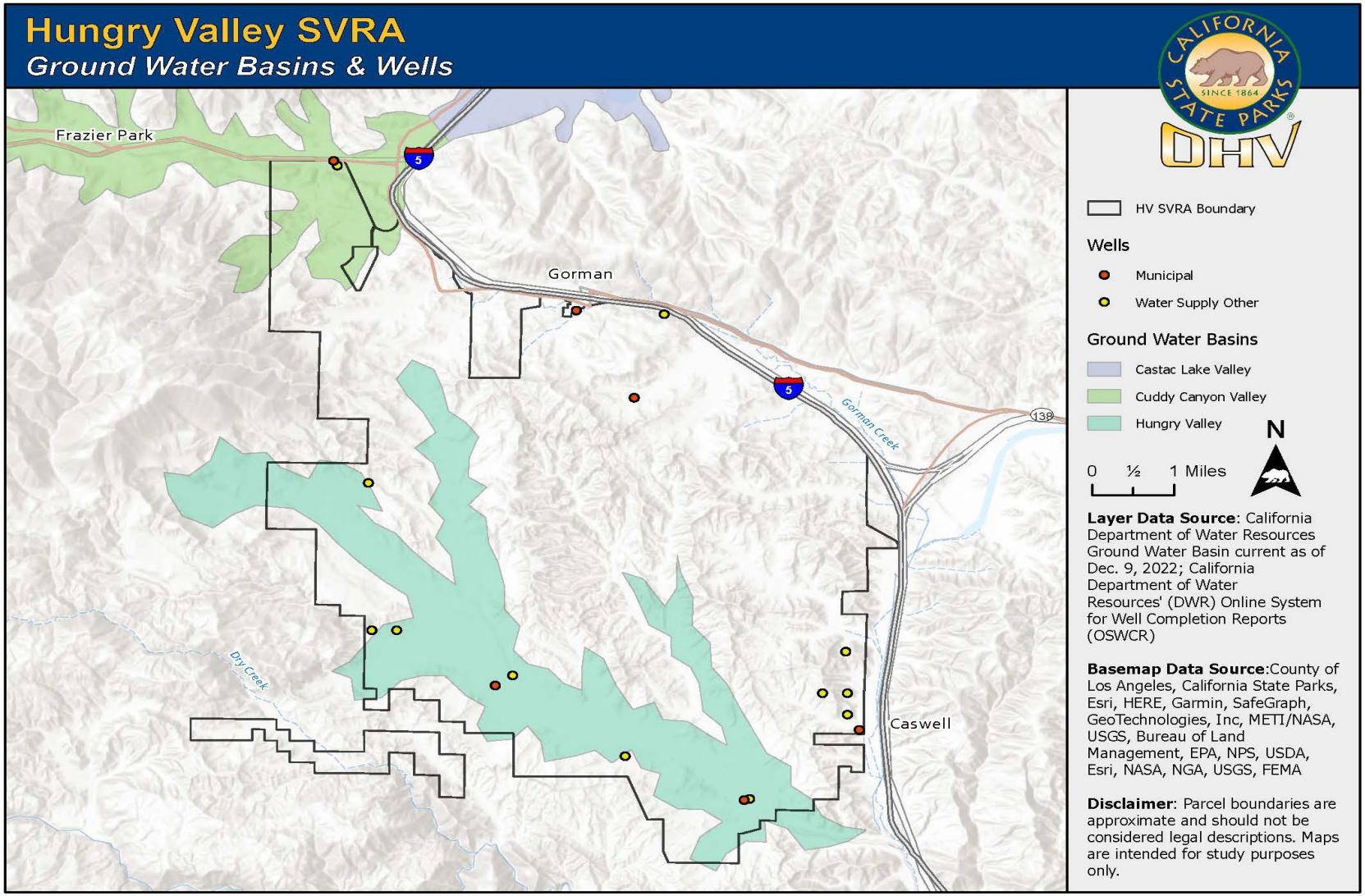

Figure 6. Hungry Valley SVRA groundwater basins and wells.

The streams in Hungry Valley SVRA are all ephemeral, except for a small section of the Cañada de Los Alamos in Lower (southern) Hungry Valley, which has a small summer base flow, and a small perennial spring in the Oak Preserve (Figure 7). Generally, the creek channels within and near the SVRA are incised. Peak flows in the creek channels occur during or shortly after storm events. Between storms, there is little or no water in streams. Creek channels transport sediment and provide surface water drainage.

Geology

Hungry Valley SVRA is in the Transverse Ranges geomorphic province. The San Andreas Fault, which is the tectonic boundary between the Pacific oceanic plate and the North American continental plate, traces along the northeast boundary of the SVRA.

Hungry Valley SVRA lies in a large inter-montane basin, termed Ridge Basin, which is filled with clastic sediments. The late Cenozoic sediments are derived primarily from highlands consisting of pre-Cenozoic metamorphic and igneous rocks and were deposited in a terrestrial environment. The Ridge Basin is bounded by the San Gabriel Fault to the southwest and the Clearwater, Liebre, San Andreas, and other faults to the east and northeast. Later, deformation, uplift, and erosion gave rise to an exposed sedimentary sequence called the Ridge Basin Group, which dips to the northwest and is approximately 29,000 feet thick. This is one of the thickest known sequences of terrestrial upper Miocene and Pliocene rocks in North America.

Soils

Hungry Valley SVRA's topographical features are reflected in the soils (Figure 8). Broadly, the northern part of the park is made up of clay soils that become slippery when saturated, requiring trail closures after heavy precipitation. The southern part of the park is sandier, and so the soils drain well during and after precipitation events, making the trails less susceptible to erosion. That said, these sandy soils tend to dry out more quickly after rainfall. If work along these southern trails is necessary, it is important to work expediently following precipitation events to ensure the soil has appropriate moisture content to ensure proper compaction of earth materials.

In the uplands, there are Gorman soils on rolling hills; Saugus soils and eroded Gorman soils on gullied, rugged hills; and Hanford soils on gullied, steep-walled canyons. The “basin soils” (collectively the Hanford, Greenfield, Ramona, and Oak Glen soils) are found in the broad, flat Hungry Valley.

The Gorman soils are found on slopes of 9 to 50 percent and are formed from alluvial materials derived from granitic rock. The more rugged hills along the western boundary and in the eastern half of the unit have soils with a sandy loam or loam texture. These areas are mapped as Gorman and Saugus soils and characterized as gullied and rough broken lands. Saugus soils are formed on loosely consolidated sandstone and mudstone. The slopes of the hills are up to 90 percent. Many hills have been cut by gullies, and many landslides are present. In the deeper gullied areas, bedrock is exposed in the incised channels.

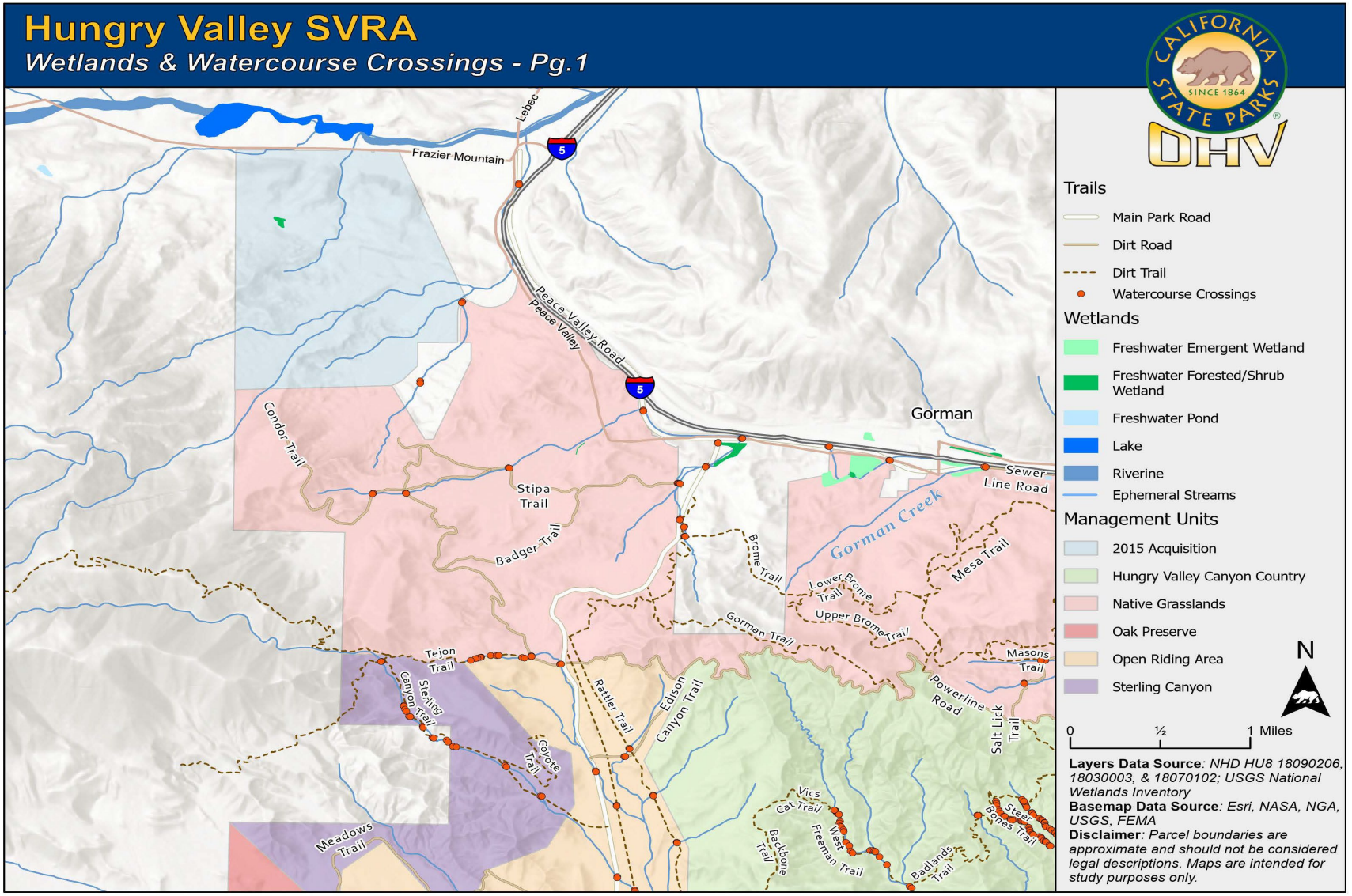

Figure 7. Wetlands, waterways, and watercourse crossings within and surrounding Hungry Valley SVRA management units

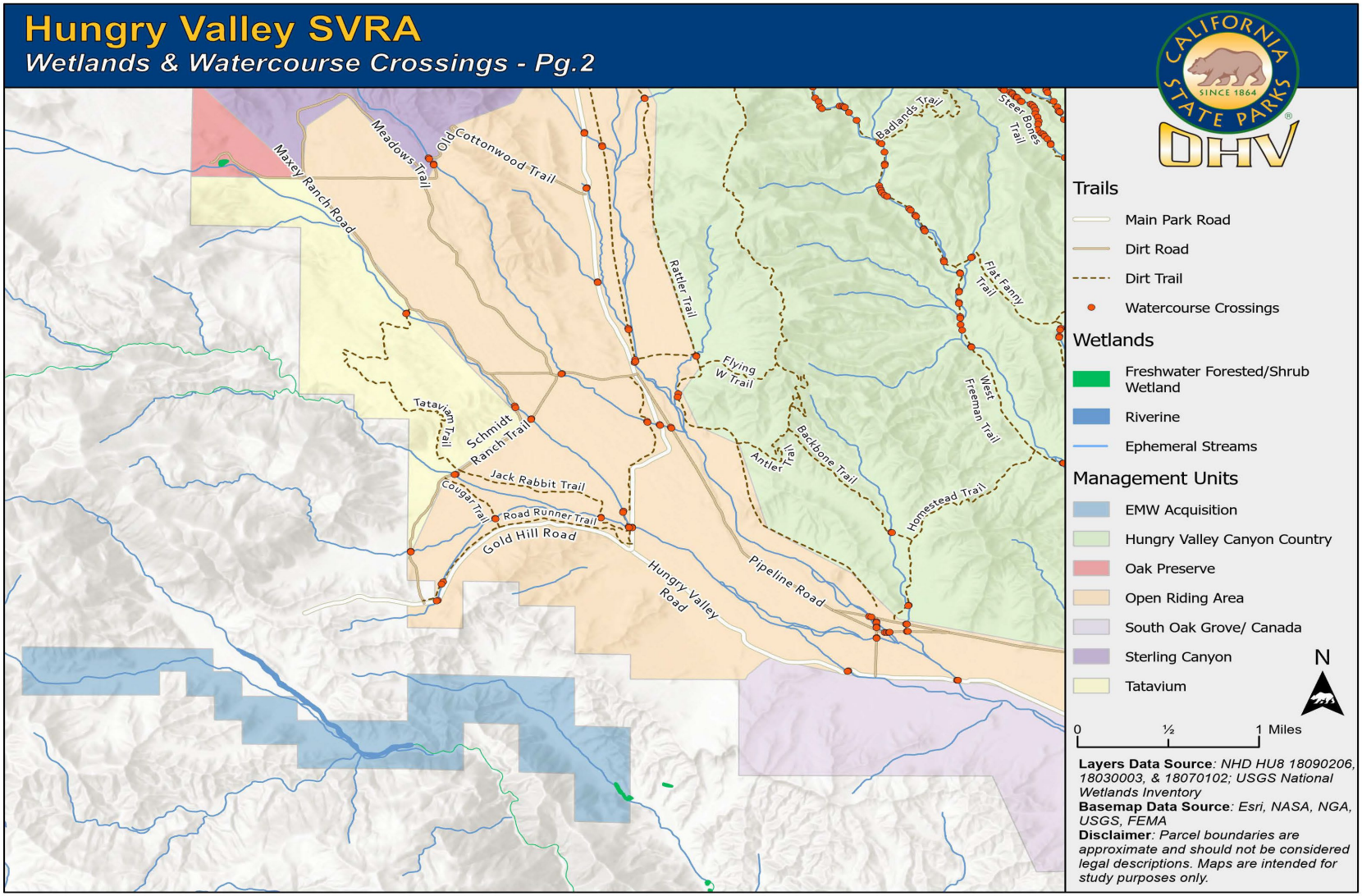

Figure 7, Page 2. Wetlands, waterways, and watercourse crossings within and surrounding Hungry Valley SVRA managements units.

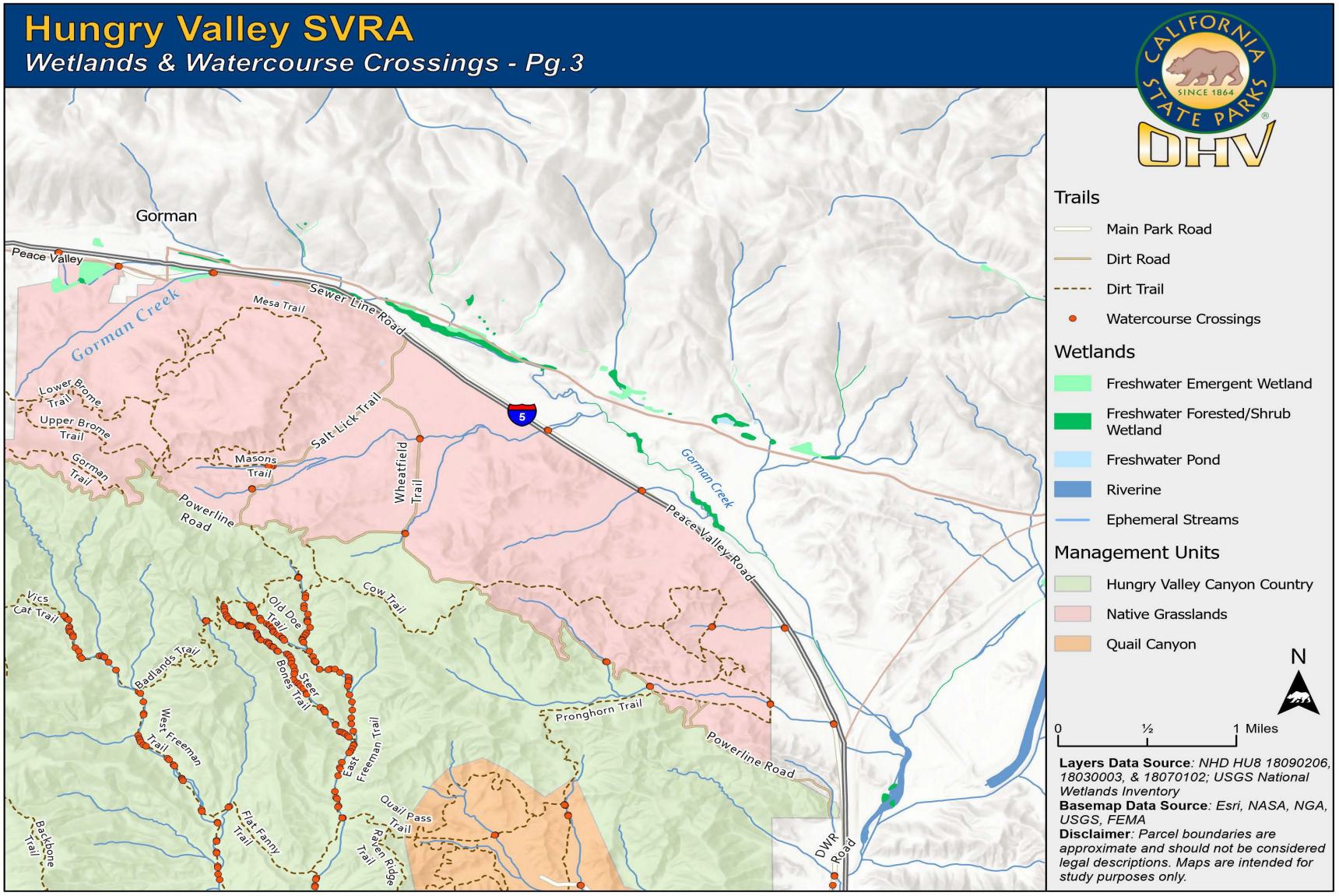

Figure 7, page 3. Wetlands, waterways, and watercourse crossings within and surrounding Hungry Valley SVRA managements units.

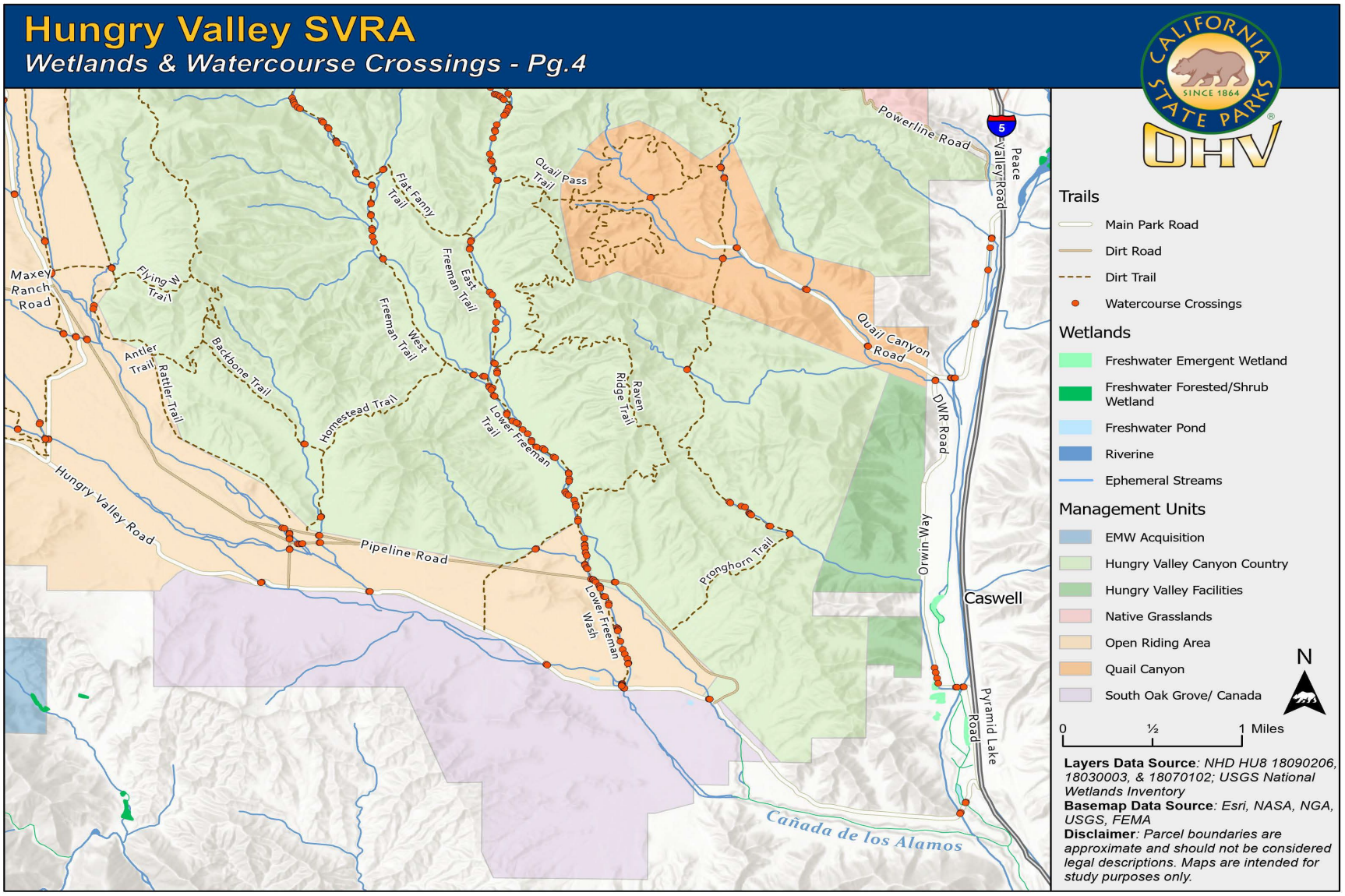

Figure 7, page 4. Wetlands, waterways, and watercourse crossings within and surrounding Hungry Valley SVRA managements units.

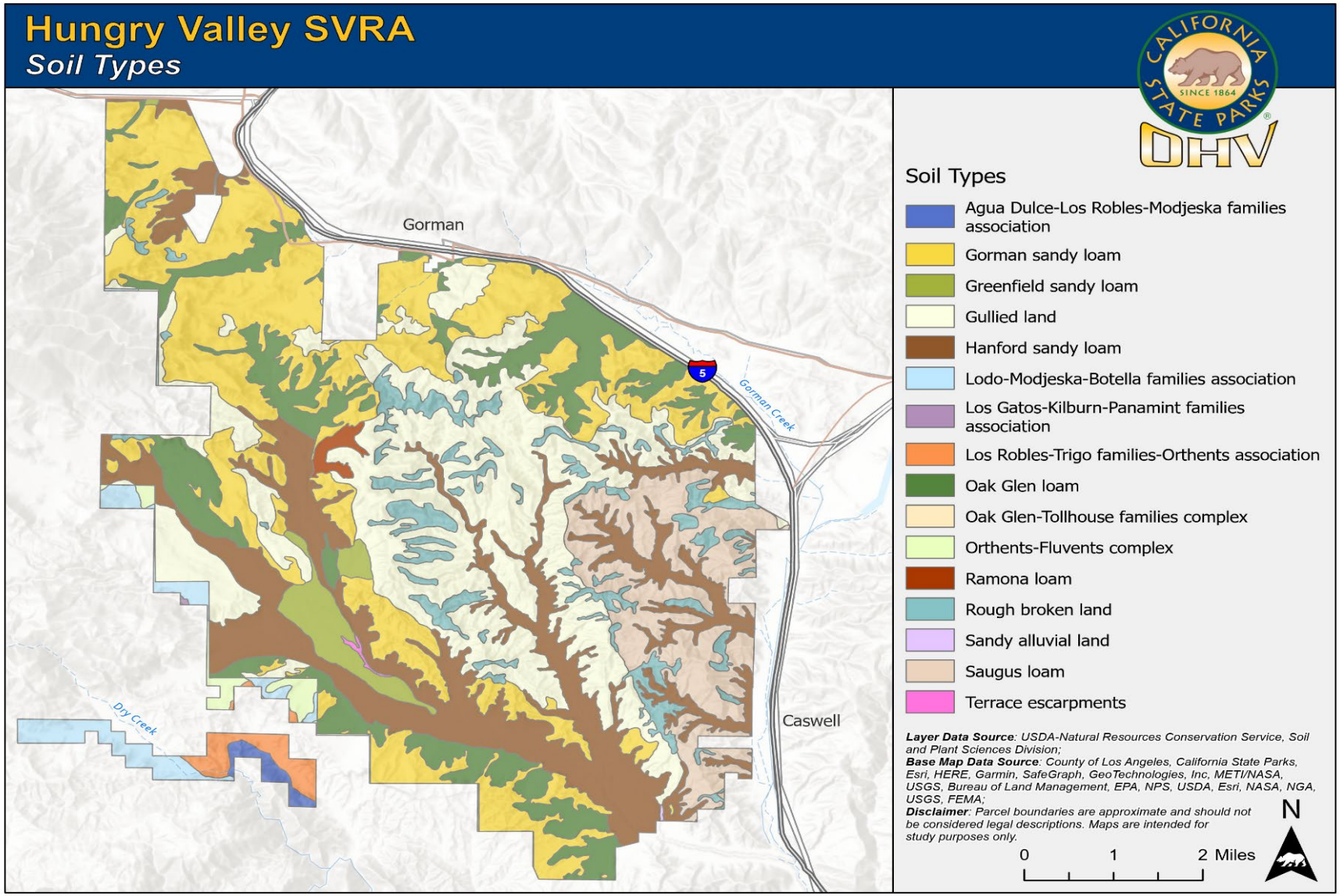

Figure 8. Hungry Valley SVRA soil types

The basin soils are formed by the draining of the intermediate streams found in Hungry Valley. Soils formed by this process are deep, well drained, moderately coarse textured, and on gentle slopes between 0 and 15 percent. When these soils are undisturbed, erosion hazard is slight. Plant cover is sparse and provides less soil protective cover than grasslands. When the vegetation is disturbed, the erosion hazard is high, and gullies often form rapidly.

Oak Glen and Ramona soils are found on the older alluvial fans, Greenfield soils are on low alluvial terraces, and Hanford soils are in and around the streambeds. The Oak Glen soils have higher organic matter content than the Hanford soils. Soil conditions also vary with depth in comparison with the surface soil. The Ramona soils have much more clay below the surface, whereas the Greenfield soils have only slightly more clay below the surface. At the mouth of Freeman Canyon and on fans facing I-5, the Hanford soils have accumulated calcium carbonate in the subsoil.

2.2 Resource Management Units

Resource Management Units (MUs) provide a structure for implementing natural resource management activities. MUs are defined areas of land with unique identifiers that constitute manageable-sized areas for organizing and scheduling management work (CDPR 2021b).

MUs were established at Hungry Valley SVRA in 2020 to provide a structure for implementing and organizing maintenance and natural resource management activities. Delineation of Hungry Valley SVRA MUs was based on vegetation community differences, OHV use type, land acquisitions, Natural Preserve status, and routine maintenance and management needs (Table 1, Figure 9). For those units that do not allow larger vehicles, trail limiters are installed. These limiters prevent larger OHVs from accessing certain trails that are designated for all-terrain vehicles (ATVs) and/or motorcycles. If there are any changes in use patterns in the MUs, that will be described in future WHPP updates.

2.2.1 Description of Resource Management Units

Table 1. Hungry Valley SVRA management unit (MU) descriptions.

Number	MU Name	Dominant Vegetation Community	OHV Use Type (open riding or trails)
1	Oak Preserve	Pinyon-oak-juniper-yucca woodland	Full size dirt road / hiking trail (No public driving other than park employees and private property owners behind park)
2	Native Grasslands	Grasslands / Rabbitbrush-sagebrush shrubland / Riparian	Full size trails for any OHV (Riders must stay on trails only)

Number	MU Name	Dominant Vegetation Community	OHV Use Type (open riding or trails)
3	2015 Acquisition	Grasslands / Oak woodland / Rabbitbrush-sagebrush shrubland / Badlands	Full size dirt roads (Closed to the public, anticipated opening in 2025 General Plan update)
4	Quail Canyon	Oak-juniper-yucca woodland / Rabbitbrush-sagebrush shrubland	Full size dirt road and parking lot / Motocross track (for dirt bikes only) / Full size trails (Riders must stay on trails)
5	Egget / Marjay / Ward (EMW) Acquisition	Pinyon-oak-juniper-yucca woodland / Rabbitbrush-sagebrush shrubland	Full size dirt roads (Closed to the public)
6	Open Riding Area	Juniper-yucca open woodland	Mix of full size through single track (Riders may ride wherever they want)
7	Sterling Canyon	Pinyon-oak-juniper-yucca woodland	Full size OHV trails
8	Tatavium	Pinyon-oak-juniper-yucca woodland	ATV trails
9	Hungry Valley Canyon Country	Oak-juniper-yucca woodland / Chaparral	Mix of single track through full size trails
10	South Oak Grove / Cañada	Oak woodland / Rabbitbrush-sagebrush shrubland / Riparian	Full size dirt road (Riders must stay on road)
11	Hungry Valley Facilities	Juniper-yucca open woodland	Full size paved roads and trails only accessible by staff

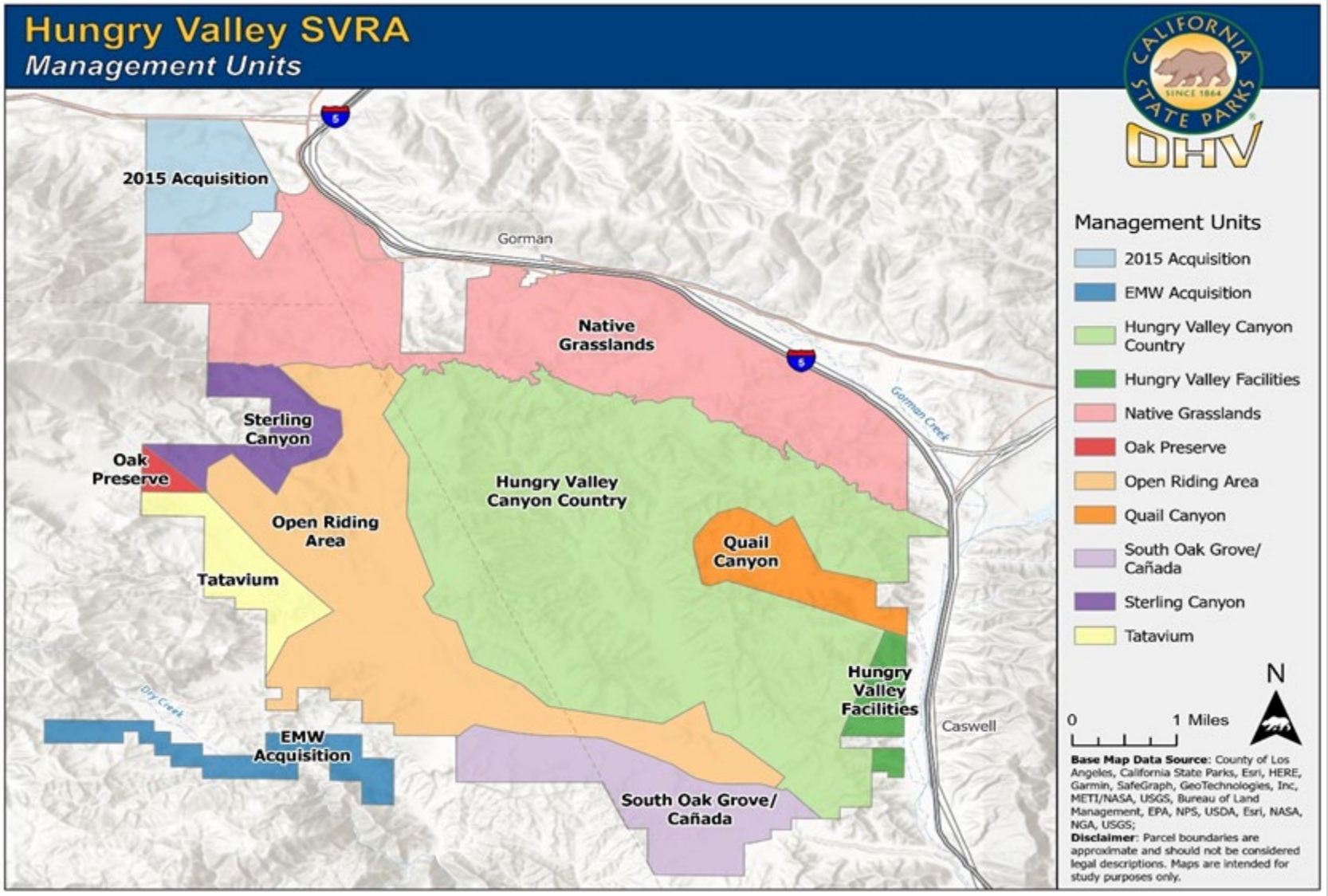

Figure 9. The 11 management units (MUs) of Hungry Valley SVRA.

Oak Preserve Management Unit

Oak Preserve: The site history of this unit includes being a significant area for Native American gatherings as well as a part of Maxey Ranch used for homesteading. The Maxeys gifted this 60-acre area to State Parks in the 1980s and it was designated a Natural Preserve. The unique mix of vegetation includes pinyon pine, juniper, immense valley oaks, riparian shrubs, chaparral yucca, and native grasses and forbs. This area is a designated Natural Preserve only open to foot traffic and private resident vehicle traffic via a dirt road that leads to private properties to the west of Hungry Valley SVRA. These properties include the Maxey Ranch and a hemp farm. The Oak Preserve contains a freshwater spring that flows perennially. The Oak Preserve MU has been delineated as a management unit because of its Natural Preserve status, unique vegetation community, and cultural significance.

Native Grasslands Management Unit

Native Grasslands: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. The dominant vegetation community is composed of naturalized annual and native perennial grasses as well as rabbitbrush-sagebrush shrubland. The trails in this area are designated as trails-only for OHV use and can accommodate vehicles as large as 4x4 trucks. Trails in this area are susceptible to degradation in wet weather, and therefore are subject to closure after rain or snowfall. This area is also popular for non-OHV enthusiasts during the wildflower season as they drive around enjoying the flower blooms from their vehicles. This area requires management of invasive plant species, such as dalmatian toadflax, through pesticide application as well as a biocontrol weevil (*Mecinus janthiniformis*). Dalmatian toadflax was originally used as an ornamental plant that became very invasive in rangelands and wildlands. The cause of introduction of this plant into Hungry Valley SVRA is unknown but may have come from early homesteaders or the I-5 freeway. On the far edge of the grasslands just to the west of I-5 is a small section of riparian area comprised of cottonwood and willow trees. The riparian area also requires invasive plant management, mainly pepperweed removal. The Native Grasslands MU has been delineated as a management unit because of its unique vegetation community and similar management requirements across the MU.

2015 Acquisition Management Unit

2015 Acquisition: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. The dominant vegetation community is composed of naturalized annual and native perennial grasses as well as oak woodland and rabbitbrush-sagebrush shrubland. Pinyon pine woodland was prominent in the area, but it burned in the 2013 Grand Fire and has not regenerated. There is currently no public vehicular access to this area of the park, but it is anticipated to open in the future when the Hungry Valley SVRA General Plan is updated. The dirt roads in this area were put in place by Southern California Edison utility company so they could access their power towers. This area requires management of invasive plant species, such as dalmatian toadflax, through pesticide application. The cause of introduction of this plant into Hungry Valley SVRA is unknown but

may have come from early homesteaders or the I-5 freeway. The 2015 Acquisition MU has been delineated as a management unit because it is a recently acquired state park property, has a unique vegetation community, and has similar management requirements across the MU.

Quail Canyon Management Unit

Quail Canyon: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. The dominant vegetation community is composed of oak-juniper-yucca woodland as well as rabbitbrush-sagebrush shrubland. This area includes an enclosed motocross track and a trail that leads from Quail Canyon into the main park. The Quail Canyon MU has been delineated as a management unit because it has a unique OHV use type of a closed course motocross track, special event area, and requires similar management strategies across the MU. Special events occur at Quail Canyon approximately four to eight times in a calendar year. Examples of these special events include Babes in the Dirt (an all-female dirt bike club), motocross grand prix, and various film shoots. This area requires constant monitoring of the motocross track soil levels to keep track features suitable for high quality recreation.

EMW Acquisition Management Unit

Egget / Marjay / Ward (EMW) Acquisition: The site history of this unit includes homestead ranching and a private campground. The name EMW comes from the three different historical landowners of the area (Egget, Marjay, and Ward). Part of the unit contained a private campground that went out of service sometime in the early 2000s when it was sold to the state. Part of this unit burned in the 2012 Hill Fire. The dominant vegetation community is composed of pinyon pine, juniper, scrub oak, and yucca plant communities as well as rabbitbrush-sagebrush shrubland. There is one dirt road in this unit that can accommodate vehicles as large as 4x4 trucks. The dirt road was likely created by the first landowners. There is no public vehicular access to this area of the park as it is currently closed. The EMW Acquisition MU has been delineated as a management unit because this land acquisition has never been monitored for flora and fauna, and it is separate from the rest of the park.

Open Riding Area Management Unit

Open Riding Area: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. This is the only remaining open riding area in the park since the land was purchased in 1980. The dominant vegetation community is composed of juniper-yucca open woodland. In addition to open riding, there are designated trails in this area ranging in size from 4x4 truck to motorcycle single track. The area also contains all 11 of the park's campgrounds, along with ATV and motorcycle practice tracks and a 4x4 practice course. The area consists of many rider-created trails called volunteer trails. Many of these volunteer trails are redundant and remove vegetative habitat from the area creating loose soils. Only designated trails are maintained by Hungry Valley SVRA

heavy equipment operators. This area requires management through rehabilitation of volunteer trails because of its open riding status. The goal of rehabilitating volunteer trails is to reduce redundant trails that all lead to the same area, increase vegetative cover, and increase soil stability. The Open Riding Area MU has been delineated as a management unit because of its open riding status and similar management requirements across the MU.2.1

Sterling Canyon Management Unit

Sterling Canyon: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. The dominant vegetation community is composed of pinyon-oak-juniper-yucca woodland. Pinyon pine woodland was prominent in the area, but it burned in the 2013 Grand Fire and has not completely regenerated. The trails in this area are designated as trails-only for OHV use and can accommodate vehicles as large as 4x4 trucks. Trails in this area are susceptible to high degradation in wet weather, which is why this area is often closed after rain or snowfall. The trail system is characterized by a trail running along a steep canyon with loose soils and large rocks. The Sterling Canyon MU has been delineated as a management unit because of its vegetation community and similar management requirements across the MU.

Tatavium Management Unit

Tatavium: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. The dominant vegetation community is composed of pinyon-oak-juniper-yucca woodland. This area is designated as trails-only for OHV use and can accommodate vehicles as large as ATVs.

This area was a part of two illegal marijuana grow operations that were discovered in May 2016. After Rangers apprehended the individuals involved, cleanup of the grow sites was planned. In December 2021, the California State Parks Special Enforcement Team came to Hungry Valley SVRA and cleaned the area. Black pipes were gathered, piled, and removed by helicopter. Pesticides from the illegal grow still remain on site until they can be disposed of properly in the future. The marijuana grow was in a remote location and did not affect OHV use in the area. The Tatavium MU has been delineated as a management unit because of its vegetation community and similar management requirements across the MU.

Hungry Valley Canyon Country Management Unit

Hungry Valley Canyon Country: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. This area was also culturally significant to the Native American population as evidenced by discovered cultural artifacts. The dominant vegetation community is composed of oak-juniper-yucca woodland and chaparral. Trails in the unit are in sandy washes in the valley floors of the canyons. The canyon walls are too steep and erodible for OHV access. Additionally, because canyon walls are so steep and soils are so loose, the area is subject to potential slumping of land

from the steep canyon sides and is also prone to landslides. This area is designated as trails-only for OHV use and can accommodate vehicles as large as 4x4 trucks. The Hungry Valley Canyon Country MU has been delineated as a management unit because of its unique geology, vegetation community, and similar management requirements across the MU.

South Oak Grove / Cañada Management Unit

South Oak Grove / Cañada: The site history of this unit includes homestead ranching and grazing as well as unmanaged OHV riding before Hungry Valley SVRA became a state park. This area is also culturally significant because of its use by the Native American population. The dominant vegetation community is composed of valley oak and rabbitbrush-sagebrush shrubland along with a riparian area dominated by cottonwoods and willows. This unit contains one of the main roadways into Hungry Valley SVRA, called Hungry Valley Road. Besides the road, there are no other trails in this area and no new trails are planned. This area is seen as a buffer zone between Hungry Valley SVRA and Angeles National Forest as it transitions from OHV riding at Hungry Valley SVRA to non-OHV riding and a campground on United States Forest Service land. The South Oak Grove / Cañada MU has been delineated as a management unit because of the unique vegetation community.

Hungry Valley Facilities Management Unit

Hungry Valley Facilities: The site history of this unit includes historic hunting shacks, private inholdings, and a passageway for historic travelers on what is now the I-5 freeway. The dominant vegetation community is composed of juniper-yucca open woodland. This area contains the Hungry Valley facilities, which include housing, a dormitory, and offices. This area is not open to OHV riding and is mainly used by Hungry Valley SVRA employees. The public does not use this area to access the park except for on the main access road (Orwin Way) that runs along the southeastern boundary of the park and leads to the park's south entrance. Staff use connector trails in this area to access the park via OHVs. The Hungry Valley Facilities MU has been delineated as a management unit because of similar management requirements across the MU.

2.3 Natural Resource Assessments

The natural resource assessments include an overview of PRC-required native vegetation and wildlife inventories, invasive species of concern, and details regarding sensitive resources and wildlife movement, including landscape connectivity. An assessment helps determine important conservation issues to consider and is the first step upon which adaptive management builds.

It is relevant to mention that in the process of finalizing the Hungry Valley SVRA WHPP, the Post Fire burned 10,064 acres across much of the eastern portion of Hungry Valley SVRA. Approximately twenty-five miles of dozer line were made in the park to protect infrastructure and prevent spread. Because of the large burn scar and miles of dozer line, the baseline

conditions described below are likely to change as vegetation and wildlife return to the burned areas. Future surveys will be conducted to gather baseline data post burn.

2.3.1 General Biological Assessments

From 1989-1990, a survey to inventory vegetation and wildlife at Hungry Valley SVRA was completed, a WHPP was created, and a monitoring program was developed (Kutilek et al. 1991). Using methodology and suggestions developed in the original inventory, in 1997, San Diego State University (McClenaghan et al. 1997) and Hungry Valley SVRA natural resources staff began performing yearly field assessments to continue inventorying vegetation and wildlife (described in Appendix 4) in order to identify, protect, and manage the park's existing native flora and fauna. Over the past 26 years, Hungry Valley SVRA natural resources staff have developed and updated a baseline species inventory by conducting surveys for vegetation, birds, small and large mammals, reptiles, amphibians, and bats.

2.3.2 Species Inventory

The species inventory discussed in this document is from the last 10 years, which represents the most current list of species found within the park. The current species inventory was compiled by first using data collected during field assessments. Twenty-two riding and non-riding Habitat Monitoring System (HMS) plots (plot selection described in Appendix 4) throughout the SVRA are utilized for these surveys (Table 2). The 11 original plots have been monitored consistently since 1997 for vegetation, birds (winter and spring), small mammals, and herpetofauna, except only seven herpetofauna plots were monitored in 1997, and winter bird surveys did not begin until 1998. Small mammals have been surveyed every other year, except in 1997 and 1998 when they were sampled two years in a row. In 2021, 11 new monitoring plots were added to increase monitoring efforts in the park and to add additional habitat comparisons. After 24 years of consistent annual monitoring, the 22 original and new plots are now monitored on an as-needed basis (except for birds, which are monitored at all 22 plots in winter and spring annually) to minimize disturbance to vegetation and wildlife communities at each location.

Hungry Valley SVRA's vegetation and wildlife species inventory (Appendix 2) has been updated and supplemented with records from established online databases, including the California Natural Diversity Database (CNDDB) run by the California Department of Fish and Wildlife (CDFW), the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) system, and California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California. Database records were searched based on a 12 United States Geological Survey 7.5' Quadrangle search methodology. The 12 quadrangles are Frazier Mountain, La Liebre Ranch, Lebec, Alamo Mountain, Black Mountain, Liebre Mountain, Cobblestone Mountain, Devils Heart Peak, Lockwood Valley, Cuddy Valley, Grapevine, and Pastoria Creek. After database records were queried, staff used field

observations, habitat requirements, and species' range estimates to validate probability of species occurrence.

Table 2. Details of the 22 Habitat Monitoring System (HMS) plots, including habitat type and riding status.

Plot ID #	General Habitat Type	Riding/Non-riding
7	Annual Grassland	Riding
14	Mixed Shrub	Non-riding
18	Mixed Shrub	Riding
24	Mixed Woodland	Riding
41	Juniper Shrub	Riding
45	Juniper Shrub	Non-riding
57	Perennial Grassland	Non-riding
72	Oak Woodland	Non-riding
77	Mixed Woodland	Non-riding
79	Mixed Woodland	Non-riding
101	Riparian	Non-riding
102	Mixed Woodland	Non-riding
103	Mixed Shrub	Non-riding
104	Mixed Woodland	Riding
105	Mixed Woodland	Riding
106	Oak Woodland	Non-riding
107	Mixed Shrub	Non-riding
108	Mixed Shrub	Non-riding
109	Mixed Shrub	Non-riding
110	Mixed Shrub	Riding
111	Mixed Shrub	Riding
112	Mixed Shrub	Riding
The first 11 plots are the 11 original HMS plots, whereas the last 11 plots are the newer HMS plots that were established in 2021.		

2.3.3 Wildlife Inventory

Wildlife Species List

An inventory of Hungry Valley SVRA's known and potential wildlife species was developed as part of the WHPP to meet the legislative requirements of PRC §5090.35(c)(1), which calls for the Division to "compile and when determined by the department to be necessary, periodically review and update an inventory of wildlife populations...". Two methods, desktop research and field assessments, were used to compile a list of known and potential occurrences of different species populations that could or are known to occur within the SVRA's boundaries (Appendix 2: Wildlife and Plant Inventories). See Section 9, Appendix 4 for more details on the field assessment methods described below.

Bird Surveys

Bird surveys at Hungry Valley SVRA are conducted using the variable circular-plot method in winter (January) and late spring (June). These surveys allow State Parks to determine species presence and to calculate diversity and evenness at each plot. In 2020, Hungry Valley SVRA began collaborating with the Institute for Bird Populations (IBP) to monitor bird populations via acoustic monitors called Autonomous Recording Units (ARUs). For a detailed description of bird survey methods, see Appendix 4.

Mammal Surveys (Excluding Bats)

Small mammal live-trapping surveys are conducted in spring (approximately April-May). These surveys allow us to determine species presence and to calculate diversity and evenness at each plot. Large mammal presence monitoring has been completed in July of each year using game cameras. The photos are reviewed, and the number of species from each site is recorded. For a detailed description of mammal survey methods, see Appendix 4.

Herpetofauna (Reptiles and Amphibians) Surveys

Herpetofauna (reptile and amphibian) monitoring is completed each May. These surveys allow us to determine species presence and to calculate diversity and evenness at each plot. In 2020, a Blainville's Horned Lizard (*Phrynosoma blainvillii*) monitoring program was initiated and has continued through 2024. For a detailed description of herpetofauna survey methods, see Appendix 4.

Hungry Valley SVRA has few aquatic features, and the majority of the waterways are ephemeral. Amphibians have only been detected at a couple locations in the park with water features. Therefore, a targeted study is needed to gauge their current status.

Bat Acoustic Surveys

Bat acoustic surveys are conducted three times each year to document species diversity from multiple seasons and to detect migratory and non-migratory bat species. These surveys allow State Parks to determine species presence. For a detailed description of bat acoustic surveys, see Appendix 4.

2.3.4 Native Plant Community Inventory

Plant species list

Two methods, desktop research and field assessments, were used to compile a list of known and potential occurrences of different plant species that could or are known to occur within the SVRA's boundaries (Appendix 2: Wildlife and Plant Inventories). See Section 9 Appendix 4 for more details on the field assessment methods described below.

Vegetation community monitoring at HMS plots

From 1997 to 2021, vegetation community composition was monitored at 11 HMS survey locations using a CNPS transect survey protocol (McClenaghan et al. 1997), and 11 new HMS plots were added in 2021. However, beginning in 2021, NRD staff transitioned the vegetation community assessment from a transect-based survey to a plot-based survey, referred to as the combined Relevé and Rapid Assessment protocols. These are standard methods used by CNPS and CDFW to survey and describe vegetation communities (CNPS-CDFW 2016). The surveys use visual estimates to assess absolute cover of every species within either a fixed plot (for the "Relevé", which is used in herbaceous vegetation types) or a vegetation stand (for the "Rapid Assessment", which is used in shrub and tree vegetation types). In 2021, both the original transect-based survey protocol and the Relevé and Rapid Assessment protocols were done simultaneously at each monitoring location for the purpose of comparing results. SVRA staff determined that the latter methods provide a more comprehensive, detailed, and accurate assessment of the vegetation community, and using these methods will improve the ability to meaningfully evaluate change over time. The new methods still provide the same metrics as the original methods, such as species richness and cover. Starting in 2022, vegetation at the 22 HMS plots will be monitored in a rotation, where each set of 11 plots is monitored in the spring every three years or as needed based on new WHPP objectives. The first set of plots was monitored in 2021 and the second set in 2022, so the first set will be monitored again in 2024 and the second set in 2025.

Vegetation Community Classification and Mapping

Fine-scale vegetation community maps are an essential tool for natural resource management. They provide information about wildlife habitat and support management decisions regarding conservation, restoration, monitoring needs, and invasive species management. They also provide a baseline inventory for tracking land use, protection, and restoration actions undertaken at Hungry Valley SVRA.

Beginning in 2021, a new effort was undertaken by State Parks staff to map vegetation communities at the park using the state standard methods, which are developed and maintained by CDFW-CNPS's Vegetation Classification and Mapping Program (VegCAMP). VegCAMP classifies vegetation according to the National Vegetation Classification System standards, which is a hierarchal classification of vegetation types, with "association" (a characteristic suite of species) at the most granular level. Associations are grouped into alliances, alliances into groups, groups into macrogroups, and upwards. VegCAMP methods involve field sampling of vegetation communities within an area using Relevé and Rapid Assessment surveys, analyzing the data to produce a hierarchical classification, and creating a map by interpreting aerial imagery and field data to delineate vegetation stands digitally. VegCAMP maps generally delineate vegetation stands at the alliance level but may be mapped at lower or higher levels

depending on what is distinguishable in the field data and in aerial imagery. More information about these methods can be found on the VegCAMP website at wildlife.ca.gov/Data/VegCAMP.

The VegCAMP program is in the process of classifying and mapping the entire state, covering different ecoregions over time, each project expanding the statewide vegetation classification. At the time of this report, the region where Hungry Valley SVRA is located has not yet been covered. Therefore, State Parks staff followed VegCAMP methodology to map vegetation communities at the park using existing vegetation classifications when possible, and consulting with CDFW staff to create provisional vegetation types when needed. Field surveys were conducted in spring 2021 and 2022, data was analyzed and digitized with the help of a consultant (California State University Chico Geographic Information Center, personal communications), and an accuracy assessment was conducted by State Parks staff in spring 2023.

The results of this effort are presented below in Table 3 and Figures 10-16. The vegetation community names used here may change in the future as VegCAMP continues classifying vegetation and defining new alliances and associations in the state. More information about these vegetation alliances may be found in the Manual of California Vegetation (MCV) online at vegetation.cnps.org.

Sensitive Vegetation Communities

Native VegCAMP alliances and associations are ranked at the state level from S1 (very rare) to S5 (stable). Alliances or associations with a rank of S1, S2, or S3 are considered "Sensitive Natural Communities", which is a designation analogous to special-status species and should be similarly addressed in environmental review. The process of ranking and inventorying vegetation communities is ongoing as VegCAMP continues surveying and classifying California vegetation. More information and an updated list of sensitive natural communities may be found on the CDFW website. Known sensitive vegetation communities at Hungry Valley SVRA are noted with * in Table 3 below. These communities should be prioritized for protection, conservation, and restoration.

Table 3. Vegetation Community Types in Hungry Valley SVRA, Surveyed 2021-2023.

	Map Code	National Vegetation Classification System Name	Common Name	Sensitive (*)	Acres
Tree Vegetation Types	1	Pinus monophylla Alliance	Singleleaf pinyon woodland		671
	2	Juniperus californica Alliance	California juniper woodland		617
	3	Quercus lobata Alliance	Valley oak woodland	*	27
	4	Populus fremontii - Fraxinus velutina - Salix gooddingii Alliance	Fremont cottonwood woodland	*	4

	Map Code	National Vegetation Classification System Name	Common Name	Sensitive (*)	Acres
	5	Populus fremontii - Salix lucida ssp. lasiandra Association	Fremont cottonwood – red willow woodland	*	19
	6	Salix laevigata Association	Red willow woodland	*	26
Shrub Vegetation Types	7	Salix exigua Alliance	Sandbar willow thickets		5
	8	Salix lasiolepis Alliance	Arroyo willow thickets		4
	9	Adenostoma fasciculatum Alliance	Chamise chaparral		311
	10	Arctostaphylos glauca Alliance	Bigberry manzanita chaparral		60
	11	Quercus john-tuckeri Alliance	Tucker oak chaparral		942
	12	Quercus john-tuckeri / Juniperus californica / Ericameria linearifolia Association	Tucker oak/California juniper/Interior goldenbush chaparral	*	3,491
	13	Quercus john-tuckeri / Pinus monophylla – Pinus sabiniana Provisional Association	Tucker oak/Singleleaf pinyon chaparral (Provisional)	*	1,335
	14	Lotus scoparius – Lupinus albifrons – Eriodictyon spp. Alliance	Deerweed-silver lupine-yerba santa scrub		115
	15	Ericameria linearifolia - Cleome isomeris Alliance	Interior goldenbush - bladderpod scrub		178
	16	Central and South Coastal Californian Coastal Sage Scrub Group	Central and South Coastal Californian Coastal Sage Scrub Group		1,407
	17	Eriogonum fasciculatum Alliance	California buckwheat scrub		971
	18	Eriogonum fasciculatum – Hesperoyucca whipplei Association	California buckwheat - chaparral yucca scrub		1,913
	19	Hesperoyucca whipplei Provisional Alliance	Chaparral yucca scrub (Provisional)	*	34
	20	Salvia mellifera Alliance	Black sage scrub		606
	21	Lepidospartum squamatum Shrubland Alliance	Scale broom scrub	*	106
	22	Encelia (actonii, virginensis) - Viguiera reticulata Shrubland Alliance	Brittle brush scrub	*	10

	Map Code	National Vegetation Classification System Name	Common Name	Sensitive (*)	Acres
	23	Ericameria cooperi Provisional Alliance	Cooper's goldenbush scrub (Provisional)		653
	24	Ephedra viridis Alliance	Mormon tea scrub		104
	25	Ericameria nauseosa Alliance	Rubber rabbitbrush scrub		2,176
	26	Artemisia tridentata Alliance	Big sagebrush		300
	27	Artemisia tridentata – Ericameria nauseosa Association	Big sagebrush - rubber rabbitbrush scrub		437
	28	Ceanothus greggii - Fremontodendron californicum Shrubland Alliance	Ceanothus-flannelbush chaparral	*	6
	29	Intermontane Deep or Well-drained Soil Scrub Group	Intermontane Deep or Well-drained Soil Scrub Group		11
Herbaceous Vegetation Types	30	Mediterranean California Naturalized Annual and Perennial Grassland Group	Mediterranean California Naturalized Annual and Perennial Grassland Group		100
	31	California Annual Forb/Grass Vegetation Group	California Annual Forb/Grass Vegetation Group		2,099
	32	Eschscholzia californica Association	California poppy fields		702
	33	Arid West Freshwater Emergent Marsh Group	Arid West Freshwater Emergent Marsh Group		6
	34	Californian Warm Temperate Marsh/Seep Group	Californian Warm Temperate Marsh/Seep Group		3
	35	Naturalized Warm-Temperate Riparian and Wetland Group	Naturalized Warm-Temperate Riparian and Wetland Group		9
	36	Cliff, Scree, Rock outcrop	Cliff, Scree, Rock outcrop		34
	37	Urban	Urban		150
	38	Water	Water		1

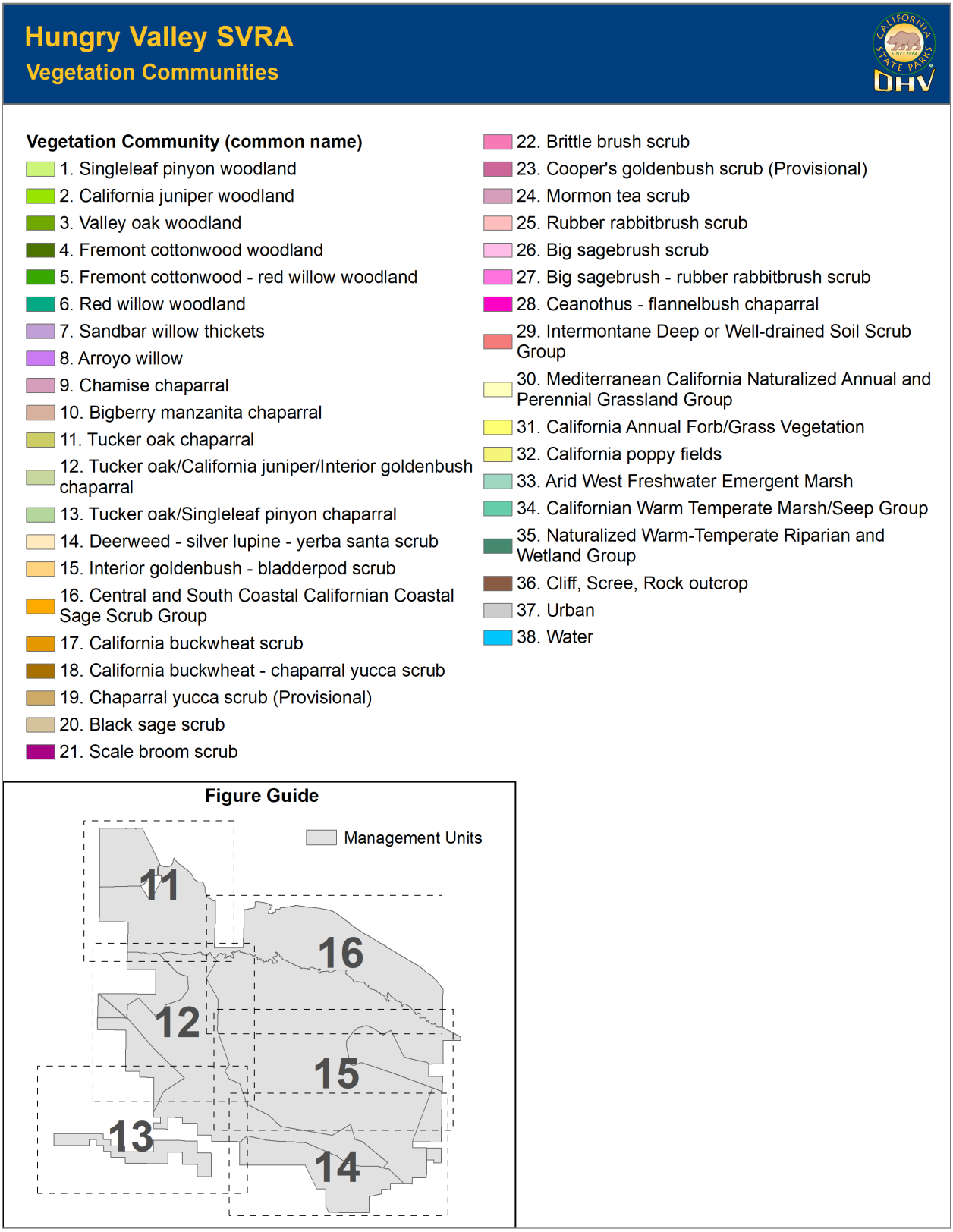

Figure 10. Key to vegetation communities mapped in Figures 11-16 below.

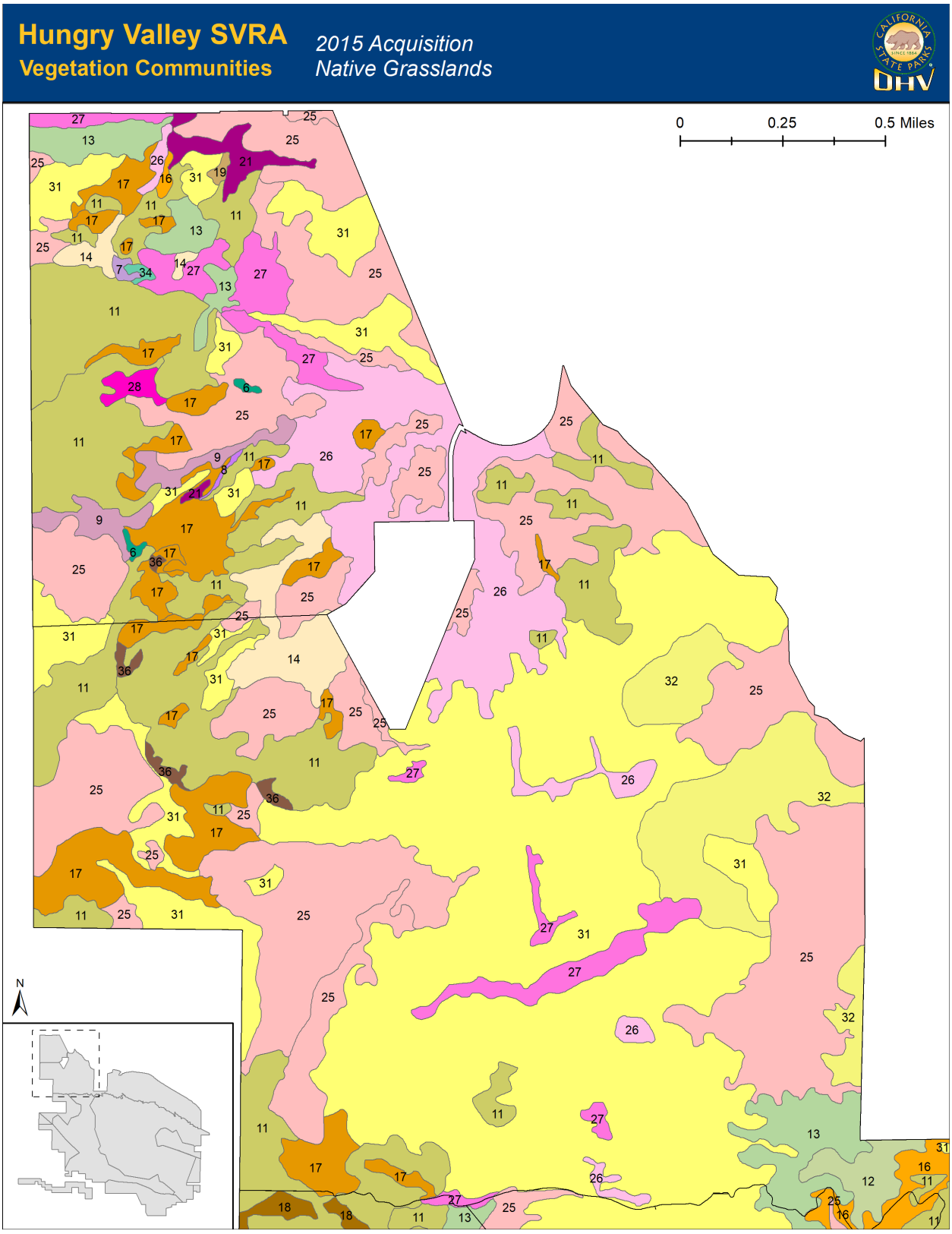

Figure 11. Vegetation communities in the 2015 Acquisition and Native Grasslands MUs

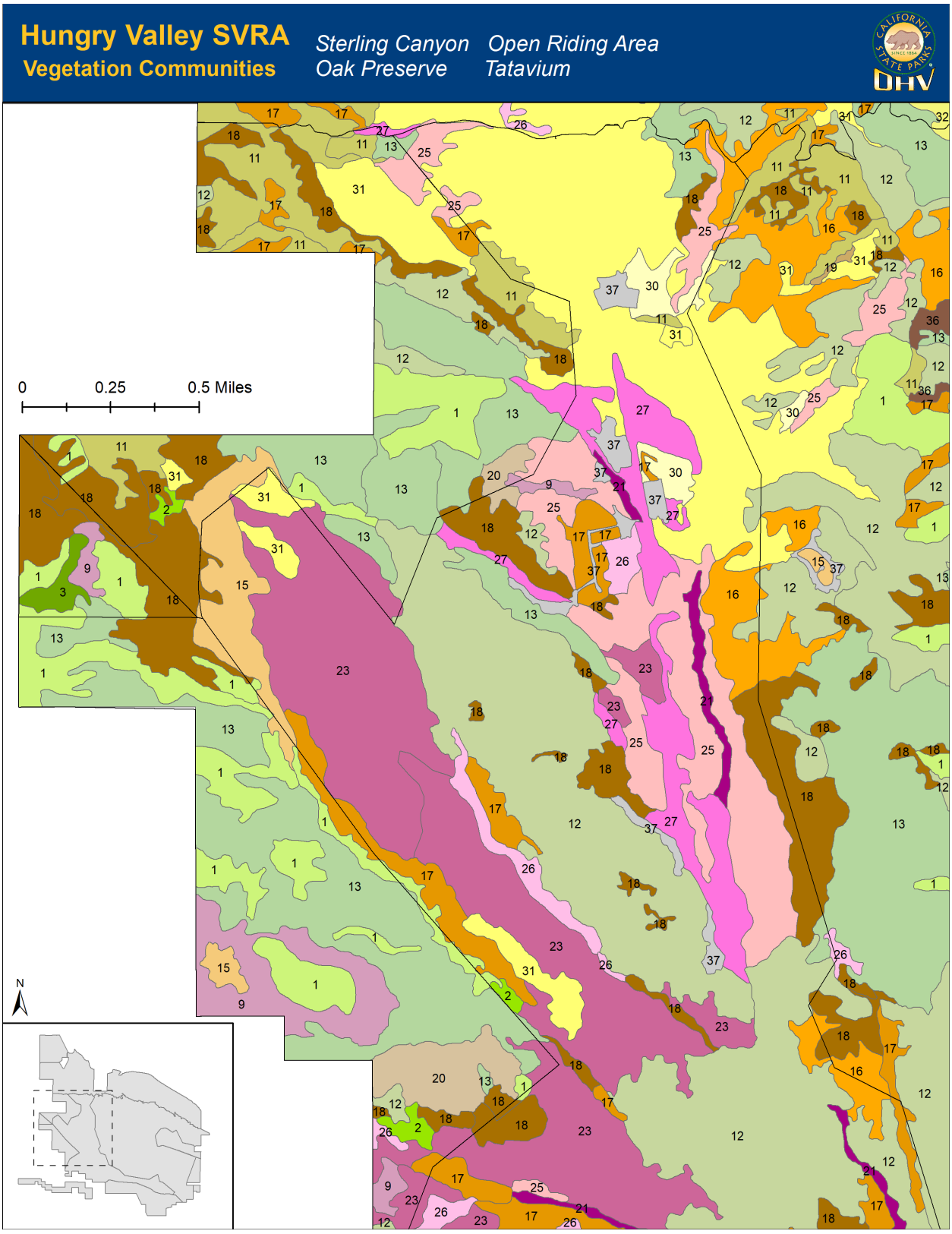

Figure 12. Vegetation communities in the Sterling Canyon, Oak Preserve, Open Riding Area, and Tatavium MUs.

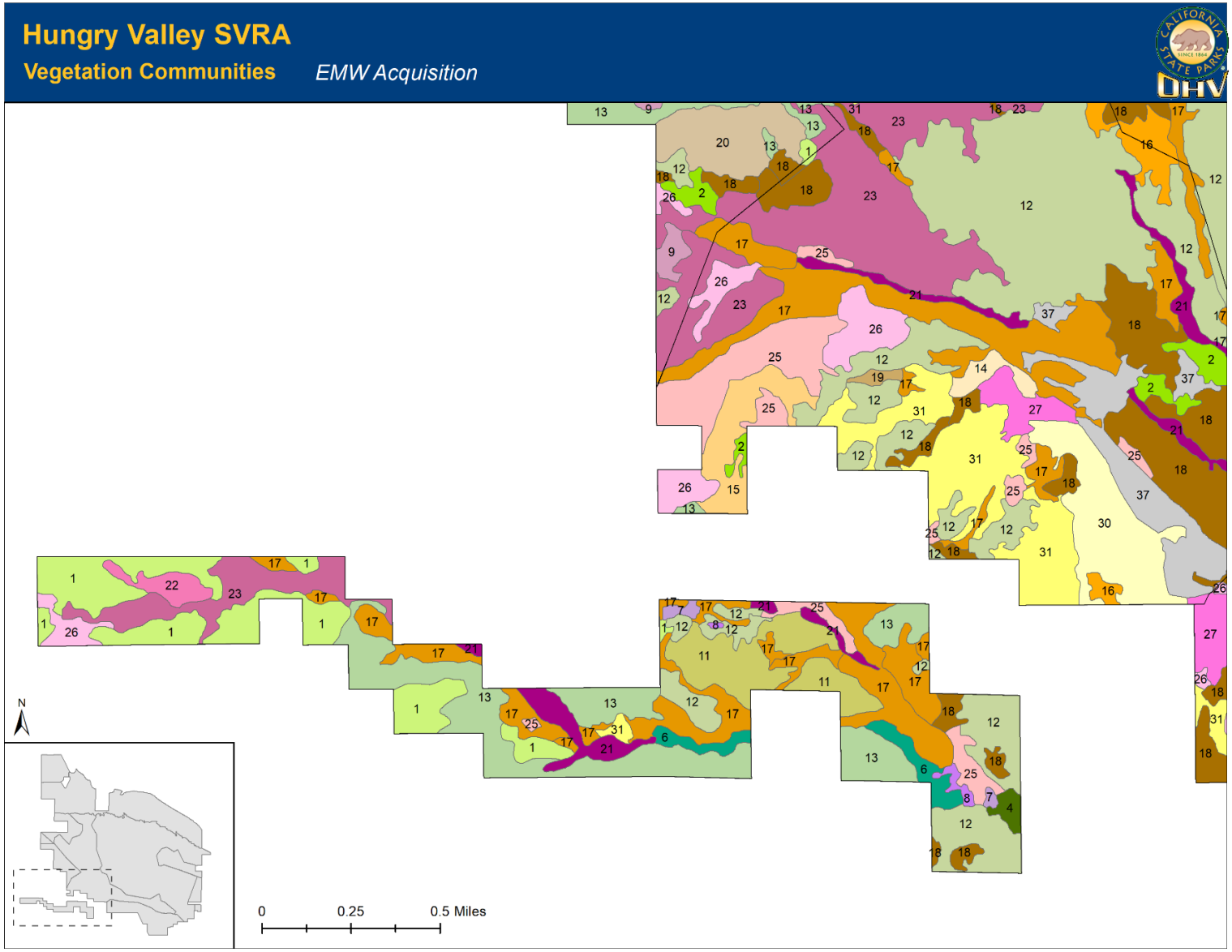

Figure 13. Vegetation communities in the EMW Acquisition.

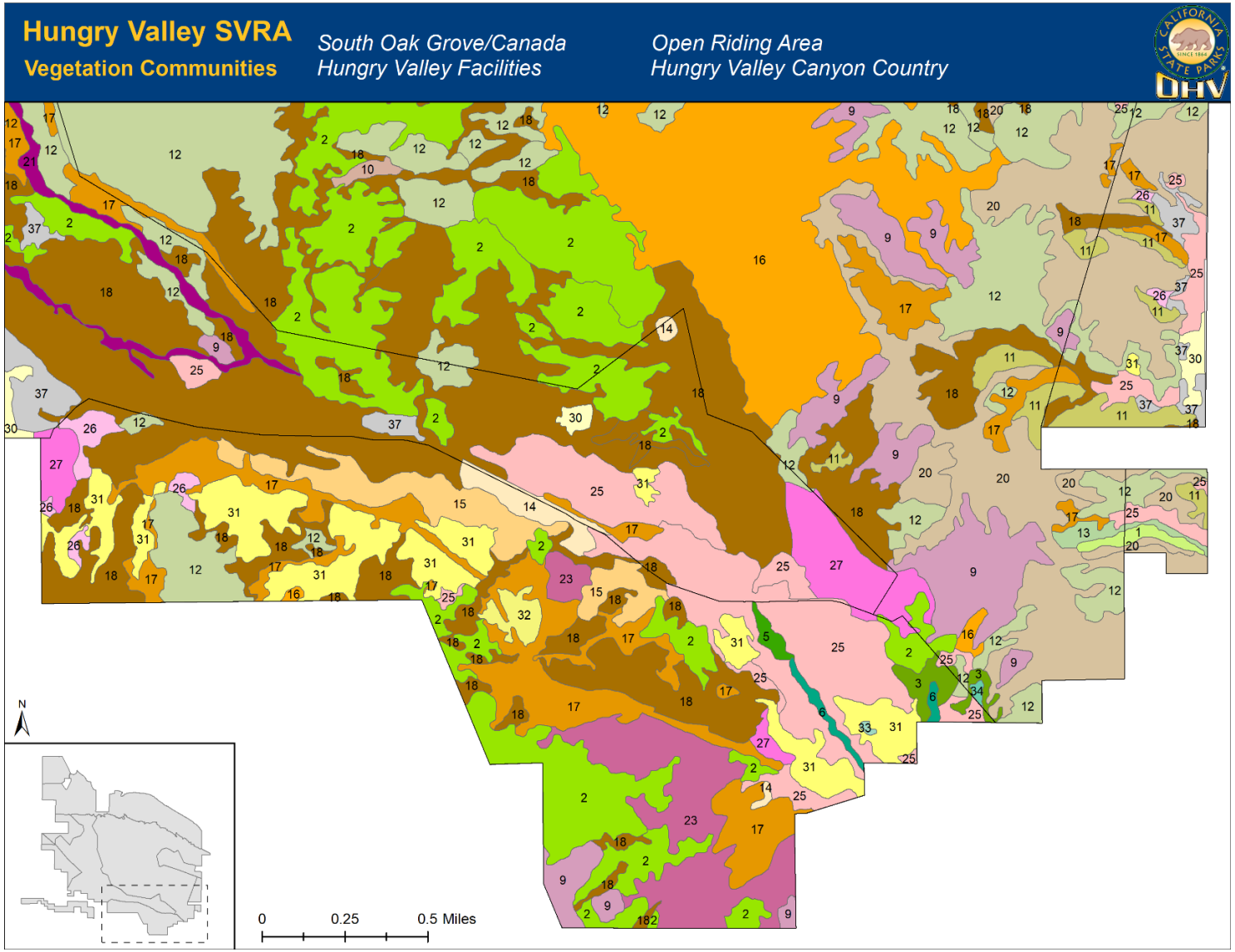

Figure 14. Vegetation communities in the South Oak Grove/Canada, Hungry Valley Facilities, Open Riding Area, and Hungry Valley Canyon Country MUs.

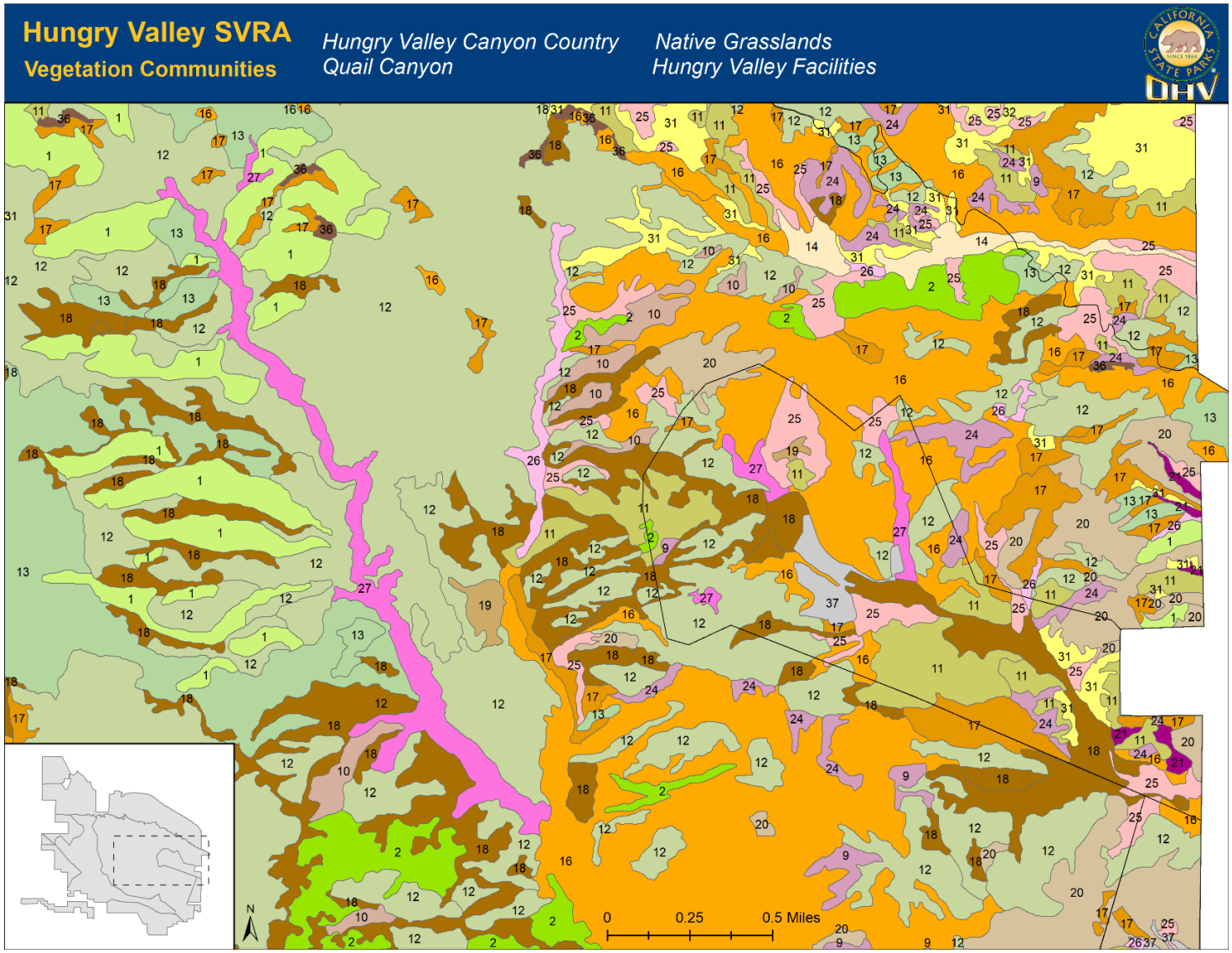

Figure 15. Vegetation communities in the Hungry Valley Canyon Country, Quail Canyon, Native Grasslands, and Hungry Valley Facilities MUs.

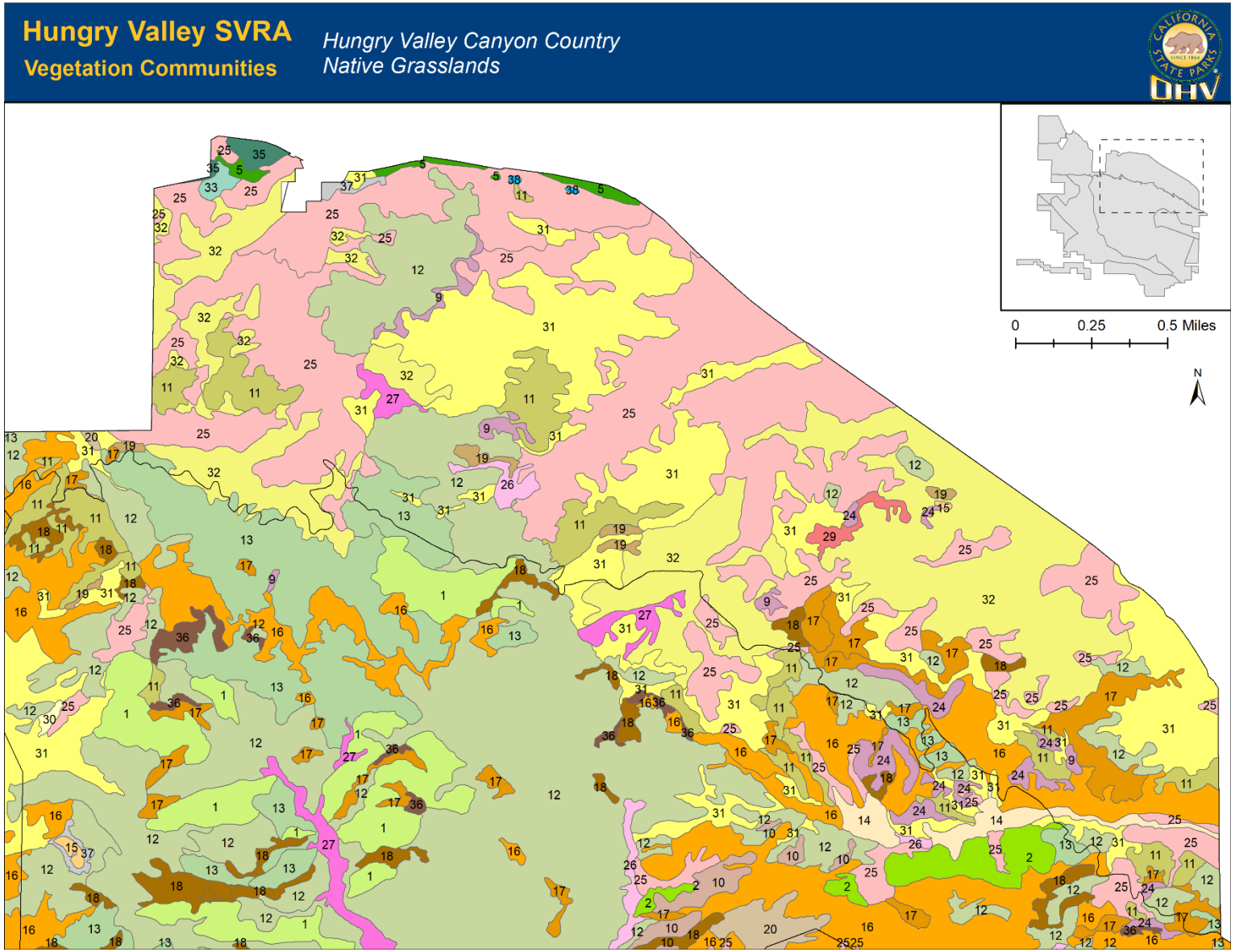

Figure 16. Vegetation communities in the Hungry Valley Canyon Country, and Native Grasslands MUs.

Vegetation Community Descriptions

Woodland Vegetation Types

Oak Woodland

Valley Oak (*Quercus lobata*) Woodland Alliance: Valley oak (*Quercus lobata*) is a distinctive tree <30 meters with tall trunks and deciduous lobed leaves. Individual valley oaks exist within Hungry Valley SVRA, including small individuals on the edge of the dry lakebed in the Condor Mesa Area. Large valley oaks also grow within Hungry Valley SVRA in an open woodland in the southeastern portion of the park near the South Entrance and within the Oak Woodland Natural Preserve. A wide variety of shrubs and herbs occur in the understory.

Conifer Woodland

Pinyon Pine (*Pinus monophylla*) Alliance: The pinyon woodland within Hungry Valley SVRA is commonly composed of three dominant species: single leaf pinyon (*Pinus monophylla*), California juniper (*Juniperus californica*), and Tucker oak (*Quercus john-tuckeri*). The pinyon pines are dominant and diagnostic in the overstory of this community even though their presence may be sparse (sometimes having <5% cover), and they may grow as tall as 15 meters. Other species that co-exist in the shrub layer include big sagebrush (*Artemisia tridentata*), big berry manzanita (*Arctostaphylos glauca*), mountain mahogany (*Cercocarpus betuloides*), thick-leaved yerba santa (*Eriodictyon crassifolium*), and rubber rabbitbrush (*Ericameria nauseosa*). This vegetation type grows predominantly on north-facing slopes throughout Hungry Valley SVRA.

California Juniper (*Juniperus californica*) Alliance: California juniper (*Juniperus californica*) is a small tree that generally grows less than 5 meters tall. Widespread within Hungry Valley SVRA in a variety of habitats, in some areas stands form a near monoculture while in other areas it is mixed with a variety of other species. When co-dominant with pinyon pine or Tucker oak, California juniper must have >60% cover to be classified as the Juniper Alliance. In some cases, the various combinations of species have been described as different associations listed below and in the shrubland classifications. The shrub layer can be open to intermittent, and the herb layer is usually sparse.

California Juniper/California Buckwheat (*Juniperus californica/Eriogonum fasiculatum*) Provisional Association: This vegetation type is widespread within Hungry Valley SVRA, creating cover of open, low woodland that supports the growth of shrubs between the junipers. Sagebrush (*Artemisia tridentata*) and goldenbush (*Ericameria* spp.) may also be mixed with California buckwheat (*Eriogonum fasciculatum*).

Riparian Woodland and Shrubland Types

Fremont Cottonwood Woodlands (*Populus fremontii - Fraxinus velutina - Salix gooddingii* Alliance; and *Populus fremontii - Salix lucida ssp. lasiandra* Association): Fremont cottonwoods (*Populus fremontii*) and willows (*Salix* sp.) are winter-deciduous trees that are indicators of

wetland habitat, where the tree and shrub vegetation receives moisture from a high water table and groundwater. Fremont cottonwoods grow to heights of < 25 m, forming a continuous to open upper canopy. Within Hungry Valley SVRA, Fremont cottonwoods are generally limited to the drainages along Hungry Valley Road near the South Entrance, the EMW Acquisition, and the northern edge of the Native Grasslands MU. In these types, Fremont cottonwood may have low absolute cover (as low as 5%) and willow species may be co-dominant with equal or higher cover.

Willow (Sandbar, Red, Black, Arroyo Willow - *Salix exigua, S. laevigata, S. gooddingii, S. lasiolepis*) Alliances: Four species of willow can be found within the park, typically in wetlands, riparian zones, or seasonally moist basins. They may be in pure or mixed stands or in association with Fremont cottonwood and can form shrubby willow thickets or attain treelike stature in the upper canopy. Stands dominated by a single species in the tree canopy are classified as that species type, i.e., Red willow (*Salix laevigata*) Alliance.

Sandbar Willow (*Salix exigua*) Shrubland Alliance: Sandbar willow is a shrub-sized, narrow-leaved willow. It has a general appearance similar to mulefat (*Baccharis salicifolia*), but with different floral features. Within Hungry Valley SVRA, it is found mainly in the northern portion of the Condor Mesa Area in areas of low, flat topography.

Chaparral Vegetation Types

Tucker Oak (*Quercus john-tuckeri*) Alliance: (Note: Per the classification rules in the MCV, Tucker oak is considered a shrub rather than a tree.)

Tucker oak is a shrub form of oak, with individuals growing up to 6 meters tall. It generally is an evergreen except during periods of drought, when it may lose some of its leaves. This plant community has *Quercus john-tuckeri* at > 50% relative cover in the shrub canopy, which can be open to continuous. It is widely distributed throughout the central portion of Hungry Valley SVRA, with large stands along the western boundary.

Tucker Oak/California Juniper/Interior Goldenbush (*Quercus john-tuckeri/Juniperus californica/Ericameria linearifolia*) Association: Tucker oak and California juniper often are found together in Hungry Valley SVRA in locations where conditions are not quite moist enough for single-leaf pinyon pine, especially along the lower slopes of ridges and hills and around the outer portions of valley bottom lands. In some locations, this Association forms a closed canopy of vegetation, but in others, it is somewhat open, with individual shrubs standing apart from one another.

Tucker Oak/Singleleaf Pinyon (*Quercus john-tuckeri/Pinus monophyla*) Provisional Association: Pinyon pine is present throughout, but with lower cover (sometimes <5% absolute cover) than the Tucker oak.

Chamise (*Adenostoma fasciculatum*) Chaparral Alliance: Chamise (*Adenostoma fasciculatum*) has at least 50% relative cover in the shrub canopy, with an intermittent to continuous canopy up to 4 m tall. In Hungry Valley SVRA, chamise mainly occurs in the southern portion on south-facing slopes, especially east of Freeman Canyon and Hungry Valley Road, southwest of Mystic Canyon, as well as along the western boundary, west of Maxey Ranch Road. In some locations, it may form nearly pure stands, but in many areas, it is mixed with other shrubs, especially California buckwheat.

Big Berry Manzanita (*Arctostaphylos glauca*) Chaparral Alliance: Big berry manzanita (*Arctostaphylos glauca*) is a long-lived, evergreen, sclerophyllous shrub that grows up to 6 m. They do not sprout after being top killed from fire. For this Alliance, *Arctostaphylos glauca* is dominant or co-dominant in the shrub canopy, typically on mid to upper slopes of moderate to high elevations. Chamise (*Adenostoma fasciculatum*) is a common co-dominant shrub along with black sage (*Salvia mellifera*) and chapparal yucca (*Hesperoyucca whipplei*).

Ceanothus – Flannelbush (*Ceanothus greggii- Fremontedendron californicum*) Shrubland Alliance: Desert ceanothus (*Ceanothus greggii*) has >30% cover in the shrub canopy with flannelbush (*Fremontedendron californicum)* and a diverse mix of other shrubs. Both *C. greggii* and *F. californicum* are components of desert chaparral vegetation that inter-relate with other desert scrub species and pinyon-juniper woodland in post-burn settings. There is one known small stand of this alliance in the northern part of the park.

Other Shrubland Types

Rubber Rabbitbrush (*Ericameria nauseosa*) Shrubland Alliance: Rubber rabbitbrush (*Ericameria nauseosa)* is a fast-growing, early-seral shrub that establishes after disturbance. Rubber rabbitbrush has >50% relative cover in the shrub layer with heights < 3 m; the canopy is open to continuous. The herbaceous layer is sparse or grassy. Rubber rabbitbrush is a dominant species in various locations within Hungry Valley SVRA, particularly in areas that have been disturbed or burned in the past. Rubber rabbitbrush has slender stems with small flower clusters, but its density generates what appears to be a complete yellow flower cover in late summer-early fall. Other species of rabbitbrush and goldenbush (*Ericameria*) may also have a co-dominant role in the areas that are classified as this vegetation community within Hungry Valley SVRA.

Big Sagebrush (*Artemisia tridentata*) Alliance: Artemisia tridentata is dominant in the shrub canopy or may be co-dominant with interior goldenbush or California buckwheat. Shrub height is typically < 2 m and the canopy may be open to continuous. This Alliance occurs in a variety of habitats where soils are sandy to loamy, well drained, and deep. The herbaceous layer is sparse to intermittent and grassy.

Big Sagebrush - Rubber Rabbitbrush (*Artemisia tridentata- Ericameria nauseosa*) Association: Along with the big sagebrush, rubber rabbitbrush (*Ericameria nauseosa*) is one of the more widespread shrubs within Hungry Valley SVRA. This combination of big sagebrush and rubber

rabbitbrush shrub vegetation is quite prevalent in Hungry Valley SVRA, especially occurring in the open valleys on the north, west, and southwest sides.

California Buckwheat (*Eriogonum fasciculatum*) Alliance: California buckwheat (*Eriogonum fasciculatum*) is one of the most common shrubs in central and southern California. It is a member of stable vegetation communities, including those that exist in valley bottoms and slopes, where it is the dominant species. It also is able to rapidly colonize areas that have been burned or subjected to mechanical removal and disturbance of soils. Because of its ability to colonize disturbed areas, it often is the dominant species on slopes that have open soil and rock from unstable geology. Within Hungry Valley SVRA, California buckwheat is found in various locations with big sagebrush on the somewhat drier slopes and areas recovering from previous disturbances, such as cattle and sheep grazing and cultivation that occurred before the land was acquired by the park.

Chaparral Yucca (*Hesperoyucca whipplei*) Provisional Alliance: Chaparral yucca (*Hesperoyucca whipplei*) occurs in a wide range of habitats within Hungry Valley SVRA, but the greatest concentrations appear in areas on the upper portion of the gently sloping valleys, below the juniper and pinyon habitats. The chaparral yucca within Hungry Valley SVRA represents atypically high concentrations of large specimens. Each chaparral yucca flowers only once - typically between April -June, after which the entire plant dies. Before flowering, a plant may produce smaller plants ("pups") around the base. Thus, the dead stalk of the original plant may leave behind one or more smaller plants, genetically identical to the original.

California Buckwheat–Chaparral Yucca (*Eriogonum fasciculatum – Hesperoyucca whipplei*) Association: Within Hungry Valley SVRA, particularly in the valleys on the southwestern portion, big sagebrush is present with California buckwheat and chaparral yucca (*Hesperoyucca whipplei*).

Scale Broom (*Lepidospartum squamatum)* – Shrubland Alliance: Scale broom (*Lepidospartum squamatum*) dominates or characterizes open stands with a variety of native and non-native herbs in the understory. Stands are concentrated along washes – usually larger washes with regular flooding where the substrate texture is coarse sand to small cobbles with gravel.

Black Sage (*Salvia mellifera*) Alliance: Black sage (*Salvia mellifera*) is dominant or co-dominant in the shrub canopy < 2 m; the canopy is continuous or intermittent. The herbaceous layer is variable; grasses and herbs are seasonal. Common on dry slopes with shallow soils. Twigs and leaves are glandular and highly aromatic. They are drought tolerant by leaf curling and yellowing rather than through leaf drop but are still considered to have a suite of drought-deciduous characteristics. Winter- and spring-blooming flowers are a rich source of nectar for native and introduced bees.

Interior Goldenbush – Bladderpod (*Ericameria linearifolia – Cleome isomeris*) Shrubland Alliance: Interior goldenbush and bladderpod are co-dominant in the shrub layer. Interior

goldenbush (*Ericameria linearifolia*) and bladderpod (*Cleome isomeris* aka *Cleomella arborea*) are widespread species of inland central and southern California. The former species typically blooms in spring and summer and fruits in summer and fall. The latter can bloom and fruit year-round when moisture is available. These two species are common in the upper Mojave Desert and may become abundant following disturbances, including fire, flooding, and grazing.

Cooper's Goldenbush (*Ericameria cooperi*) Provisional Alliance**:** Cooper's goldenbush (*Ericameria cooperi*) is evenly distributed and widespread across the park's landscape. This type is provisional and is based on *E. cooperi* having a significant presence (generally >40% relative cover) in a stand. Stands show evidence of recent disturbance (typically fire) and are usually adjacent to stands with larger and longer-lived shrubs that belong to other Alliances.

Encelia (*Encelia actoni*) Shrubland Alliance: Acton's encelia (*Encelia actonii)* is dominant or co-dominant in the shrub canopy, with ≥2% absolute cover and no other shrub species with greater or equal cover. In the borders of the Transverse and Tehachapi ranges, stands often occur on steep, south-facing slopes associated with *Hesperoyucca whipplei* or *Eriogonum fasciculatum.* Habitats include intermittently flooded arroyos, canyons, alluvial fans, road cuts, and other substrates with recent disturbance. Soils are alluvial with cobble and gravel. Encelias are short-lived, drought-deciduous shrubs that grow to 1.5 m tall. Plants reproduce by seeds that are well adapted to wind and water dispersal and plants establish well from seed during wet years. They are early colonizers of sites such as washes, road cuts, recently cleared or burned land, or other disturbances. As a result, populations increase with disturbance and are replaced in areas lacking recurring disturbance.

Mormon Tea (*Ephreda viridis*) Alliance – Mormon Tea (*Ephedra viridis*) has >2% cover as the dominant or codominant shrub with a mix of other associated shrubs. In Hungry Valley, it is found on steep rocky slopes with chaparral yucca (*Hesperoyucca whipplei*).

Deerweed- Silver Lupine- Yerba Santa (*Lotus scoparius, Lupinus albifrons, Eriodictyon* spp.)

Shrubland Alliance: Disturbance-related shrubs (*Eriodictyon crassifolium, Lupinus* spp., *Lotus scoparius*, or others) dominate the shrub canopy with low to moderate cover. The shrubs reach < 3 m; the canopy is open to intermittent and can be two-tiered. The herbaceous layer is sparse to intermittent. Typical habitats for this Alliance include exposed lower to upper slopes and ridges, moderately steep open settings, and areas with recent disturbance, such as through clearing, fire, or intermittent flooding.

Deerweed (*Lotus scoparius* aka *Acmispon glaber*) is a short-lived shrub that can reach 20 years of age. Bush lupine (*Lupinus albifrons*) is a shrubby lupine with silvery leaves. The flowers are loosely whorled, and the bi-colored purple and white flowers are large and showy. They are relatively short-lived and tend to colonize regularly disturbed, steep and unstable slopes and shifting sands. Both deerweed and bush lupine are nitrogen fixers.

Thick-leaved yerba santa (*Eriodictyon crassifolium*) is a much-branched, evergreen shrub that attains 3 m in height. Branches are tomentose, and the lanceolate leaves are entire to toothed, sparsely hairy to white-tomentose. Seeds collect near plants and form a seed bank; they germinate following disturbance such as fire, and plants die after 20 to 30 years.

Within Hungry Valley SVRA, this vegetation Alliance is expressed as stands dominated by either thick-leaved yerba santa or deerweed. Patches of vegetation dominated by thick-leaved yerba santa are fairly common in the park. Deerweed tends to occur on ridges with thin soils.

Herbaceous Vegetation Types

Arid West Freshwater Emergent Marsh and Warm Temperate Marsh/Seep Groups: Marsh vegetation types are found in permanently wet soils or standing water. Vegetation is dominated by emergent perennial herbs such as rushes (*Juncus* spp.), tules (*Schoenoplectus acutus*), and cattails (*Typha* spp.). There are multiple Alliances and Associations within these groups, and plant assemblages vary annually.

California Annual Forb/Grass Vegetation and Mediterranean California Naturalized Annual and Perennial Grassland Groups: Hungry Valley SVRA supports a large number of grassland species, both native and non-native. Large expanses of grassland comprise the Native Grasslands Management Area and smaller grassland areas are scattered throughout the park. Some stands are strongly dominated by annual non-natives and lack evenly distributed, diagnostic native plants. Other stands are dominated or characterized by annual and perennial grasses and forbs with native herbs being characteristic and evenly distributed across the herbaceous layer, though non-native forbs and grasses may be dominant.

Nonnative grass species include wild oat (*Avena fatua*), slender wild oats (*Avena barbata*), ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), soft chess (*Bromus hordeaceous*), and cheat grass *(Bromus tectorum*). Native grass species include creeping wild rye (*Elymus triticoides*), slender wheatgrass (*Elymus trachycaulus*), nodding needlegrass *(Stipa cernua*), purple needlegrass (*Stipa pulchra*), pine bluegrass (*Poa secunda*), desert needlegrass (*Stipa speciosa*), and Indian rice grass (*Stipa hymenoides*).

Native herbaceous dicots or forbs include California poppy (*Eschscholzia californica*), desert dandelion (*Malacothrix glabrata*), spider lupine (*Lupinus benthamii*), miniature lupine (*Lupinus bicolor*), baby blue eyes (*Nemophila menziesii*), phacelias (*Phacelia* spp.), fiddeneck (*Amsinckia* spp.), purple owl's clover (*Castilleja exserta*), and many others. Deltoid balsam root (*Balsamorhiza deltoidea*) is a large-flowered herbaceous perennial member of the sunflower family that grows on north-facing grassland slopes within Hungry Valley SVRA near the southern limit of its range, extending northward into Oregon.

The dominant mix of species varies from year to year, depending on rainfall and germination factors. In some years, California poppies may cover extensive areas hundreds of acres in size,

visible from long distances. The desert dandelions also create large patches of bright yellow that can be viewed from distant vantage points. All of these native forbs are mixed with native and non-native grasses. However, because the boundaries and mix of the patches of species are highly variable, it is not possible to map them all at the Alliance or Association level using standard mapping methods such as aerial image interpretation, with the exception of the California poppy Alliance.

California poppy (*Eschscholzia californica*) Association: California poppy (*Eschscholzia californica)* is seasonally abundant along with many other native and non-native forbs and grasses such as purple owl's clover (*Castillja exserta*), miniature lupine (*Lupinus bicolor*), fiddlenecks, (*Amsinckia* sp.), phacelia (*Phacelia* spp.), brome grasses (*Bromus* spp.), wild oats (*Avena* spp.), etc. Our state flower contributes significantly to the iconic vision of the state's wildflower displays and "superblooms". However, these stands can shift radically year-to-year in species composition depending primarily on the amount and timing of precipitation.

2.3.5 Additional Resource Assessment Elements

Rare or Endangered Plant and Animal Species and Their Supporting Habitats

Special-status species are those plants and animals that are legally protected or otherwise recognized as vulnerable to habitat loss or population decline by federal, state, or local resource conservation agencies and organizations. Special-status species include:

- Species that are federal or state listed as threatened or endangered
- Species considered as candidates or proposed for federal or state listing as threatened or endangered
- CDFW Species of Special Concern
- Fully protected species per California Fish and Game Code
- Plants considered by the CNPS and CDFW to be rare, threatened, or endangered

Hungry Valley SVRA provides habitat for several special-status species, many of which have been found within or nearby the park (see Section 9, Appendix 2: Wildlife and Plant Inventories).

Special status species not recorded within the past ten years include California Gnatcatcher and Western Pond Turtle. Special status migratory species infrequently seen throughout the past ten years include Swainson's Hawk and California Condor.

Rare plant species known to be present in Hungry Valley SVRA include Palmer's mariposa lily (*Calochortus palmeri*), Alkali mariposa lily (*Calochortus striatus*), unexpected larkspur (*Delphinium inopinum*), Mt. Pinos larkspur (*Delphinium parryi* ssp. *purpureum*), Piute cypress (*Hesperocyperus nevadensis*), Robbins' nemacladus (*Nemacladus secundiflorus* ssp. *robbinsii*), and short-joint beavertail (*Opuntia basilaris* var. *brachyclada*). An additional five special-status

plant species have a high likelihood of occurrence and 13 more have a moderate chance of occurrence.

Wildlife species of special concern found within the park include the American Badger, Blainville's Horned Lizard, Coast Patch-nosed Snake, Northern California Legless Lizard, Tiger Whiptail, Pallid Bat, Townsend's Big-eared Bat, Western Mastiff Bat, Western Red Bat, Burrowing Owl, Loggerhead Shrike, Northern Harrier, Olive-sided Flycatcher, Redhead, Yellow Warbler, Yellow-headed Blackbird (CNDDB 2023). State or federal threatened, endangered, fully protected, or candidate species recorded within the past ten years are described below. Bird descriptions are sourced from the Cornell Lab of Ornithology's website: allaboutbirds.org.

Bald Eagle

Bald Eagles are listed as endangered under the California Endangered Species Act (CESA) and fully protected under the CDFW. They have been delisted as endangered by the Federal Endangered Species Act (ESA). Bald Eagles can be found near lakes, rivers, reservoirs, and on the coast in most areas of California in the winter. They have a few year-round ranges in the southern, central, and northern parts of California, mostly near the coast. Bald Eagles are very large raptors, with broad wings, and a dark brown body that contrasts with a white head on adults. The juveniles do not have a white head and are mostly brown with mottled white wings and can look similar to juvenile Golden Eagles. Bald Eagles typically nest in tall conifer trees but have been known to nest in deciduous trees in the southern part of their range. They eat a wider variety of food, mostly consisting of fish. Hungry Valley SVRA has suitable nesting habitat and is in close proximity to Pyramid Lake, but we have not detected any nests at the park. Hungry Valley SVRA does not offer any foraging areas for Bald Eagles to obtain fish as a main part of their diet. Bald Eagles have been observed incidentally at Hungry Valley SVRA and the last observation was a fly over in 2023.

California Condor

California Condors are listed as endangered under the ESA and CESA and fully protected under the CDFW. They can be found flying over open grassland areas in search of carrion. California Condors have ranges in central and southern California, in and around the Grand Canyon, and the northern area of Baja California, Mexico. The Sespe Condor Sanctuary in Ventura County is home to the closest population of California Condors to Hungry Valley SVRA. Adult California Condors are very large with mostly black bodies, pink heads, and distinctive white triangle shaped patches on the underside of their wings. Immature California Condors are similar in size to adults with splotchy white triangle patches on the underside of their wings and a black or mottled black and pink head. California Condors typically nest in natural cavities or caves in cliffs and have been historically known to use trees such as coast redwoods and giant sequoias. They can travel far from their nest area to forage for carrion. Hungry Valley SVRA has suitable nesting habitat in the Freeman Canyon area with sufficient cliffs for nesting, but staff have not detected any nests at the park. Hungry Valley SVRA's grasslands and open chapparal offer good

foraging opportunities. California Condors have been observed incidentally at Hungry Valley SVRA and the last observation was a fly over in 2023.

Golden Eagle

Golden Eagles are not listed as endangered under the ESA and CESA but are fully protected under the CDFW. They can be found year-round in most of California's grasslands, chapparal, and shrubland. Adult Golden Eagles are very large raptors with all dark brown feathers and a golden nape. Immature Golden Eagles are similar in size to adults with white patches at the base of their primaries and base of tail. Golden Eagles typically nest on cliffs but can also use human-made structures like electrical power towers. Most of their diet consists of hares, rabbits, ground squirrels and other similar size mammals but they have been known to also prey on larger animals like deer and coyotes. Black-tailed jackrabbits are a key prey species throughout much of their range. Hungry Valley SVRA has suitable nesting habitat in the Freeman Canyon area with sufficient cliffs for nesting as well as many large Southern California Edison power towers bisecting the center of the park. It is highly likely that Hungry Valley SVRA hosts Golden Eagle nests, but staff have not confirmed any at this time. Hungry Valley SVRA's high population of small mammals including Black-tailed jackrabbits offers great foraging opportunities. Golden Eagles have been observed during surveys and incidentally at Hungry Valey SVRA with birds soaring and roosting on vegetation. Observations of Golden Eagles at Hungry Valley SVRA are somewhat common, and the most recent observation was in 2023.

Peregrine Falcon

Peregrine Falcons have been delisted as endangered under the ESA and CESA but are fully protected under the CDFW. They can be found on the west side of the major California mountain ranges year-round and can be found all over California in the nonbreeding season. Peregrine Falcons can occur in all types of habitats but prefer open landscapes with cliffs or skyscrapers for nesting. Adult Peregrine Falcons are large falcons with iconic bold black moustachial stripes connected to their black head with a strongly barred chest. Immature Peregrine Falcons are similar in size to adults but have dark brown streaky chests and brown heads with a brown moustachial stripe. Most of their diet consists of approximately 450 bird species, bats, and stolen prey from other raptors. Hungry Valley SVRA has suitable nesting habitat in the Freeman Canyon area with sufficient cliffs for nesting as well as many large Southern California Edison power towers bisecting the center of the park. It is likely that Hungry Valley SVRA hosts Peregrine Falcon nests, but staff have not confirmed any at this time. Hungry Valley SVRA's high population of bird species and bats offers great foraging opportunities. Peregrine Falcons have been observed incidentally at Hungry Valley SVRA with birds soaring near the eastern boundary of the park over open grassland habitat. Observations of Peregrine Falcons at Hungry Valley SVRA are uncommon, and the most recent observation was in 2022.

Swainson's Hawk

Swainson's Hawks are listed as threatened under CESA. They can be found in most of California during the breeding season and migrate to Argentina for their nonbreeding season. Swainson's Hawks favor open habitats for foraging and have adapted well to agricultural lands in inland California. Adult Swainson's Hawks can be identified through their long-pointed wings and dihedral flight style. They also have a hooded appearance from the difference of color on their head and upper breast from their lower breast. Immature Swainson's Hawks are mottled above and streaky on the body. The majority of their diet consists of smaller mammals and insects, but they have also been known to prey on bats, reptiles, and birds opportunistically. Swainson's Hawks rely on sparse tree stands amongst open habitats for nesting. Hungry Valley SVRA has suitable nesting habitat in the Native Grasslands MU area with sufficient open habitat and sparse tree stands for nesting. It is unlikely that Hungry Valley SVRA hosts Swainson Hawk nests because the park is just outside of their breeding range. Hungry Valley SVRA's high population of small mammals, insects, and bats offers great foraging opportunities. Swainson's Hawks have been observed incidentally at Hungry Valley SVRA with birds soaring over the Native Grasslands and in the Freeman canyons. Observations of Swainson's Hawks at Hungry Valley SVRA are uncommon, and the most recent observation was in 2021.

Non-native Invasive (Exotic) Species

There are currently four non-native invasive plant species of management concern at Hungry Valley SVRA. This includes dalmatian toadflax (*Linaria dalmatica*), Russian thistle (*Salsola paulsenii*), yellow star-thistle (*Centaurea solstitialis*), and perennial pepperweed (*Lepidium latifolium*). These plants are actively managed through mechanical or chemical means each year to control populations. While these species currently have limited distributions, they have the potential to spread rapidly under select environmental conditions, can compete with native species for available resources, and can alter the habitat. In addition to these more prolific species, Hungry Valley SVRA is also at risk of *Tamarisk* invasion. Other non-native species are present on-site, including *Bromus* spp., *Avena* spp., *Brassica* spp., and common stork's bill (*Erodium cicutarium*), which currently are not of management concern. Due to the park's location near the freeway and regional roadways, invasive plants have the potential to spread within the park.

Non-native invasive wildlife species of management concern include European Starling (*Sturnus vulgaris*). European Starlings are known for outcompeting and overtaking the cavities of cavity-nesting bird species. There is also the potential for other non-native species to be present at Hungry Valley SVRA, including Rock Pigeons (*Columba livia*), House Sparrows (*Passer domesticus*), House Mouse (*Mus musculus*), and Norwegian Rat (*Rattus norvegicus*), but these species are currently not of management concern. In addition, Hungry Valley SVRA could experience issues with non-native ant species and possibly non-native insects threatening vegetation, such as Valley Oak, but this is not a concern at present.

Sensitive Aquatic Habitats

Hungry Valley SVRA has many ephemeral washes and drainages. However, there are few permanent aquatic habitats in the park. Sensitive aquatic habitats in the park include a riparian corridor in the South Oak Grove/Cañada MU called the Cañada de los Alamos, a riparian corridor in the Native Grasslands MU just to the west of I-5 called Gorman Creek, and a spring-fed stream in the Oak Preserve MU.

Wildlife Movement

Habitat corridors facilitate wildlife migration and movement within landscapes and are essential to the viability and persistence of many wildlife populations. Wildlife movement includes migration, interpopulation movement, and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also connect outlying populations and the main corridor, permitting an increase in gene flow among populations. These linkages among habitats can extend for miles and occur on a large scale throughout California.

Most of the wildlife linkages occur on the western half of Hungry Valley SVRA. Hungry Valley SVRA is connected to Angeles National Forest on the south and west and Los Padres National Forest on the north and west, providing essential habitat connectivity between these large areas of wilderness. A variety of species use the park as a travel corridor, including mountain lions, coyotes, and bobcats. Many migratory bird species also use the SVRA as a stopover. Wildlife use riparian corridors to travel through oak woodland/cottonwood habitats at Hungry Valley SVRA. Many of these areas are in MUs that are trails only, meaning riders cannot ride off trail, which protects habitat that maintains wildlife connections. Wildlife friendly fencing has been established throughout the park by either using peeler pole fencing that wildlife can go under or jump over or by cutting sections of fence away along known paths. New fencing is always installed in a way that encourages wildlife passage.

One barrier to wildlife movement is I-5, which borders the eastern edge of the park. While there are culverts that run under the freeway and connect Hungry Valley SVRA to the Tejon Ranch on the other side of the freeway, it seems that overland travel between the two areas is minimal. Certainly, bats and birds are capable are flying over the freeway, but it likely presents a barrier for other wildlife, such as large mammals.

Adaptive Management for Climate Change

The earth's climate is changing rapidly due to anthropogenic factors that result in increased greenhouse gas emissions, primarily carbon dioxide. The effects of climate change include long-term shifts in temperature and precipitation and increase the frequency and magnitude of extreme weather events. Strategies to respond to climate change include mitigation and adaptation actions. Mitigation actions target the reduction of greenhouse gas emissions or their removal

from the atmosphere. Adaptation actions target reducing the specific impacts caused by climate change on the landscape.

For vegetation and wildlife to successfully adapt, organisms require healthy, connected landscapes that allow shifts in behavior, distribution, and, on a longer timeframe, evolutionary processes to operate unimpeded (Chambers et al. 2019, Seavy et al. 2009). For organisms to respond to the rapid rate of climate change on an evolutionary level, they require a landscape that supports their biology and population dynamics (Bonnet et al. 2022).

The most important climate adaptation strategy for natural resource land managers is the recovery and protection of healthy, connected ecosystems (Seavy et al. 2009). Healthy ecosystems are more resilient to the short-term and long-term effects of climate change (Gunderson 2000, Scheffer et al. 2001). Ecosystems with high ecological connectivity (e.g., connectivity within a habitat type, between different ecotones, upstream/downstream through elevation gradients, horizontally on to floodplains) allow movement and resource exchange across the landscape.

The WHPP addresses climate adaptation for species and ecosystems through removing stressors and restoring ecosystem connectivity, structure, and function. This will allow natural resources to more easily adapt to primary (e.g., changes in temperature, precipitation, river flow) and secondary (e.g., stream hydrology, fire) effects of climate change. The adaptive management approach of this WHPP provides the opportunity to understand the response of natural resources to changes in environmental conditions from climate change as well as changes in response to management through mitigation and adaptation actions.

2.4 Statutorily Required State and Regional Conservation Objectives

Hungry Valley SVRA is owned and operated by the State of California. However, PRC §5090.32(g) requires that WHPPs be developed considering statutorily required state and regional conservation objectives. As a result, the below referenced state and regional conservation objectives were reviewed and considered while developing the Hungry Valley SVRA WHPP objectives (Table 4). These state and regional conservation objectives are only for reference purposes for developing the WHPP, and Hungry Valley SVRA and the WHPP are not necessarily subject to complying with all of the referenced plans. This consideration has led to well-defined WHPP objectives that will ensure the SVRA is managed in a manner compatible with the values expressed by the surrounding community.

Table 4. Summary of state and regional plans, their geographical relationship to Hungry Valley SVRA, and whether the WHPP contributes to relevant state or regional conservation objectives.

	Documents with Conservation Objectives	**Geographical Overlap with the Park**	**Contains Relevant**	**Contributes to**

			Target Resources	Conservation Objectives
Statewide Plans	State Wildlife Action Plan	X	X	X
	Safeguarding California Plan	X	X	X
	California Biodiversity Initiative	X	X	X
Regional Plans	Tejon Ranch Conservancy Ranch-wide Management Plan	X	X	X
	Los Padres National Forest Land Management Plan	X	X	X
	Angeles National Forest Land Management Plan	X	X	X

2.4.1 State Conservation Objectives

The following section discusses state-level documents, each with their conservation objectives, that were considered when drafting this WHPP. Provided below are brief descriptions of each document considered, followed by a discussion on how their goals and objectives relate to Hungry Valley SVRA's goals and objectives and how they correspond with WHPP development.

State Wildlife Action Plan (SWAP)

This plan, developed by the California Department of Fish and Wildlife in 2015 in concert with several partners statewide, provides a blueprint for conservation of wildlife and their habitats in the context of a growing human population and a changing climate. The plan complies with the requirements of the federal State and Tribal Wildlife Grants Program. One of the priority goals of the Plan is to maintain and improve ecological conditions vital for sustaining ecosystems in California by, in part, improving ecosystem connectivity and community structure. The WHPP supports SWAP goals by maintaining and improving wildlife habitat over time within Hungry Valley SVRA.

2018 Safeguarding California Plan

Developed by the California Natural Resources Agency, the updated 2018 Safeguarding California Plan's purpose is to lay out guidelines for how agencies can incorporate strategies necessary to address climate change into their future planning efforts. The 2018 update included a chapter specific to parks, including the recommendation (PC-5) to incorporate climate change in all California State Parks and conservancy planning and decision-making. To meet Recommendation PC-5, the Plan identifies a step (PC-5.6) to "prioritize conservation, protection, and restoration of natural resources in climate change adaptation projects and planning to ensure sustainable recreational opportunities for the public." The WHPP can contribute to this plan by conserving and improving habitat while evaluating whether recreational opportunities are sustainably managed.

California Biodiversity Initiative

The goal of the California Biodiversity Initiative is to secure the future of California's biodiversity by integrating biodiversity protection into the state's environmental and economic goals and efforts. The California Biodiversity Initiative Roadmap outlines long-term steps for achieving the initiative's goals. The Roadmap identifies the need to develop a baseline understanding of the current status of California's biodiversity. Additionally, it highlights that management and conservation activities should integrate protection and preservation of biodiversity and that lands and waters should be restored and protected to meet the Initiative's biodiversity goals. The WHPP supports these goals by seeking to maintain and improve wildlife habitat over time within the SVRA through specific management actions directed by research and monitoring.

2.4.2 Regional Conservation Objectives

The following section discusses regional documents, each with their conservation objectives, considered when drafting this WHPP. Provided below are brief descriptions of each document considered, followed by a discussion on how their goals and objectives relate to Hungry Valley SVRA's goals and objectives and how they correspond with WHPP development.

Tejon Ranch Conservancy Ranch-wide Management Plan

The Ranch-wide Management Plan created by the Tejon Ranch Conservancy and other environmental agencies in 2013 is a detailed plan to implement conservation initiatives across the Ranch. The original iteration was signed in 2008, and the 2013 document expands on those original conservation goals. The plan uses adaptive management techniques and seeks to characterize, monitor, conserve, and enhance habitat and implement long-term stewardship of the Ranch. Best management practices (BMPs) are set forth to protect the habitat in many ways, such as working to minimize invasive plant and animal species, maintaining roadways to minimize erosion, protecting soil integrity at water crossings, protecting and monitoring wildlife populations, and planting vegetation to reduce soil loss. The WHPP is in alignment with this plan by conserving and improving habitat and protecting the longevity of Hungry Valley SVRA.

Angeles National Forest Land Management Plan

The Angeles National Forest Land Management Plan created by the United State Forest Service in 2005 is a detailed plan set forth to sustainably protect and manage the land and resources within the Forest for the long-term. The Plan seeks to manage "the health of the vegetation on the land, the quality of wilderness areas, the boundaries and ownership of the land, the cultural heritage that resides on the land, the quality of the water running on and under the land, the air quality above the land, and the habitat for the wildlife roaming the land." Protection of sensitive wildlife, management of invasive species, and minimizing soil erosion are all key aspects of the Plan. All of these initiatives are in alignment with the goals of the Hungry Valley SVRA WHPP.

Los Padres National Forest Land Management Plan

The Los Padres National Forest Land Management Plan created by the United States Forest Service in 2005 is a detailed plan set forth to sustainably protect and manage the land and resources within the Forest for the long-term. The Plan seeks to manage many aspects of the Forest, such as wildlife, vegetation, watersheds, air, geologic resources, and heritage resources. Goals are linked to invasive species reduction, wildlife protection, watershed protection and improvement, OHV recreation management to minimize impacts, and management of habitat linkages. The WHPP can contribute to this plan by conserving and improving habitat while evaluating whether recreational opportunities are sustainably managed.

3 WHPP Goals and Objectives

Setting goals and objectives clarifies the outcomes to be achieved by implementing annual management activities to protect and maintain habitat health and restoration targets to achieve an ecological lift of "habitat improvement" as required by law (CDPR 2021a). In addition, well-crafted goals and objectives can identify targeted resource conditions while allowing for flexibility to apply innovative techniques to achieve desired conditions. This section describes the goals and objectives developed for Hungry Valley SVRA.

3.1 WHPP Goals as Defined by the Public Resource Code

The 2017 update to California PRC pertaining to off-highway motor vehicle recreation provides the goals for this WHPP (CDPR 2021a). Specifically, PRC §5090.35(c)(1) calls for the Division to "…prepare a wildlife habitat protection plan that conserves and improves wildlife habitats for each state vehicular recreation area." Further, PRC §5090.10 defines "Conservation" and "conserve" as "…activities, practices, and programs that protect and sustain soils, plants, wildlife, habitats, and cultural resources." PRC §5090.11 defines "restoration" and "restore" to mean "upon closure of the unit or any portion thereof, the restoration of land to the contours, the plant communities, and the plant covers comparable to those on surrounding lands or at least those that existed prior to off-highway motor vehicle use."

While the PRC defines "conserve" and "restoration," the broader definition of these terms used in the fields of conservation biology and ecology are more appropriate when considering wildlife habitat. To capture industry standards, the WHPP uses conservation in the context of protection and sustainment of resource values at existing conditions over time, and restoration as improvement in the quality or extent of resource values from existing conditions over time (and not necessarily resulting in permanent closure of the "restoration/improvement" area).

Given the language provided by the PRC, the fundamental habitat goals of the WHPP are to provide for (CDPR 2021a):

- the conservation or long-term protection of soils, plants, wildlife, and habitats; and

- the improvement or increase in the quality or extent of soils, plants, wildlife, and habitat.

3.2 WHPP Objectives

Below is a discussion of the park's WHPP objectives, which tier directly from the goals outlined in the PRC. WHPP objectives build upon the existing natural resources program at Hungry Valley SVRA and have been tailored to fit the specific environmental conditions at the park. Hungry Valley SVRA's WHPP objectives are somewhat broad and focus mostly on habitat conservation and improvement. The objectives are broad because of the large size of the park, the diversity of habitats it encompasses, and the feasibility of managing such a large area with limited staff. Due to the large size and rugged landscape of Hungry Valley SVRA, OHV activity is more diffuse and less concentrated throughout much of the park, so we chose to focus on specific areas in the park where we see opportunities to conserve and improve habitat. These habitats, in turn, support healthy soil and diverse plant and wildlife communities. Due to the interrelated nature of the natural world and the systems it embodies, these objectives are not delineated along with singular variables as called out in the PRC but are interwoven to reflect the interconnected relationship of ecosystems.

The PRC mandate of "conservation and long-term protection" is achieved through setting resource objectives that target the protection and maintenance of the extent and condition of the existing soils, plants, wildlife, and habitats within the SVRA. The PRC statutory law of "restoration" is achieved by setting objectives that target improving degraded conditions or provide for re-establishment or increased quantity of soils, plants, wildlife, and habitats within a SVRA. The objectives below allow for the conservation and improvement of the resource categories provided in the PRC.

The objectives assigned under each goal follow S.M.A.R.T. format principles and inherently conform to best available science and adaptive management (CDPR 2021a). S.M.A.R.T. refers to objectives that are "specific," "measurable," "achievable/attainable," "realistic," and "timely". In addition, the WHPP objectives will be consistent with the updated General Plan and Environmental Impact Report. The objectives are based on the natural resource assessment gathered and span the next five years. A summary of the WHPP goals and objectives listed below can be found in Table 5. Table 5 also outlines each goal's management actions and monitoring, as described in detail in sections 4 and 5, respectively.

3.2.1 Conservation and Long-term Protection Objectives

Goal 1 – Conserve sensitive vegetation communities at Hungry Valley SVRA.

Soil, Vegetation, and Habitat Conservation Objective 1 – Protect 27 acres of Valley Oak groves (*Quercus lobata* Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs from OHV activity through 2027.

Metric

Acreage of *Quercus lobata* Alliance.

Baseline
27 acres.

Target
Maintain 27 acres of the *Quercus lobata* Alliance through 2027 with no net loss.[1]

The *Quercus lobata* Alliance is deemed a sensitive vegetation community with a VegCAMP state ranking of 3. All 27 acres of Valley Oak groves at Hungry Valley SVRA are in non-riding areas and protected from OHV activity. These Valley Oak groves are monitored by completing VegCAMP surveys every three years. In addition, the area will be monitored through annual EDRR invasive plant surveys, surveillance monitoring in areas of known OHV trespass, surveillance monitoring in areas of known invasive species presence, and general field observations.

This vegetation community is actively managed and protected by preventing off-trail riding by displaying signage and using fence and hay bale barriers, managing invasive plant species through active management, caging sapling oaks to increase chances of survival, removing trash from the area, and enforcing California Code of Regulations Title 14, Section 4306 – Plants and Driftwood. California Code of Regulations 4306 states (a) No person shall willfully or negligently pick, dig up, cut, mutilate, destroy, injure, disturb, move, molest, burn, or carry away any tree or plant or portion thereof, including but not limited to leaf mold, flowers, foliage, berries, fruit, grass, turf, humus, shrubs, cones, and dead wood, except in specific units when authorization by the Department to take berries, or gather mushrooms, or gather pine cones, or collect driftwood is posted at the headquarters of the unit to which the authorization applies. Valley Oak groves provide a unique and sensitive habitat that is important for a variety of species at Hungry Valley SVRA, including bats and native cavity-nesting birds. In addition to providing wildlife habitat, Valley Oaks sequester and store carbon dioxide (a contributor to global climate change), filter water, and provide nutrients to the soil.

Soil, Vegetation, and Habitat Conservation Objective 2 – Protect 970 acres of native grassland vegetation communities in the western section of the Native Grasslands MU from unauthorized OHV activity through 2027.

Metric
Acreage of native grassland vegetation community and presence of unauthorized trails.

Baseline
970 acres.

Target

[1] Since this area burned in the 2024 Post Fire, our baseline measurements may change. However, this area will still be protected in the same manner.

Maintain 970 acres of native grassland vegetation communities through 2027 with no net loss.

Native grassland vegetation communities (California Annual Forb/Grass Vegetation Group) are deemed a sensitive vegetation community by VegCAMP. The native grassland vegetation communities are monitored by conducting VegCAMP surveys every three years. In addition, the area will be monitored through annual EDRR invasive plant surveys, surveillance monitoring in areas of known OHV trespass, surveillance monitoring in areas of known invasive species presence, and general field observations.

Although riding on designated trails is allowed in the Native Grasslands MU, this sensitive vegetation community is actively managed and protected by preventing off-trail riding by displaying signage and using fence and hay bale barriers, managing invasive plant species through active management, removing trash from the area, and enforcing California Code of Regulations 4306. Because of their open nature, it is common for riding trespass to occur in grassland communities, so active protection is necessary. It is important to protect and maintain grassland communities because they make up a unique ecosystem that promotes biodiversity and provides an important habitat for many species, including grassland birds. Grasslands also aid in carbon sequestration and erosion control.

3.2.2 Restoration and Improvement Objectives

Resource Categories: Soil, Vegetation, and Habitat

Goal 2 – Improve native vegetation at Hungry Valley SVRA.

Soil, Vegetation, and Habitat Restoration Objective 1 – Reduce invasive plant species, specifically dalmatian Toadflax (*Linaria dalmatica*), in the 970-acre western section of the Native Grasslands MU through 2027.

Metric
Number of infestation acres.

Baseline
Baseline acreage of infestation in the western section of the MU is 3.4 acres.

Target
The target number of toadflax infestation acres to reduce will be determined by 2024.

Dalmatian toadflax is an invasive plant that has been present in the Native Grasslands MU since at least 2005 when it was first identified. Due to its propensity to spread rapidly if left unchecked, active management is necessary to keep populations to a minimum. At this point, toadflax is established in the surrounding area, including Los Padres National Forest, so it is unrealistic to attempt to eradicate it. Instead, we seek to minimize its presence by reducing the acres of infestation and keeping it from spreading into additional areas of the park that are currently free of toadflax. Baseline infestation acres were determined in 2024 using simplified

relevè surveys. We plan to reduce infestation acreage to 3 acres and maintain the infestation at 3 acres or less. During 2024 surveys, we also discovered additional stands of toadflax that were denser than any of our sampling locations, so we will estimate coverage in those areas in 2025 and determine how that impacts the calculated infestation acreage. . In addition, the area will be monitored through surveillance monitoring in areas of known invasive species presence and general field observations.

Soil, Vegetation, and Habitat Restoration Objective 2 – Reestablish 4 acres of the vegetation communities that existed within the South Oak Grove MU prior to the Post Fire through 2027.

Metric

Number of *Quercus lobata* individuals.

Percent cover of associated vegetation species in the *Ericameria nauseosa* Shrubland Alliance and pre-fire vegetation communities.

Baseline

The baseline number of living *Quercus lobata* individuals in the 4-acre plot will be determined in 2025.

The current baseline percent cover of the *Ericameria nauseosa* Shrubland Alliance and pre-fire vegetation communities is 0%.

Target

The target number of trees will be determined after knowing how many individuals in the current plot have survived the fire.

5% cover representing the *Ericameria nauseosa* Shrubland Alliance and pre-fire vegetation communities.

In June 2024, the Post Fire spread over more than 10,000 acres within the eastern half of Hungry Valley SVRA, burning much of the native vegetation in its path. This fire occurred as we were finalizing this WHPP, which triggered an adjustment in the management priorities in the park and resulted in the creation of Soil, Vegetation, and Habitat Restoration Objective 2 . As more data are gathered, this objective may be adjusted to conserve and improve the native habitat of Hungry Valley SVRA. While some native vegetation has begun resprouting in the burn area, there is a risk of invasive plants entering the area because the ground is essentially bare and percent cover of shrubs is currently 0. We plan to increase the native shrub cover to 5% in a 4-acre area with the *Ericameria nauseosa* Shrubland Alliance, which includes *Ericameria nauseosa*, *Artemesia tridentata*, *Eriogonum fasiculatum*, and *Ephedra viridis*. We also plan to increase other native shrub species that were known to occur in the area pre-fire based on VegCAMP surveys in the South Oak Grove MU. These other species include *Eriodictyon crassifolium*, *Peritoma arborea*, and *Artemesia dracunculus*. An average of 5% shrub cover is

consistent throughout many areas of the park and was selected as a target based on our previous work with VegCAMP surveys throughout Hungry Valley SVRA. Percent cover will be determined in 2025 using rapid assessment surveys after one growing season post-fire.

Management will include planting native seeds collected from Hungry Valley SVRA and seedlings started in the Hungry Valley SVRA greenhouse. Hand sowing native seeds from Hungry Valley SVRA can add to the seed bank and give the target species a better chance at revegetating the area. Seedlings can be propagated in Hungry Valley SVRA's greenhouse for better chances of survival than starting from seed. *Quercus lobata* seedlings may also be transplanted from the Oak Preserve MU. This will allow *Quercus lobata* and native shrubs to repopulate the area over time. The 4-acre area will be monitored by conducting plant survivorship and rapid assessment surveys by counting *Quercus lobata* individuals and estimating the native shrub cover in the 4-acre plot each year. In addition, the area will have surveillance monitoring in areas of known invasive species presence that could impact the revegetated area, as well as general field observations.

Soil, Vegetation, and Habitat Restoration Objective 3 – Revegetate a minimum of 1,000 linear feet of redundant trails with the *Ericameria linearifolia – Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, and/or California Annual Forb/Grass Vegetation Group in the 410-acre western section of the Open Riding MU by 2027.

Metric
Linear feet of redundant trails.

Baseline
15,500 linear feet.

Target
14,500 linear feet.

The Open Riding MU is characterized by many redundant, unestablished trails due to its open riding nature. While this is expected given that riders are allowed to ride unprohibited in this MU, it is important to minimize the negative impact this can have on the environment (e.g., erosion, loss of vegetation/habitat) if redundant trails become too dense. Redundant trails all lead to the same area and are often unnecessary, so removing them will not take away from the riding experience. Our objective is to manage and minimize redundant trails in the western section of the Open Riding MU where redundant trails are currently not as prevalent, so we can restore the native vegetation in the area. This area was chosen because it will eventually transition to trails-only riding with the updated Hungry Valley SVRA General Plan and because the area does not currently have an abundance of redundant trails, so we want to keep it at a minimum. Currently, there is an estimated 15,500 linear feet of redundant trails in the 410-acre western section of the Open Riding MU. To manage and reduce redundant trails, a minimum of 1,000 linear feet of redundant trails will be blocked off and the trails will be revegetated with representative native

plant species from the surrounding area, which is predominantly the *Ericameria linearifolia – Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, and/or California Annual Forb/Grass Vegetation Group. Management will include preventing the creation of volunteer trails by closing them off to riding access and displaying signage, using fence and hay bale barriers, and planting native vegetation to rehabilitate the redundant volunteer trails. This will allow native plants to revegetate the area and encourage the public to use established trails.

To maintain 14,500 linear feet or less of redundant trails in the area, aerial imagery will be used to monitor the existing trail density within the 410-acre western section of the Open Riding MU. In addition, the area will be monitored through annual Trail Condition Evaluations, surveillance monitoring in areas of known redundant OHV trails, and general field observations.

Table 5. Hungry Valley SVRA objectives for habitat conservation and improvement and associated management and monitoring. See sections 4 and 5 for a detailed description of management actions and monitoring, respectively.

Goal from PRC 5090.35(2)(c)(1)	Resource Category from PRC 5090.10	S.M.A.R.T. Objectives	Management Actions	Monitoring
Conservation and long-term protection	Soil, Vegetation, and Habitat	**Goal 1, Objective 1:** Protect 27 acres of Valley Oak groves (*Quercus lobata* Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs from OHV activity through 2027.	• Cage sapling oaks to increase chances of survival. • Prevent the creation of volunteer trails by displaying signage and using fence and hay bale barriers. • Enforce California Code of Regulations "4306. Plants and Driftwood" to keep riders on designated trails in trails-only riding areas through law enforcement patrols. • Active management to remove invasive plant species. • Remove trash from sensitive habitats.	• VegCAMP surveys every three years. • Annual Early Detection Rapid Response (EDRR) surveys. • Surveillance monitoring in areas of known OHV trespass. • Surveillance monitoring in areas of known invasive species presence. • General field observations.
	Soil, Vegetation, and Habitat	**Goal 1, Objective 2:** Protect 970 acres of native grassland vegetation communities in the western section of the Native Grasslands MU from unauthorized OHV activity through 2027.	• Prevent the creation of volunteer trails by displaying signage and using fence and hay bale barriers. • Enforce California Code of Regulations "4306. Plants and Driftwood" to keep riders on designated trails in trails-only riding areas through law enforcement patrols.	• VegCAMP surveys every three years. • Annual EDRR surveys. • Surveillance monitoring in areas of known OHV trespass. • Surveillance monitoring in areas of known invasive species presence. • General field observations.

Goal from PRC 5090.35(2)(c)(1)	Resource Category from PRC 5090.10	S.M.A.R.T. Objectives	Management Actions	Monitoring
			• Active management to remove invasive plant species. • Remove trash from sensitive habitats.	
Improvement or increase in the quality or extent	Soil, Vegetation, and Habitat	**Goal 2, Objective 1:** Reduce invasive plant species, specifically dalmatian toadflax (*Linaria dalmatica*), in the 970-acre western section of the Native Grasslands MU through 2027.	• Active management to remove invasive plant species.	• Surveillance monitoring in areas of known invasive species presence. • Annual relevé surveys. • General field observations.
	Soil, Vegetation, and Habitat	**Goal 2, Objective 2:** Reestablish 4 acres of the vegetation communities that existed within the South Oak Grove MU prior to the Post Fire through 2027.	• Plant native species from the *Ericameria nauseosa* Shrubland Alliance and pre-fire vegetation communities. • Plant *Quercus lobata* individuals. • Active management to remove invasive plant species.	• Plant survivorship surveys. • Surveillance monitoring in areas of known invasive species presence. • Annual rapid assessment surveys. • General field observations.
	Soil, Vegetation, and Habitat	**Goal 2, Objective 3:** Revegetate a minimum of 1,000 linear feet of redundant trails with the *Ericameria linearifolia – Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, or California Annual Forb/Grass Vegetation Group in the 410-acre western section of the Open Riding MU by 2027.	• Prevent the creation of volunteer trails by displaying signage and using fence and hay bale barriers. • Close off and rehabilitate redundant volunteer trails by displaying signage, using fence and hay bale barriers, and planting native vegetation.	• Use aerial imagery to monitor the existing trail density within the Open Riding MU. • Annual trail condition evaluations. • Surveillance monitoring in areas of known redundant OHV trails. • Annual rapid assessment surveys. • General field observations.

4 Management Actions

Management actions are responses that can be taken to improve habitat, reduce impacts to habitat, respond to triggers, and attempt to reach success criteria, all to move toward habitat goals and objectives (CDPR 2021a). These actions are informed by the park's resource objectives (Table 6), success criteria, and monitoring results. For more detail on all the management actions described in the following Table 6 and for additional reasonably feasible actions not listed here, see Section 9 Appendix 3.

Table 6. Summary of management actions and suggested scheduling over the next five years.

Management Action Category	Management Action	Associated WHPP Goal/Objective	Timing	Year	Location (Management Unit)
Ongoing natural resources maintenance and activities	Cage sapling oaks to increase chances of survival.	Goal 1, Objective 1	Annual Spring and Summer	Through 2027	South Oak Grove/Cañada and Oak Preserve
	Prevent the creation of volunteer trails by displaying signage and using fence and hay bale barriers.	Goal 1, Objectives 1 and 2 Goal 2, Objective 3	Annual	Through 2027	South Oak Grove/Cañada, Oak Preserve, Native Grasslands, and western section of Open Riding
	Enforce California Code of Regulations "4306. Plants and Driftwood" to keep riders on designated trails in trails-only riding areas through law enforcement patrols.	Goal 1, Objectives 1 and 2	Annual	Through 2027	South Oak Grove/Cañada, Oak Preserve, and Native Grasslands
	Active management to remove invasive plant species.	Goal 1, Objectives 1 and 2 Goal 2, Objectives 1 and 2	Annual Spring through Fall	Through 2027	South Oak Grove/Cañada, Oak Preserve, Native Grasslands, western section of Open Riding, and Quail Canyon
	Remove trash from sensitive habitats.	Goal 1, Objectives 1 and 2	Annual	Through 2027	Park-wide

One-time landscape conservation and improvement projects	Plant native species from the *Ericameria nauseosa* Shrubland Alliance.	Goal 2, Objective 2	Annual Fall and Winter	Through 2027	South Oak Grove
	Plant *Quercus lobata* individuals.	Goal 2, Objective 2	Annual Fall and Winter	Through 2027	South Oak Grove
	Close off and rehabilitate redundant volunteer trails by displaying signage, using fence and hay bale barriers, and planting native vegetation.	Goal 2, Objective 3	Annual	Through 2027	Western section of Open Riding

5 Monitoring Program

Monitoring programs provide a periodic evaluation of the condition of resources and inform adaptive management within the park. The Natural Resource Assessment section is the initial assessment within a monitoring program. The discussion below includes current and future planned monitoring at Hungry Valley SVRA. Performance indicators demonstrate progress and achievements of the objectives outlined in Section 3 and evaluate the effects of management actions outlined in Section 4 and summarized in Table 5 and Table 6. For more detail on the monitoring methodologies described in the following Table 7 and for additionally reasonable feasible actions not listed here, see Section 9, Appendix 4.

Table 7. A summary of monitoring activities at Hungry Valley SVRA. If the monitoring activity is not associated with a specific protocol, that is indicated be N/A in the Protocol Used column.

PRC Category	Monitoring Activity	Associated WHPP Goal/Objective	Frequency	Due	Protocol Used
Soil, Vegetation, and Habitat	Annual trail condition evaluations	Goal 2, Objective 3	Annual	2024	Soil Conservation Plan
Soil, Vegetation, and Habitat	VegCAMP surveys	Goal 1, Objectives 1 and 2	Every 3 years or as needed	2026	CDFW VegCAMP
Soil, Vegetation, and Habitat	EDRR invasive plant surveys	Goal 1, Objectives 1 and 2	Annual	2024	CDPR EDRR Handbook
Soil, Vegetation, and Habitat	Surveillance monitoring in areas of known OHV trespass	Goal 1, Objectives 1 and 2	Annual	2024	N/A
Soil, Vegetation, and Habitat	Surveillance monitoring in areas of known invasive species presence	Goal 1, Objectives 1 and 2 Goal 2, Objectives 1 and 2	Annual	2024	N/A
Soil, Vegetation, and Habitat	Rapid Assessment/Relevé surveys	Goal 2, Objectives 1, 2, and 3	Annual	2024	CDFW-CNPS Rapid Assessment Relevé
Soil, Vegetation, and Habitat	Plant survivorship surveys	Goal 2, Objective 2	Annual	2025	N/A
Soil, Vegetation, and Habitat	Aerial imagery surveys	Goal 2, Objective 3	Annual	2024	N/A
Soil, Vegetation, and Habitat	Surveillance monitoring in areas of known redundant OHV trails.	Goal 2, Objective 3	Annual	2024	N/A
Soil, Vegetation, and Habitat	General field observations	All goals and objectives	As needed	2024	N/A

5.1 Monitoring Related to Soil, Vegetation, and Habitat

Below is a discussion of the monitoring activities, performance indicators (i.e., metric, baseline, and target), management actions, and target parameters that determine the success of Goals 1, 2, and 3 related to conserving and improving soil, vegetation, and habitat within the park. Although the goals and objectives are not wildlife specific, wildlife is being protected at the project level because all goals and objectives will protect sensitive habitat and resources that will ultimately benefit wildlife. Results of monitoring and potential adaptive management decisions will be included in the Annual Report.

Goal 1: Soil, Vegetation, and Habitat Conservation Objective 1 – Protect 27 acres of Valley Oak groves (*Quercus lobata* Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs from OHV activity through 2027.

Metric
Acreage of *Quercus lobata* Alliance.

Baseline
27 acres.

Target
Maintain 27 acres of the *Quercus lobata* Alliance through 2027 with no net loss.

Baseline acreage of Valley Oak groves was determined through VegCAMP surveys in 2021 and 2022. VegCAMP monitoring measures the presence and extent in acres of vegetation communities within the park using the VegCAMP surveying and mapping classification (Appendix 4). The information obtained from these surveys is intended to provide a baseline inventory for vegetation communities throughout the park, provide information about wildlife habitat, and inform management decisions regarding conservation, restoration, monitoring needs, invasive species management, and other management needs and goals. Subsequent VegCAMP surveys will also help resources managers assess the effectiveness of management techniques, including restoration and invasive plant species treatments, and whether WHPP goals and objectives regarding the management of plant communities have been met. Results of monitoring and potential adaptive management decisions will be included in the Annual Report.

Staff will ensure the 27 acres of Valley Oak groves are being conserved by conducting VegCAMP surveys every three years. In addition, the area will be monitored through annual EDRR invasive plant surveys, surveillance monitoring in areas of known OHV trespass, surveillance monitoring in areas of known invasive species presence, and general field observations.

Goal 1: Soil, Vegetation, and Habitat Conservation Objective 2 – Protect 970 acres of native grassland vegetation communities in the western section of the Native Grasslands MU from unauthorized OHV activity through 2027.

Baseline acreage of grassland vegetation communities was determined through VegCAMP surveys in 2021 and 2022 and by using Google Earth to map the target area. See Goal 1, Objective 1 above for more details on VegCAMP surveys.

Staff will ensure the 970 acres of native grassland vegetation communities are being conserved by conducting VegCAMP surveys every three years. In addition, the area will be monitored through annual EDRR invasive plant surveys, surveillance monitoring in areas of known OHV trespass, surveillance monitoring in areas of known invasive species presence, and general field observations.

Goal 2: Soil, Vegetation, and Habitat Restoration Objective 1 – Reduce invasive plant species, specifically dalmatian toadflax (*Linaria dalmatica*), in the 970-acre western section of the Native Grasslands MU through 2027.

Baseline infestation acreage will be determined in 2024 using relevé surveys (Appendix 4) at 5 x 5-meter plots established throughout the target 970-acre section of the Native Grasslands MU. Twenty permanent relevé survey plots will be set up across the infestation area. Within each plot, the percent cover of toadflax will be determined on an annual basis. Using the average percent cover of toadflax across all 20 plots, State Parks staff will be able to extrapolate the approximate infestation acreage across the 970-acre target area. In addition, the area will be monitored through surveillance monitoring in areas of known invasive species presence and general field observations. The objective will be updated once baseline infestation acreage is determined.

Goal 2: Soil, Vegetation, and Habitat Restoration Objective 2 – Reestablish 4 acres of the vegetation communities that existed within the South Oak Grove MU prior to the Post Fire through 2027.

Classification of this area as the *Quercus lobata* Woodland Alliance and *Ericameria nauseosa* Shrubland Alliance was accomplished through VegCAMP surveys in 2021 and 2022. See Goal 1, Objective 1 above for more details on VegCAMP surveys. A 4-acre plot in the Post Fire burn area will be created. Within the 4-acre plot, we will determine the number of surviving *Quercus lobata* individuals and plant new individuals to replace those impacted by the Post Fire. We will also estimate vegetation percent cover in 2025 with the goal to increase the cover from 0% post fire to at least 5% cover of *Ericameria nauseosa* Shrubland Alliance and pre-fire vegetation communities. An average of 5% shrub cover is consistent throughout many areas of the park and was selected as a target based on our previous work with VegCAMP surveys throughout Hungry Valley SVRA. The 4-acre area will be monitored by conducting plant survivorship and rapid assessment surveys by counting the number of *Quercus lobata* individuals and estimating shrub cover in the 4-acre plot each year. In addition, the area will have surveillance monitoring in areas of known invasive species presence that could impact the revegetated area, as well as general field observations.

Goal 2: Soil, Vegetation, and Habitat Restoration Objective 3 – Revegetate a minimum of 1,000 linear feet of redundant trails with the *Ericameria linearifolia – Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, and/or California Annual Forb/Grass Vegetation Group in the 410-acre western section of the Open Riding MU by 2027.

Classification of this area as the *Ericameria linearifolia – Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, and/or California Annual Forb/Grass Vegetation Group was accomplished through VegCAMP surveys in 2021, 2022, and 2023. See Goal 1 above for more details on VegCAMP surveys. Baseline number of linear feet of redundant trails was determined using Google Earth to measure redundant trail lengths in the area. We will monitor the restoration area by conducting rapid assessment surveys where we monitor the overall plant cover in the 1,000-linear feet trail segment each year. To maintain 14,500 linear feet or less of redundant trails in the area, we will use aerial imagery to monitor the existing trail density within the 410-acre western section of the Open Riding MU. In addition, we will monitor the area through annual Trail Condition Evaluations, surveillance monitoring in areas of known redundant OHV trails, and general field observations.

5.2 Scientific Research

5.2.1 Monitoring Related to Special-Status Species

Blainville's Horned Lizards

Blainville's Horned Lizard (*Phrynosoma blainvillii*) is designated by CDFW as a Species of Special Concern (SSC) and has experienced recent population declines (Hult and Germano 2015; Richmond and Fisher 2017, unpub.). Blainville's Horned Lizard was only recently recognized as a separate species from its close relatives in central (*P. cerroense*) and southern (*P. coronatum*) Baja California (Leaché et al. 2009, 2018). Blainville's Horned Lizard studies are lacking in the northern part of their range, and more information is needed to aid in conservation and management initiatives for Blainville's Horned Lizard (Hult and Germano 2015, Jennings and Hayes 1994).

Hungry Valley SVRA is home to Blainville's Horned Lizard and provides an expansive area of high desert chaparral habitat and sandy soils that are utilized by this species. During the warm spring and summer months, Blainville's Horned Lizard can be found along OHV trails and in native habitat at Hungry Valley SVRA. Our current goal is to continue yearly estimates that were started in 2020 on the distribution of Blainville's Horned Lizard in the park to form a detailed distribution map and inform management actions. We hypothesize that Blainville's Horned Lizard are using all areas of the park but may be more concentrated in areas with more suitable habitat (i.e., ample cover intermixed with open sandy areas). The overall goal is to create a long-term project to detect changes in spatial distribution across the park and determine causes for population increase or decline to inform management actions. In 2024, a new objective will be to conduct grid search efforts in the 2021 fire areas to determine if Blainville's Horned Lizard

populations are utilizing those sites post-fire. Based on one incidental observation in 2023 and two incidental observations in 2022 within the Tumbleweed Fire boundary, we predict Blainville's Horned Lizard are still using the fire areas, but standardized surveys are necessary to determine this.

All Blainville's Horned Lizard handling is limited to staff that are listed on a Scientific Collecting Permit approved through CDFW. Yearly incidental visual searches are conducted for Blainville's Horned Lizard anytime permitted staff are conducting work in the park. Permitted staff make their best attempt to hand capture all Blainville's Horned Lizard incidentally found in the park to collect data such as sex, approximate life stage, weight, and snout-to-vent length (SVL) to gather morphological data as well as distribution data. Permitted staff determine sex by observing the presence of enlarged post-anal scales, base of tail bulge, and enlarged femoral pores on males and the absence of those three characteristics on females. Permitted staff determine life-stage by overall body size and SVL measurements, where an SVL between 65 and 105 mm indicates an adult lizard and an SVL less than 65 mm indicates a juvenile (Jennings 1988). Permitted staff place Blainville's Horned Lizard in a plastic Ziploc bag and weigh with a spring scale to the nearest gram. Permitted staff measure SVL to the nearest millimeter with a ruler placed on the ventral side of the lizard, measuring from the tip of the snout to the end of the vent. A mark on the ventral side of the lizard with the last two digits of the four-digit year "20(xx)" can be marked with a sharpie so that any possible recaptures can be identified. The year mark and distinct ventral spot pattern of each individual lizard can help to determine specific recaptures.

To avoid unnecessary stress and possible injury, permitted staff shall not pursue Blainville's Horned Lizard that they feel they would harm by pursuing and eventually catching in a harmful way. This includes Blainville's Horned Lizard that flee under dense vegetation or quickly flee to a distance greater than staff could reasonably get to without a long pursuit. Permitted staff should easily be able to capture most Blainville's Horned Lizard by hand and generally release them within five minutes of capture. Permitted staff will report all ARSSC captures to the California Natural Diversity Database (CNDDB).

Bats

Bat monitoring provides information on the bat species present at Hungry Valley SVRA and the habitats they are using. Bats are monitored using passive acoustic detector surveys (described in Section 2.3) and active mist nets surveys, which allow hand capture of bats on the landscape. All bat handling is limited to staff that are listed on a Scientific Collecting Permit approved through CDFW.

To capture bats with mist nets, permitted staff focus our monitoring efforts at sites in the park that are known to have a high level of bat diversity and activity based on acoustic surveys.

Permitted staff place mist nets on the landscape in areas near water sources and bat foraging corridors. Mist nets are set up for three consecutive nights at each site. This includes single- (2.6 meter), double- (5.2 meter), and triple- (7.8 meter) high net setups of various horizontal lengths depending on the site. On some occasions, after the first night of netting, permitted staff place new nets or move certain nets and place them at a different location to better target bats. Personnel availability dictates the number of nets used. Permitted staff open nets at sunset, minimizing the likelihood of capturing birds. Permitted staff check each net regularly (at least every 10 minutes) for bats. Permitted staff leave nets open anywhere from 2 to 5 hours, depending on bat activity and weather. We record geographic coordinates at each capture site using a phone GPS and the Avenza application.

Most bats are easily removed from the nets and are released within 15 minutes of capture. Captured bats are identified to species, sexed, and weighed (to the nearest gram with a spring scale). Permitted staff also determine age (juvenile or adult) and take several body size measurements (to the nearest millimeter with a ruler). We note reproductive status (i.e., pregnant, lactating, post-lactating, scrotal, testes descended, non-reproductive) and overall condition of the bat, including the presence of wing scars. Permitted staff collect various samples (e.g., tissue, guano, swabs) if requested by other researchers. We report all species of special concern (SSC) captures to the California Natural Diversity Database (CNDDB).

Permitted staff disinfect all equipment and surfaces between each bat. We follow the most recent version (currently 10.14.2020) of the National White-Nose Syndrome (WNS) Decontamination Protocol (White-nose Syndrome Disease Management Working Group 2020) to clean all equipment after use. We purchased brand new equipment to be used within the park, and we decontaminate this equipment each time it is transferred to a new site within or outside the park. We only use this equipment within the state of California, and we do not use any out-of-state equipment for monitoring in order to prevent the spread of WNS.

5.2.2 Inventory Update and Habitat Monitoring System (HMS) Taxa Monitoring

Regular taxa monitoring provides data used to update the PRC required wildlife and native plant inventories (see Section 2.3) and provides a deeper understanding of wildlife and vegetation populations at Hungry Valley SVRA for park managers. Twenty-two HMS plots are surveyed throughout the park in both riding and non-riding areas. The frequency of monitoring varies depending on taxa and monitoring needs and the level of effort required. Detailed protocols can be found in Section 2.3 and Appendix 3.

6 Evaluate and Adapt

After evaluating the year's management actions and monitoring programs, Hungry Valley SVRA may need to respond by adjusting the following year's WHPP program as part of the adaptive management process. This section outlines the adaptive management decisions process and chain

of command and the required Annual Report to document those decisions and the full natural resources program of the previous year.

6.1 Adaptive Management Decisions

Many adaptive management decisions are relatively straightforward changes to resource management activities or treatments approved and undertaken by program staff within afforded authorities. Others require changes to operational decisions, require additional resources, or include other factors which require SVRA management to be informed and engaged in assessing alternative to address mandates. Thus, the approval process of decisions that grow out of adaptive management processes will necessarily engage a slightly different chain of command depending on the situation.

6.1.1 Standard Chain of Command

The Great Basin District uses the Department Standard District Structure identified in Department Operations Manual 0202. Within Park Operations, the district falls under the Desert Field Division. However, aspects of district managed SVRAs, such as review and approval of the WHPP, also fall under the jurisdiction of OHMVRD and NRD. A District Superintendent is responsible for the district operations, and a core team of program managers is responsible for their respective programs. Core district programs include administrative services, facilities management, interpretation and education, public safety, cultural resources, and natural resources. While program managers are tied to specific disciplines and programs, it is important for cross-discipline and matrix management to occur as no program exists solely independent of others.

For the purposes of the WHPP, the district's resources department will primarily be responsible for implementation, although other district programmatic efforts will be required. For example, certain management actions call for the use of interpretive signage, which would be executed in conjunction with the interpretation program. Additionally, the district's core team will be part of the district approval process of the WHPP.

6.1.2 Approval for WHPP-Identified Management Actions

As management actions included in the WHPP have previously been reviewed by the district, OHMVRD, and NRD, implementation of any adaptive management strategy identified in the WHPP is to be approved by the district's Resource Program Manager and reported to the District Superintendent. Implemented management actions will be discussed in annual WHPP reports.

6.1.3 Approval for Modified or New Management Actions

The management actions presented within the WHPP offer a comprehensive overview of all management actions currently being used to manage the SVRA's natural resources. The presented management actions may be expanded or modified, and new management actions may

be developed based on monitoring results. Adaptive management actions not outlined and approved by the WHPP will follow a different process for review and implementation. Modified and new management actions are to be categorized as low-level or high-level, depending on the scale or level of change to the current WHPP, resources program, and park unit. Any modified or new management action would follow Department policies found within the Department Operations Manual or relevant Departmental Notices.

Low-level management actions can be performed with little to no impact on the SVRA's recreation or WHPP. Implementation of low-level management actions is to be approved by the district's Resource Program Manager and reported to the District Superintendent. Additionally, low-level management actions would be reported in the annual WHPP report. The use of low-level management actions allows for resources staff to act and respond quickly to changes in the adaptive management strategies of their parks. Examples of low-level actions include closing a gate or removing incipient invasive plants.

High-level management actions are adaptive management decisions that require more thought, approval, and implementation and that may impact or alter recreation opportunities or result in broader changes to the current WHPP. High-level management decisions will require the approval of the district's Resource Program Manager and District Superintendent. These management decisions should be reported to OHMVRD and NRD and included in the WHPP annual report. Examples of high-level management decisions include closing sections of the SVRA for restoration (e.g., after wildfire) or starting a new management program (e.g., grazing, controlled burn, etc.). For example, the 2024 Post Fire burned approximately 10,000 acres of Hungry Valley SVRA and is the perfect example of how high-level adaptive management actions will be used to manage the areas impacted by the wildfire.

6.2 Annual WHPP Report

The Hungry Valley SVRA Annual WHPP Report will be used to capture the full natural resources program over the previous year, including adaptive management decisions, project implementation, and monitoring results. The Annual WHPP Report serves as a review of the application of the habitat management strategy and adaptive management approach of Hungry Valley SVRA.

The report, at a minimum, will including the following:

- The resources, goals, and objectives from the prior year.
- An analysis and review of the prior year's monitoring data results.
- The park's management triggers from the prior year.
- All management action decisions implemented during the past year, and a review of their level of success and ability to inform management decisions.
- Plans, goals, and objectives for monitoring and management within the coming year.

WHPP Annual Reports are to be reviewed at many different levels within the State Parks' Chain of Command. These levels include Park, District, Division, and Department. After iterative review at the Park and District levels, WHPP Annual Reports are to be sent to OHMVRD and NRD technical team staff for review to determine if the goals and objectives established by the park's WHPP are being met.

Report generation, program review, and district review should be completed annually, with final reports submitted to OHVMRD and NRD by March 31 following the year to which the annual report applies.

7 Constraints

Several factors may limit staff's ability to accomplish the goals and objectives laid out in the WHPP. Factors constraining Hungry Valley SVRA may include, but are not limited to, staffing, funding, stochastic events, and annual weather cycles. The Annual Report will discuss any constraints that inhibit specific goals and objectives.

Staffing

Staffing at Hungry Valley SVRA is limited. As of 2023, there are two Environmental Scientists and a Senior Environmental Scientist in the natural resources discipline.

Funding

Funding availability may impact staff's ability to implement projects, monitoring, and management actions outlined in the WHPP.

Stochastic Events

Stochastic (random) events are unpredictable events which may impact the land or draw resources which would otherwise be directed towards management. Examples of stochastic events which may occur within or nearby Hungry Valley SVRA include wildfires and flooding.

Annual Weather Cycles

The location of Hungry Valley SVRA is known to have extremely variable weather cycles, with hot and dry summers and cold winters with occasional snowfall. The variability in annual weather cycles may restrict the ability to complete certain goals that depend on specific temporal and climatic conditions.

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9 Appendices

9.1 Appendix 1: PRC Related to the WHPP

PRC §5090 provides language on conserving and improving natural resources within SVRAs, which further informs the scope and purpose of WHPPs:

§5090.10 "'Conservation' and 'conserve' mean activities, practices, and programs that protect and sustain soils, plants, wildlife, habitats, and cultural resources in accordance with the standards adopted pursuant to Section 5090.35.

§5090.11 "'Restoration' and 'restore' mean, upon closure of the unit or any portion thereof, the restoration of land to the contours, the plant communities, and the plant covers comparable to those on surrounding lands or at least those that existed prior to off-highway motor vehicle use.

§5090.13 "'Monitoring program' means a program adopted by the department that provides periodic evaluations of the condition of resources and informs adaptive management within state vehicular recreation areas."

§5090.14 "'Adaptive management' means to use the results of information gathered through a monitoring program or scientific research to adjust management strategies and practices to conserve cultural resources and provide for the conservation and improvement of natural resources."

§5090.32. (g) the Off-Highway Motor Vehicle Recreation Division (Division) to "Prepare and implement management and wildlife habitat protection plans for lands in, or proposed to be included in, state vehicular recreation areas, including new state vehicular recreation areas. These plans shall be developed in consideration of statutorily required state and regional conservation objectives. However, a plan shall not be prepared in any instance specified in subdivision (c) of Section 5002.2. Trails may only be added or included as components of existing trail systems when developing or updating plans in state vehicular recreation areas, upon completion of full environmental review."

§5090.35. (a) "The protection of public safety, the appropriate utilization of lands, and the conservation of natural and cultural resources are of the highest priority in the management of the state vehicular recreation areas. Additionally, the division shall promptly repair and continuously maintain areas and trails, and anticipate and prevent accelerated and unnatural erosion and other off-highway vehicle impacts to the extent possible. The division shall take steps necessary to prevent damage to significant natural and cultural resources within state vehicular recreation areas."

§5090.35. (c) (1) "The division shall compile and, when determined by the department to be necessary, periodically review and update an inventory of wildlife populations and prepare a wildlife habitat protection plan that conserves and improves wildlife habitats for each state

vehicular recreation area. By December 31, 2030, the division shall compile an inventory of native plant communities in each state vehicular recreation area to inform future plan updates."

§5090.35. (d) "The division shall monitor annually in each state vehicular recreation area to determine whether soil conservation standards are being met and the objectives of wildlife habitat protection plans are being met."

5090.35. (f) "The division shall protect natural, cultural, and archaeological resources within the state vehicular recreation areas."

§5090.39. (a) "The department shall require that: (1) Any soil conservation standard, wildlife habitat protection plan, or monitoring program, required by this chapter, applies best available science. (2) All standards, plans, and monitoring programs subject to paragraph (1) shall provide opportunities for public comment, including, but not limited to, written comments and public meetings, as appropriate."

§5090.43. (a) "State vehicular recreation areas consist of areas selected, developed, and operated to provide off-highway vehicle recreation opportunities. State vehicular recreation areas shall be selected for acquisition on lands where the need to establish areas to protect natural and cultural resources is minimized, the terrain is capable of withstanding motorized vehicle impacts, and where there are quality recreational opportunities for off-highway motor vehicles. Areas shall be developed, managed, and operated for the purpose of providing the fullest appropriate public use of the vehicular recreational opportunities present, in accordance with the requirements of this chapter, while providing for the conservation of cultural resources and the conservation and improvement of natural resource values over time."

§5090.43. (b) "After January 1, 1988, no new cultural or natural preserves or state wildernesses shall be established within state vehicular recreation areas. To protect natural and cultural resource values, sensitive areas may be established within state vehicular recreation areas where determined by the department to be necessary to protect natural and cultural resources. These sensitive areas shall be managed by the division in accordance with Sections 5019.71 and 5019.74, which define the purpose and management of natural and cultural preserves."

§5090.43. (c) "If off-highway motor vehicle use results in damage to any natural or cultural resources or damage within sensitive areas, appropriate measures shall be promptly taken to protect these lands from any further damage. These measures may include the erection of physical barriers and shall include the restoration of natural resources and the repair of damage to cultural resources."

9.2 Appendix 2: Wildlife and Plant Inventories

Table 8. Hungry Valley SVRA wildlife inventory.

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Anaxyrus boreas halophilus	California Toad	Amphibians	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Anaxyrus californicus	Arroyo Toad	Amphibians	Endangered	None	CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered	Desert wash | Riparian scrub | Riparian woodland | South coast flowing waters | South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Low	No	Within the range but minimal suitable habitat and no known occurrences within the park.	CNDDB
Batrachoseps stebbinsi	Tehachapi Slender Salamander	Amphibians	None	Threatened	BLM_S-Sensitive | IUCN_VU-Vulnerable	Cismontane woodland | Riparian woodland	Valley-foothill hardwood-conifer and valley-foothill riparian in the Piute and Tehachapi mountains of Kern County.	Prefers wet talus slopes or log-strewn hillsides with a steep, north-facing exposure.	Low	No	Just outside of the range and no known occurrences within the park.	CNDDB
Ensatina eschscholtzii croceater	Yellow-blotched Salamander	Amphibians	None	None	BLM_S-Sensitive | CDFW_WL-Watch List | USFS_S-Sensitive	Broadleaved upland forest | Chaparral	Forests and well-shaded canyons, as well as oak woodlands	Needs surface objects, such as logs, boards, and rocks. Also	Low	No	Just outside of the range and no known occurrences	CNDDB

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
							and old chaparral.	needs old rodent burrows or other underground retreats.			within the park.	
Pseudacris hypochondriaca	Baja California Treefrog	Amphibians	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Rana boylii	Foothill Yellow-legged Frog	Amphibians	None	Endangered	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened | USFS_S-Sensitive	Aquatic | Chaparral | Cismontane woodland | Coastal scrub | Klamath/North coast flowing waters | Lower montane coniferous forest | Meadow & seep | Riparian forest | Riparian woodland | Sacramento/San Joaquin flowing waters	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	None	No	Far outside of the range and no known occurrences within the park.	CNDDB
Rana draytonii	California Red-legged Frog	Amphibians	Threatened	None	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	N/A	N/A	N/A	None	No	Far outside of the range and no known occurrences within the park.	IPaC

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Spea hammondii	Western Spadefoot	Amphibians	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Cismontane woodland | Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	None	No	Far outside of the range and no known occurrences within the park.	CNDDB
Accipiter cooperii	Cooper's Hawk	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB
Accipiter striatus	Sharp-shinned Hawk	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Aeronautes saxatalis	White-throated Swift	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Agelaius phoeniceus	Red-winged Blackbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Agelaius tricolor	Tricolored Blackbird	Birds	None	Threatened	BLM_S-Sensitive | CDFW_SSC-Species	Freshwater marsh | Marsh & swamp |	Highly colonial species, most	Requires open water, protected nesting	Moderate	No	Within the range but minimal suitable	CNDDB

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
					of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Swamp | Wetland	numerous in Central Valley and vicinity. Largely endemic to California.	substrate, and foraging area with insect prey within a few km of the colony.			habitat and no known occurrences within the park.	
Aimophila ruficeps	Rufous-crowned Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Ammodramus savannarum	Grasshopper Sparrow	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Valley & foothill grassland	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	Moderate	No	Within the range and suitable habitat but no known occurrences within the park.	CNDDB
Amphispiza bilineata	Black-throated Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Last detected acoustically by IBP in 2020.	Park Species List
Anas platyrhynchos	Mallard	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park but minimal suitable habitat. Last	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											detected in 2022.	
Aphelocoma californica	California Scrub-Jay	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Aquila chrysaetos	Golden Eagle	Birds	None	None	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | CDFW_WL-Watch List | IUCN_LC-Least Concern	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB
Archilochus alexandri	Black-chinned Hummingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Ardea alba	Great Egret	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											park. Last detected in 2022.	
Artemisiospiza belli	Bell's Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Athene cunicularia	Burrowing Owl	Birds	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Moderate	No	Within the range and suitable habitat but no known occurrences within the park.	CNDDB
Aythya americana	Redhead	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park but minimal suitable habitat. Last detected in 2012.	Park Species List
Baeolophus inornatus	Oak Titmouse	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Bombycilla cedrorum	Cedar Waxwing	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											park. Last detected in 2022.	
Branta canadensis	Canada Goose	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park but minimal suitable habitat. Last detected in 2017.	Park Species List
Bubo virginianus	Great Horned Owl	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Bucephala albeola	Bufflehead	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park but minimal suitable habitat. Last detected in 2021.	Park Species List
Buteo jamaicensis	Red-tailed Hawk	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Buteo lagopus	Rough-legged Hawk	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Buteo lineatus	Red-shouldered Hawk	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											park. Last detected in 2022.	
Buteo regalis	Ferruginous Hawk	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Great Basin grassland | Great Basin scrub | Pinon & juniper woodlands | Valley & foothill grassland	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	High	Yes	Seen occasionally within the park. Last detected in 2022.	CNDDB
Buteo swainsoni	Swainson's Hawk	Birds	None	Threatened	BLM_S-Sensitive | IUCN_LC-Least Concern	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Callipepla californica	California Quail	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Calypte anna	Anna's Hummingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Calypte costae	Costa's Hummingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Cardellina pusilla	Wilson's Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											detected in 2022.	
Cathartes aura	Turkey Vulture	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Catharus guttatus	Hermit Thrush	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Chamaea fasciata	Wrentit	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Charadrius vociferus	Killdeer	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Chondestes grammacus	Lark Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Chordeiles minor	Common Nighthawk	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Last detected acoustically by IBP in 2021.	Park Species List
Circus hudsonius	Northern Harrier	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List

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					Concern | USFWS_BCC-Birds of Conservation Concern							
Colaptes auratus	Northern Flicker	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Columba livia	Rock Pigeon	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Contopus cooperi	Olive-sided Flycatcher	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List | USFWS_BCC-Birds of Conservation Concern	N/A	N/A	N/A	Moderate	Yes	Seen rarely within the park. Last detected in 2020.	Park Species List
Contopus sordidulus	Western Wood-Pewee	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Corvus brachyrhynchos	American Crow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											detected in 2021.	
Corvus corax	Common Raven	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Cyanocitta stelleri	Steller's Jay	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Dendragapus fuliginosus howardi	Mount Pinos Sooty Grouse	Birds	None	None	CDFW_SSC-Species of Special Concern	Upper montane coniferous forest	Inhabitant of southern Sierra Nevada mountains, in small islands of populations.	Mainly inhabits white fir covered slopes. Also found in other conifer types and open, brushy areas adjacent to forest.	Low	No	Far outside of the range and no known occurrences within the park.	CNDDB
Dryobates nuttallii	Nuttall's Woodpecker	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Dryobates pubescens	Downy Woodpecker	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Dryobates villosus	Hairy Woodpecker	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											detected in 2021.	
Elanus leucurus	White-tailed Kite	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Empidonax difficilis	Pacific-slope Flycatcher	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Empidonax traillii extimus	Southwestern Willow Flycatcher	Birds	Endangered	Endangered	N/A	N/A	N/A	N/A	Moderate	No	Within the range and suitable habitat but no known occurrences within the park.	IPaC
Eremophila alpestris actia	California Horned Lark	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Marine intertidal & splash zone communities | Meadow & seep	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB
Euphagus cyanocephalus	Brewer's Blackbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List

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Falco mexicanus	Prairie Falcon	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB
Falco peregrinus	Peregrine Falcon	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park. Last detected in 2023.	Park Species List
Falco sparverius	American Kestrel	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Fulica americana	American Coot	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park but minimal suitable habitat. Last detected in 2022.	Park Species List
Gallinago delicata	Wilson's Snipe	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen rarely within the park but minimal suitable habitat. Last detected in 2020.	Park Species List

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Geococcyx californianus	Greater Roadrunner	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Geothlypis trichas	Common Yellowthroat	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Gymnogyps californianus	California Condor	Birds	Endangered	Endangered	CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_CR-Critically Endangered | NABCI_RWL-Red Watch List	Chaparral | Valley & foothill grassland	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude.	Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	High	Yes	Seen regularly flying over the park. Last detected in 2022.	CNDDB
Haemorhous mexicanus	House Finch	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Haliaeetus leucocephalus	Bald Eagle	Birds	Delisted	Endangered	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern | USFS_S-Sensitive	Lower montane coniferous forest | Old growth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Low	No	Seen occasionally within the park. Last detected in 2023.	CNDDB

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Hirundo rustica	Barn Swallow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Icterus bullockii	Bullock's Oriole	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Icterus cucullatus	Hooded Oriole	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Icterus parisorum	Scott's Oriole	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Junco hyemalis	Dark-eyed Junco	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Lanius ludovicianus	Loggerhead Shrike	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Broadleaved upland forest | Desert wash | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands | Riparian	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB

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						woodland | Sonoran desert scrub						
Melanerpes formicivorus	Acorn Woodpecker	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Melanerpes lewis	Lewis's Woodpecker	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Melospiza melodia	Song Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Melozone crissalis	California Towhee	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Mimus polyglottos	Northern Mockingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Molothrus ater	Brown-headed Cowbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Myiarchus cinerascens	Ash-throated Flycatcher	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the	Park Species List

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											park. Last detected in 2022.	
Nycticorax nycticorax	Black-crowned Night-Heron	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Oreortyx pictus	Mountain Quail	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Oreothlypis celata	Orange-crowned Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Oreothlypis ruficapilla	Nashville Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2020.	Park Species List
Oxyura jamaicensis	Ruddy Duck	Birds	None	None	N/A	N/A	N/A	N/A	Moderate	Yes	Seen occasionally within the park but minimal suitable habitat. Last detected in 2021.	Park Species List
Pandion haliaetus	Osprey	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park but minimal suitable	Park Species List

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											habitat. Last detected in 2021.	
Passer domesticus	House Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Passerculus sandwichensis	Savannah Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Passerella iliaca	Fox Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Passerina amoena	Lazuli Bunting	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Passerina caerulea	Blue Grosbeak	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Last detected acoustically by IBP in 2020.	Park Species List
Patagioenas fasciata	Band-tailed Pigeon	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Petrochelidon pyrrhonota	Cliff Swallow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last	Park Species List

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											detected in 2022.	
Phainopepla nitens	Phainopepla	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Phalaenoptilus nuttallii	Common Poorwill	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Phasianus colchicus	Ring-necked Pheasant	Birds	None	None	N/A	N/A	N/A	N/A	Low	Yes	Seen rarely within the park but possibly introduced to the area for hunting. Last detected in 2020.	Park Species List
Pheucticus melanocephalus	Black-headed Grosbeak	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Pipilo maculatus	Spotted Towhee	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Piranga ludoviciana	Western Tanager	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List

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Polioptila caerulea	Blue-gray Gnatcatcher	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Polioptila californica californica	Coastal California Gnatcatcher	Birds	Threatened	None	CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	Coastal bluff scrub | Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Low	No	Far outside of the range and no known occurrences within the park.	CNDDB
Progne subis	Purple Martin	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Broadleaved upland forest | Lower montane coniferous forest	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine.	Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	Low	No	Far outside of the range and no known occurrences within the park.	CNDDB
Psaltriparus minimus	Bushtit	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Regulus calendula	Ruby-crowned Kinglet	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List

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Salpinctes obsoletus	Rock Wren	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Sayornis nigricans	Black Phoebe	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sayornis saya	Say's Phoebe	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Selasphorous calliope	Calliope Hummingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2020.	Park Species List
Selasphorus rufus	Rufous Hummingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Selasphorus sasin	Allen's Hummingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Last detected acoustically by IBP in 2020.	Park Species List
Setophaga coronata	Yellow-rumped Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List

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Setophaga nigrescens	Black-throated Gray Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Setophaga occidentalis	Hermit Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2023.	Park Species List
Setophaga petechia	Yellow Warbler	Birds	None	None	CDFW_SSC-Species of Special Concern	Riparian forest | Riparian scrub | Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	High	Yes	Seen occasionally within the park. Last detected in 2021.	CNDDB
Setophaga townsendi	Townsend's Warbler	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Sialia currucoides	Mountain Bluebird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Sialia mexicana	Western Bluebird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the	Park Species List

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											park. Last detected in 2022.	
Sitta carolinensis	White-breasted Nuthatch	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sphyrapicus ruber	Red-breasted Sapsucker	Birds	None	None	N/A	N/A	Breeds in mixed coniferous and mixed deciduous-coniferous forests and woodlands.	Requires standing snags or hollow trees for nesting cavity.	High	Yes	Seen occasionally within the park. Last detected in 2022.	CNDDB
Sphyrapicus thyroideus	Williamson's Sapsucker	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2023.	Park Species List
Spinus lawrencei	Lawrence's Goldfinch	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Spinus psaltria	Lesser Goldfinch	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2020.	Park Species List
Spinus tristis	American Goldfinch	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List

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Spizella atrogularis	Black-chinned Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Last detected acoustically by IBP in 2021.	Park Species List
Spizella breweri	Brewer's Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Last detected acoustically by IBP in 2020.	Park Species List
Spizella passerina	Chipping Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Stelgidopteryx serripennis	Northern Rough-winged Swallow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Streptopelia decaocto	Eurasian Collared-Dove	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sturnella neglecta	Western Meadowlark	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sturnus vulgaris	European Starling	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Tachycineta bicolor	Tree Swallow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last	Park Species List

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											detected in 2022.	
Thryomanes bewickii	Bewick's Wren	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Toxostoma redivivum	California Thrasher	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Troglodytes aedon	House Wren	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Turdus migratorius	American Robin	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Tyrannus verticalis	Western Kingbird	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Tyto alba	Barn Owl	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Vireo bellii	Bell's Vireo	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last	Park Species List

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											detected in 2022.	
Vireo bellii pusillus	Least Bell's Vireo	Birds	Endangered	Endangered	IUCN_NT-Near Threatened	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	IPaC
Vireo gilvus	Warbling Vireo	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Xanthocephalus xanthocephalus	Yellow-headed Blackbird	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Zenaida macroura	Mourning Dove	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Zonotrichia atricapilla	Golden-crowned Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Zonotrichia leucophrys	White-crowned Sparrow	Birds	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Bombus caliginosus	Obscure Bumble Bee	Insects	None	None	IUCN_VU-Vulnerable	N/A	Coastal areas from Santa	Food plant genera include	Moderate	No	Within the range but no known	CNDDB

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							Barbara County to north to Washington state.	Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.			occurrences within the park.	
Bombus crotchii	Crotch Bumble Bee	Insects	Candidate	None	N/A	N/A	Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	High	Yes	CNDDB record inside park.	CNDDB
Branchinecta conservatio	Conservancy Fairy Shrimp	Crustaceans	Endangered	None	IUCN_EN-Endangered	Valley & foothill grassland | Vernal pool | Wetland	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools.	Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	Low	No	No suitable habitat in the park but likely found nearby.	CNDDB
Branchinecta lynchi	Vernal Pool Fairy Shrimp	Crustaceans	Threatened	None	IUCN_VU-Vulnerable	Valley & foothill grassland | Vernal pool | Wetland	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Low	No	No suitable habitat in the park but likely found nearby.	CNDDB

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							rain-filled pools.					
Ceratochrysis longimala	Desert Cuckoo Wasp	Insects	None	None	N/A	N/A	N/A	N/A	Moderate	No	Within the range but no known occurrences within the park.	CNDDB
Danaus plexippus	Monarch Butterfly	Insects	Candidate	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	IPaC
Plebulina emigdionis	San Emigdio Blue Butterfly	Insects	None	None	USFS_S-Sensitive	N/A	Found in desert canyons and along riverbeds in Inyo, Kern, Los Angeles, and San Bernardino counties.	Host plant is Atriplex canescens; maybe Lotus purshianus also.	High	No	Within the range but no known occurrences within the park.	CNDDB
Streptocephalus woottoni	Riverside Fairy Shrimp	Crustaceans	Endangered	None	N/A	N/A	N/A	N/A	Low	No	No suitable habitat in the park but likely found nearby.	IPaC
Ammospermophilus nelsoni	Nelson's (=San Joaquin) Antelope Squirrel	Mammals	None	Threatened	BLM_S-Sensitive | IUCN_EN-Endangered	Chenopod scrub	Western San Joaquin Valley from 200-1200 ft elev. On dry, sparsely vegetated loam soils.	Dig burrows or use k-rat burrows. Need widely scattered shrubs, forbs and grasses in broken terrain with gullies and washes.	Low	No	Just outside of the range and no known occurrences within the park.	CNDDB

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Antrozous pallidus	Pallid Bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	High	Yes	Regularly detected within the park and captured while mist netting in 2022.	CNDDB
Bassariscus astutus	Ringtail	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Suitable habitat present and within range.	Park Species List
Canis latrans	Coyote	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Chaetodipus californicus	California Pocket Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Corynorhinus townsendii	Townsend's Big-eared Bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species	Broadleaved upland forest | Chaparral |	Throughout California in a wide variety of	Roosts in the open, hanging from walls	High	Yes	Regularly detected within the park and	CNDDB

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					of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland	habitats. Most common in mesic sites.	and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.			captured while mist netting in 2022.	
Dipodomys agilis	Agile Kangaroo Rat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Dipodomys ingens	Giant Kangaroo Rat	Mammals	Endangered	Endangered	IUCN_EN-Endangered	N/A	N/A	N/A	Low	No	Just outside of the range and no known	IPaC

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											occurrences within the park.	
Dipodomys nitratoides nitratoides	Tipton Kangaroo Rat	Mammals	Endangered	Endangered	IUCN_VU-Vulnerable	Chenopod scrub	Saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley.	Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.	Low	No	Just outside of the range and no known occurrences within the park.	CNDDB
Eptesicus fuscus	Big Brown Bat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Eumops perotis californicus	Western Mastiff Bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	High	Yes	Regularly detected within the park. Last detected in 2022.	CNDDB
Lasionycteris noctivagans	Silver-haired Bat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Lasiurus blossevillii	Western Red Bat	Mammals	None	None	CDFW_SSC-Species	N/A	N/A	N/A	High	Yes	Regularly detected within the	Park Species List

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					of Special Concern						park. Last detected in 2022.	
Lasiurus cinereus	Hoary Bat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Lepus californicus	Black-tailed Jackrabbit	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Lynx rufus	Bobcat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Mephitis mephitis	Striped Skunk	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Microtus californicus	California Vole	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Mustela frenata	Long-tailed Weasel	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Myotis californicus	California Myotis	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the	Park Species List

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											park. Last detected in 2023.	
Myotis ciliolabrum	Western Small-footed Myotis	Mammals	None	None	BLM_S-Sensitive | IUCN_LC-Least Concern | WBWG_M-Medium Priority	N/A	Wide range of habitats mostly arid wooded and brushy uplands near water. Seeks cover in caves, buildings, mines, and crevices.	Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.	High	Yes	Regularly detected within the park. Last detected in 2023.	CNDDB
Myotis evotis	Long-eared Myotis	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Myotis lucifugus	Little Brown Bat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2019.	Park Species List
Myotis thysanodes	Fringed Myotis	Mammals	None	None	BLM_S-Sensitive | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	N/A	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer.	Uses caves, mines, buildings or crevices for maternity colonies and roosts.	High	Yes	Regularly detected within the park and captured while mist netting in 2022.	CNDDB
Myotis volans	Long-legged Myotis	Mammals	None	None	IUCN_LC-Least	Upper montane	Most common in	Nursery colonies	High	Yes	Regularly detected	CNDDB

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					Concern | WBWG_H-High Priority	coniferous forest	woodland and forest habitats above 4000 ft. Trees are important day roosts; caves and mines are night roosts.	usually under bark or in hollow trees, but occasionally in crevices or buildings.			within the park.	
Myotis yumanensis	Yuma Myotis	Mammals	None	None	BLM_S-Sensitive | IUCN_LC-Least Concern | WBWG_LM-Low-Medium Priority	Lower montane coniferous forest | Riparian forest | Riparian woodland | Upper montane coniferous forest	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	High	Yes	Regularly detected within the park. Last detected in 2023.	CNDDB
Neotamias speciosus callipeplus	Mount Pinos Chipmunk	Mammals	None	None	USFS_S-Sensitive	Upper montane coniferous forest	Open forests with a mix of shrubs and trees on the upper slopes and summit of Mt. Abel and Mt. Frazier.	Arboreal habits - rarely ventures far from tree cover.	Low	No	Within the range but minimal suitable habitat and no known occurrences within the park.	CNDDB
Neotoma fuscipes	Dusky-footed Woodrat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Neotoma lepida	Desert Woodrat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last	Park Species List

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											detected in 2021.	
Odocoileus hemionus californicus	Mule Deer	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Otospermophilus beecheyi	California Ground Squirrel	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Parastrellus hesperus	Canyon Bat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Pekania pennanti	Fisher	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	N/A	N/A	N/A	None	No	Far outside of the range and no known occurrences within the park.	IPaC
Perognathus alticola inexpectatus	Tehachapi Pocket Mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | USFS_S-Sensitive	Chaparral | Joshua tree woodland | Valley & foothill grassland	Arid annual grassland and desert shrub communities, but also taken in fallow grain fields and in Russian thistle.	Burrows for cover and nesting. Aestivates and hibernates during extreme weather. Forages on open ground and under shrubs.	Moderate	No	Within the range but no known occurrences within the park.	CNDDB

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Perognathus inornatus	San Joaquin Pocket Mouse	Mammals	None	None	BLM_S-Sensitive | IUCN_LC-Least Concern	Cismontane woodland | Mojavean desert scrub | Valley & foothill grassland	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert.	Associated with fine-textured, sandy, friable soils.	Moderate	No	Within the range but no known occurrences within the park.	CNDDB
Perognathus longimembris	Little Pocket Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Peromyscus boylii	Brush Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Peromyscus californicus	California Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Peromyscus eremicus	Cactus Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2020.	Park Species List

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Peromyscus maniculatus	Deer Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Peromyscus truei	Pinyon Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Procyon lotor	Raccoon	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Puma concolor	Mountain Lion	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Reithrodontomys megalotis	Western Harvest Mouse	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Sciurus griseus	Western Gray Squirrel	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sorex ornatus relictus	Buena Vista Lake Ornate Shrew	Mammals	Endangered	None	CDFW_SSC-Species of Special Concern	N/A	N/A	N/A	Low	No	Just outside of the range and no known occurrences	IPaC

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											within the park.	
Spilogale gracilis	Western Spotted Skunk	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Sylvilagus audobonii	Desert Cottontail	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Sylvilagus bachmani	Brush Rabbit	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Tadarida brasiliensis	Mexican Free-tailed Bat	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Tamias merriami	Merriam's Chipmunk	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2021.	Park Species List
Taxidea taxus	American Badger	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Alkali marsh | Alkali playa | Alpine | Alpine dwarf scrub | Bog & fen | Brackish marsh | Broadleaved	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents.	High	Yes	Rarely seen within park.	CNDDB

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						upland forest | Chaparral | Chenopod scrub | Cismontane woodland | Closed-cone coniferous forest | Coastal bluff scrub | Coastal dunes | Coastal prairie | Coastal scrub | Desert dunes | Desert wash | Freshwater marsh | Great Basin grassland | Great Basin scrub | Interior dunes | Ione formation | Joshua tree woodland | Limestone | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Mojavean		Digs burrows.				

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						desert scrub | Montane dwarf scrub | North coast coniferous forest | Oldgrowth | Pavement plain | Redwood | Riparian forest | Riparian scrub | Riparian woodland | Salt marsh | Sonoran desert scrub | Sonoran thorn woodland | Ultramafic | Upper montane coniferous forest | Upper Sonoran scrub | Valley & foothill grassland						
Thomomys bottae	Botta's Pocket Gopher	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2023.	Park Species List
Urocyon cinereoargenteus	Gray Fox	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											park. Last detected in 2023.	
Ursus americanus	Black Bear	Mammals	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Vulpes macrotis mutica	San Joaquin Kit Fox	Mammals	Endangered	Threatened	N/A	Chenopod scrub | Valley & foothill grassland	Annual grasslands or grassy open stages with scattered shrubby vegetation.	Need loose-textured sandy soils for burrowing, and suitable prey base.	Low	No	Just outside of the range and no known occurrences within the park.	CNDDB
Actinemys marmorata	Northwestern Pond Turtle	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters |	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Low	No	Within the range but minimal suitable habitat and no known occurrences within the park.	CNDDB *now split into two species

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
						South coast standing waters | Wetland						
Actinemys pallida	Southwestern Pond Turtle	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	N/A	N/A	N/A	Low	No	Within the range but minimal suitable habitat and no known occurrences within the park.	CNDDB *now split into two species
Anniella pulchra	Northern California Legless Lizard	Reptiles	None	None	CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Chaparral | Coastal dunes | Coastal scrub	Sandy or loose loamy soils under sparse vegetation.	Soil moisture is essential. They prefer soils with a high moisture content.	High	Yes	Within the range and has been observed within the park.	CNDDB
Anniella spp.	California Legless Lizard	Reptiles	None	None	CDFW_SSC-Species of Special Concern	N/A	Contra Costa County south to San Diego, within a variety of open habitats. This element represents California records of Anniella not yet assigned to new species within the Anniella	Variety of habitats; generally, in moist, loose soil. They prefer soils with a high moisture content.	High	No	Within the range but no known occurrences within the park.	CNDDB

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
							pulchra complex.					
Arizona elegans occidentalis	California Glossy Snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	N/A	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Moderate	No	Within the range and suitable habitat but no known occurrences within the park.	CNDDB
Aspidoscelis tigris stejnegeri	San Diegan Tiger Whiptail	Reptiles	None	None	CDFW_SSC-Species of Special Concern	N/A	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB
Charina umbratica	Southern Rubber Boa	Reptiles	None	Threatened	USFS_S-Sensitive	Meadow & seep | Riparian forest | Riparian woodland | Upper montane coniferous	Known from the San Bernardino and San Jacinto mtns; found in a variety of montane forest	Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing;	Moderate	No	Within the range and suitable habitat but no known occurrences within the park.	CNDDB

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
						forest | Wetland	habitats. Snakes resembling C. umbratica reported from Mt. Pinos and Tehachapi mtns group with C. bottae based on mtDNA. Further research needed.	seeks cover in rotting logs, rock outcrops, and under surface litter.				
Coluber flagellum piceus	Red Racer	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Coluber flagellum ruddocki	San Joaquin Coachwhip	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Chenopod scrub | Valley & foothill grassland	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley.	Needs mammal burrows for refuge and oviposition sites.	Low	No	Far outside of the range and no known occurrences within the park.	CNDDB
Coluber lateralis lateralis	California Striped Racer	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Crotalus oreganus helleri	Southern Pacific Rattlesnake	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											detected in 2022.	
Diadophis punctatus modestus	San Bernardino Ringneck Snake	Reptiles	None	None	USFS_S-Sensitive	N/A	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.	Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.	Moderate	No	Within the range and suitable habitat but no known occurrences within the park.	CNDDB
Elgaria multicarinata webbii	Woodland Alligator Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Gambelia sila	Blunt-nosed Leopard Lizard	Reptiles	Endangered	Endangered	CDFW_FP-Fully Protected | IUCN_EN-Endangered	Chenopod scrub	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief.	Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	Low	No	Far outside of the range and no known occurrences within the park.	CNDDB
Gambelia wislizenii	Long-nosed Leopard Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Gopherus agassizii	Desert Tortoise	Reptiles	Threatened	Threatened	IUCN_VU-Vulnerable	N/A	N/A	N/A	Low	No	Just outside of the range and no known	IPaC

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											occurrences within the park.	
Hypsiglena ochrorhyncha klauberi	San Diego Nightsnake	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2022.	Park Species List
Lampropeltis californiae	California Kingsnake	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Phrynosoma blainvillii	Blainville's Horned Lizard	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	High	Yes	Seen regularly within the park. Last detected in 2022.	CNDDB
Pituophis catenifer	Gopher Snake	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Plestiodon gilberti	Western Red-tailed Skink	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the	Park Species List

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
rubricaudatus											park. Last detected in 2021.	
Plestiodon skiltonianus	Skilton's Skink	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Rhinocheilus lecontei	Long-nosed Snake	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen occasionally within the park. Last detected in 2021.	Park Species List
Salvadora hexalepis virgultea	Coast Patch-nosed Snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sceloporus graciosus gracilis	Western Sagebrush Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sceloporus occidentalis longipes	Great Basin Fence Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Sceloporus uniformis	Yellow-backed Spiny Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Thamnophis gigas	Giant Garter Snake	Reptiles	Threatened	Threatened	IUCN_VU-Vulnerable	N/A	N/A	N/A	None	No	Far outside of the range and no known	IPaC

Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											occurrences within the park.	
Thamnophis hammondii	Two-striped Gartersnake	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Marsh & swamp | Riparian scrub | Riparian woodland | Wetland	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Low	No	Within the range but minimal suitable habitat and no known occurrences within the park.	CNDDB
Uta stansburiana elegans	Western Side-blotched Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List
Xantusia vigilis	Desert Night Lizard	Reptiles	None	None	N/A	N/A	N/A	N/A	High	Yes	Seen regularly within the park. Last detected in 2022.	Park Species List

Table 9. Hungry Valley SVRA plant inventory.

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Acanthomintha obovata ssp. cordata	heart-leaved thorn-mint	None	None	4.2	SB_CalBG/RSABG; SB_SBBG	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	N/A	Clay; Grassy slopes, oak woodland, chaparral, <1600 m.	Medium	No	On 2022 CNPS database search. There are recent observations nearby.	CNPS
Acanthoscyphus parishii var. abramsii	Abrams' oxytheca	None	None	1B.2	USFS_S-Sensitive	Chaparral	Chaparral.	Shale or sandy places. 1675-2075 m.	Low	No	On 2022 CNDDB database search. Observations are to the west. Our elevation range is too low.	CNDDB
Acanthoscyphus parishii var. parishii	Parish's oxytheca	None	None	4.2	N/A	Chaparral, Lower montane coniferous forest	N/A	Gravelly, Sandy; 1900-2600 m.	Low	No	On 2022 CNPS database search. Elevation range is higher than the park.	CNPS
Acmispon brachycarpus	short-podded lotus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Acmispon glaber	deerweed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Acmispon procumbens	silky California broom	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Acmispon strigosus	strigose lotus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Adenostoma fasciculatum	chamise	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Agoseris retrorsa	spear-leaved agoseris	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Allium howellii var. clokeyi	Mt. Pinos onion	None	None	1B.3	SB_SBBG-Santa Barbara Botanic Garden | USFS_S-Sensitive	Great Basin scrub | Meadow & seep | Pinon & juniper woodlands	Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges).	Open slopes, sagebrush scrub, clay, 1385-1800 m.	High	No	On 2022 CNDDB database search. Elevations do overlap. Observations both west and east of park.	CNDDB
Allophyllum glutinosum	sticky false gilia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ambrosia dumosa	burro weed, white bursage	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ambrosia psilostachya	western ragweed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Amsinckia menziesii	common fiddleneck	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
var. intermedia												
Amsinckia tessellata	fiddleneck	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ancistrocarphus filagineus	wooly fishhooks	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Androsace elongata ssp. acuta	California androsace	None	None	4.2	SB_CalBG/ RSABG; SB_USDA	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland	N/A	Dry grassy slopes, <1200 m.	Medium	No	On 2022 CNPS database search. Recent observations near Gorman.	CNPS
Anemopsis californica	yerba mansa	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Anthriscus caucaulis	bur chervil*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Apium graveolens	celery*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Arctostaphylos glandulosa ssp. gabrielensis	San Gabriel manzanita	None	None	1B.2	SB_CalBG/ RSABG; USFS_S	Chaparral	N/A	N/A	Low	No	On 2022 CNPS database search. No observations in	CNPS

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
											Ventura or Kern counties.	
Arctostaphylos glauca	big berry manzanita	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Arctostaphylos parryana	parry manzanita	None	None	4.3	USFS_S-Sensitive	Chaparral | Cismontane woodland	Chaparral, cismontane woodland.	Montane chaparral or foothill woodland. 2100-2310 m.	High	Yes	Detected in the park.	Park Species List
Arenaria paludicola	marsh sandwort	Endangered	Endangered	1B.1	SB_SBBG-Santa Barbara Botanic Garden	Freshwater marsh | Marsh & swamp | Wetland	Marshes and swamps.	Growing up through dense mats of vegetation in freshwater marsh.	Low	No	On 2022 IPAC database search. Marsh habitat not present.	IPaC
Argemone munita	prickly poppy	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Artemisia californica	California sagebrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Artemisia palmeri	San Diego sagewort	None	None	4.2	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral | Coastal scrub | Riparian forest | Riparian scrub | Riparian woodland	Coastal scrub, chaparral, riparian forest, riparian woodland, riparian scrub.	In drainages and riparian areas in sandy soil within chaparral and other habitats. 15-915 m.	High	Yes	Detected in the park.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Artemisia tridentata	Great Basin sagebrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Arundo donax	giant reed**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Asclepias erosa	desert milkweed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Asclepias fascicularis	narrow leaf milkweed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Astragalus douglasii	Douglas' milkvetch	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Astragalus gambelianus	Gambel's milkvetch	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Astragalus hornii var. hornii	Horn's milkvetch	None	None	1B.1	BLM_S-Sensitive	Alkali playa | Meadow & seep | Wetland	Meadows and seeps, playas.	Lake margins, alkaline sites. 75-350 m.	Low	No	On 2022 CNDDB database search. Salt flats, low elevation not present.	CNDDB
Astragalus leucolobus	Big Bear Valley woollypod	None	None	1B.2	BLM_S-Sensitive | IUCN_VU-Vulnerable | SB_CalBG/RSABG-California/Rancho Santa	Lower montane coniferous forest | Pavement plain | Pinon & juniper woodlands | Upper montane	Lower montane coniferous forest, pebble plain, pinyon and juniper woodland, upper montane	Dry pine woods, gravelly knolls among sagebrush, or stony lake shores in the pine	Medium	No	On 2022 CNDDB database search. Very little potential habitat.	CNDDB

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
					Ana Botanic Garden	coniferous forest	coniferous forest.	belt. 1460-2895 m.				
Astragalus pachypus	thickpod milkvetch	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Astragalus purshii	Pursh's milkvetch	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Astragalus trichopodus	Santa Barbara milkvetch	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Atriplex canescens	fourwing saltbush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Atriplex coronata var. vallicola	Lost Hills crownscale	None	None	1B.2	BLM_S-Sensitive	Chenopod scrub | Valley & foothill grassland | Vernal pool	Chenopod scrub, valley and foothill grassland, vernal pools.	In powdery, alkaline soils that are vernally moist. 45-885 m.	Low	No	On 2022 CNDDB database search. Found lower. No habitat.	CNDDB
Atriplex lentiformis	big saltbush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Avena barbata	slender wild oat**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Avena fatua	wild oat**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Baccharis salicifolia	mulefat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Baileya multiradiata	desert marigold	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Balsamorhiza deltoidea	deltoid balsam root	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bassia hyssopifolia	five horn bassia**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Berberis nevinii	Nevin's barberry	Endangered	Endangered	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Chaparral | Cismontane woodland | Coastal scrub | Riparian scrub	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, north-facing slopes or in low grade sandy washes. 90-1590 m.	Low	No	On 2022 IPAC database search. Found lower. Habitat not present.	IPaC
Berula erecta	cut leaved water parsnip	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bloomeria crocea	golden stars	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Boechera pulchra	beautiful rockcress	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Brassica nigra	black mustard**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Brickellia californica	California bricklebush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bromus diandrus	ripgut brome**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bromus hordeaceus	soft chess**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bromus madritensis	foxtail brome**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bromus rubens	red brome*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bromus sitchensis var. carinatus (Bromus carinatus*)	California brome grass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Bromus tectorum	cheat grass**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calandrinia menziesii	redmaids	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calochortus clavatus	clubhair mariposa lily	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Calochortus clavatus var. clavatus	club-haired mariposa lily	None	None	4.3	SB_CalBG/RSABG; USFS_S	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland	N/A	Clay, Rocky, Serpentinite (usually).	Low	No	On 2022 CNPS database search. Generally serpentine.	CNPS
Calochortus clavatus var. gracilis	slender mariposa lily	None	None	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Shaded foothill canyons; often on grassy slopes within other habitat. 210-1815 m.	Low	No	On 2022 CNDDB database search. Below 1000 m.	CNDDB
Calochortus fimbriatus	late-flowered mariposa lily	None	None	1B.3	SB_SBBG; USFS_S	Dry, open coastal woodland, chaparral < 900 m	Chapparal, cismontane woodland, riparian woodland.	Serpentinite (sometimes).	Low	No	On general plan database search and literature review.	CNPS
Calochortus kennedyi	desert mariposa lily	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calochortus palmeri	Palmer's mariposa lily	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calochortus palmeri var. palmeri	Palmer's mariposa lily	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic	Chaparral | Lower montane coniferous forest | Moist	Meadows and seeps, chaparral, lower montane	Vernally moist places in yellow-pine forest, chaparral.	High	Yes	On 2022 CNDDB database search.	CNDDB

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					Garden | SB_SBBG-Santa Barbara Botanic Garden | USFS_S-Sensitive	meadow & seep	coniferous forest.	195-2530 m.				
Calochortus plummerae	Plummer's mariposa lily	None	None	4.2	SB_CalBG/RSABG	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	N/A	Granitic, Rocky.	Low	No	On 2022 CNPS database search. Observations are further south.	CNPS
Calochortus striatus	alkali mariposa lily	None	None	1B.2	BLM_S-Sensitive, USFS_S-Sensitive	Alkaline meadows	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calochortus venustus	butterfly mariposa lily	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calyptridium monandrum	common pussypaws	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calystegia collina ssp. venusta	South Coast Range morning glory	None	None	4.3	N/A	Chaparral | Cismontane woodland | Ultramafic | Valley &	Chaparral, cismontane woodland, valley and foothill grassland.	Most common on serpentine, but also on sedimentary substrate. In open,	High	Yes	Detected in the park.	Park Species List

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						foothill grassland		rocky areas. 425-1490 m.				
Calystegia occidentalis ssp. fulcrata	Sonora morning glory	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Calystegia peirsonii	Peirson's morning glory	None	None	4.2	N/A	Chaparral | Chenopod scrub | Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Valley & foothill grassland	Chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	Disturbed areas or along roadsides or grassy, open areas. 30-1500 m.	Low	No	On 2022 CNDDB database search. Observations to the south and east.	CNDDB
Camissonia campestris	Mojave sun cup	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Camissonia strigulosa	strigose sun cup	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Camissoniopsis ignota	Jurupa Hills sun cup	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Carex simulata	short-beaked sedge	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Castilleja chromosa	desert indian paintbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Castilleja exserta	owl's clover	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Castilleja foliolosa	wooly indian paintbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Castilleja gleasoni	Mt. Gleason paintbrush	None	Rare	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Lower montane coniferous forest | Pinon & juniper woodlands	Lower montane coniferous forest, chaparral, pinyon and juniper woodland.	On open flats or slopes in granitic soil. Restricted to the San Gabriel Mountains. 975-1950 m.	Low	No	On 2022 CNDDB database search. Observations to the east in pine forest.	CNDDB
Castilleja subinclusa	longleaf paintbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Caulanthus coulteri	Coulter's jewel flower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Caulanthus lemmonii	Lemmon's jewel flower	None	None	1B.2	BLM_S-Sensitive | SB_SBBG-Santa Barbara Botanic Garden | USFS_S-Sensitive	Pinon & juniper woodlands | Valley & foothill grassland	Pinyon and juniper woodland, valley and foothill grassland.	Grassland, chaparral, scrub; 75-1585 m.	Medium	No	On 2022 CNDDB database search. No observations nearby.	CNDDB
Ceanothus cueatus	buckbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Ceanothus leucodermis	chaparral whitethorn	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ceanothus pauciflorus	Mojave ceanothus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Centaurea benedicta	blessed thistle**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Centaurea solstitialis	yellow star thistle**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Centrostegia thurberi	red triangles	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cercocarpus betuloides	birchleaf mountain mahogany	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Chaenactis fremontii	Fremont pincushion	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Chaenactis glabriuscula	yellow pincushion	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Chaenactis stevioides	desert pincushion	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Chaenactis xantiana	fleshy pincushion	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Chenopodium californicum	California goosefoot	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Chorizanthe brevicornu	brittle spineflower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Chorizanthe parryi	Parry's spineflower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Chorizanthe spinosa	Mojave spineflower	None	None	4.2	N/A	Alkali playa | Chenopod scrub | Joshua tree woodland | Mojavean desert scrub	Chenopod scrub, Mojavean desert scrub, Joshua tree woodland, playas.	Sometimes on alkaline soils. 6-1300 m.	Low	No	On 2022 CNPS database search. All observations to the east. Mojave desert.	CNPS
Chorizanthe staticoides	Turkish rugging	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cirsium mohavense	Mohave thistle	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cirsium occidentale	cobweb thistle, western thistle	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cirsium occidentale var.venustum	cobwebby thistle, venus thistle	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Clarkia cylindrica	speckled clarkia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Clarkia purpurea	winecup clarkia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Claytonia exigua	little spring beauty	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Claytonia parviflora	narrow-leaved miner's lettuce	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Claytonia perfoliata	miner's lettuce	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Clinopodium mimuloides	monkey-flower savory	None	None	4.2	N/A	Chaparral, North Coast coniferous forest	N/A	Mesic, Streambanks.	Low	No	On 2022 CNPS database search. Lack of habitat. No observations nearby.	CNPS
Collinsia bartsiifolia	white collinsia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Convolvulus arvensis	bindweed*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Convolvulus simulans	small-flowered morning-glory	None	None	4.2	SB_CRES	Chaparral, Coastal scrub, Valley and foothill grassland	N/A	Clay, Seeps, Serpentinite.	Low	No	On 2022 CNPS database search. Found at lower elevation.	CNPS

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Cordylanthus rigidus	rigid bird's beak	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Corethrogyne filaginifolia	California sandaster	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cortaderia jubata	pampas grass**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Croton setiger	turkey-mullein, dove weed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cryptantha pterocarya	wingnut cryptantha	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cryptantha tumulosa	New York Mountains cryptantha	None	None	4.3	SB_CalBG/ RSABG	Mojavean desert scrub, Pinyon and juniper woodland	N/A	Carbonate, Clay, Granitic, Gravelly.	Low	No	On 2022 CNPS database search. San Bernardino and Inyo counties.	CNPS
Cucurbita foetidissima	buffalo gourd	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cuscuta californica	California dodder	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Cylindropuntia californica	California cholla	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Datura wrightii	jimson weed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Delphinium gypsophilum	gypsum-loving larkspur	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Delphinium inopinum	unexpected larkspur	None	None	4.3	USFS_S	Upper montane coniferous forest	N/A	N/A	Low	Yes	On 2022 CNPS database search. Conifer forest >2200 m.	CNPS
Delphinium parryi ssp. purpureum	Mt. Pinos larkspur	None	None	4.3	SB_CalBG/RSABG; SB_SBBG; USFS_S	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland	Sagebrush scrub, dry chaparral;1000--2600 m	Sagebrush scrub, dry chaparral; 1000-2600 m.	High	Yes	On 2022 CNPS database search.	CNPS
Diplacus pictus	calico monkeyflower	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest | Cismontane woodland	Broadleafed upland forest, cismontane woodland.	In bare ground around gooseberry bushes or around granite rock outcrops. 180-1280 m.	Low	No	On 2022 CNDDB database search. All observations are to the north.	CNDDB
Diptospermum capitatus	blue dicks, blue hyacinth	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Dodecahema leptoceras	slender-horned spineflower	Endangered	Endangered	1B.1	SB_CalBG/RSABG-California/R	Chaparral, Cismontane	Chaparral, cismontane woodland,	Flood deposited terraces and	Low	No	On 2022 IPAC database search. All	IPaC

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					ancho Santa Ana Botanic Garden	woodland, Coastal scrub	coastal scrub (alluvial fan sage scrub).	washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.			observations to the southeast.	
Dudleya lanceolata	lance-leaved liveforever	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Elymus condensatus	giant rye grass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Elymus elymoides	big squirreltail	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Elymus trachycaulus	slender wheatgrass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Elymus triticoides	creeping wild rye	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Emmenanthe penduliflora	whispering bells	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Encelia actoni	Acton's encelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Encelia virginensis	Virginia River encelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ephedra viridis	green ephedra	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Epilobium canum	California fuschia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Epipactis gigantea	stream orchid	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Equisetum sp.	horsetail	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eremalche parryi ssp. kernensis	kern mallow	Endangered	None	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Chenopod scrub | Pinon & juniper woodlands | Valley & foothill grassland	Chenopod scrub, valley and foothill grassland, pinyon and juniper woodlands.	On dry, open, sandy to clay soils; usually within valley saltbush scrub; often at edge of balds. 60-1295 m.	Low	No	On 2022 CNDDB database search. All observations to the north and <1000 m.	CNDDB
Eremothera boothii	Booth's evening primrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriastrum densifolium	giant woollystar	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Eriastrum diffusum	miniature woollystar	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriastrum hooveri	Hoover's eriastrum	FD	None	4.2	SB_CalBG/ RSABG	Chenopod scrub, Pinyon and juniper woodland, Valley and foothill grassland	N/A	Gravelly (sometimes).	Low	No	On 2022 CNPS database search. No habitat. Lower elevation.	CNPS
Eriastrum tracyi	Tracy's eriastrum	None	Rare	3.2	USFS_S-Sensitive	Chaparral | Cismontane woodland | Valley & foothill grassland	Chaparral, cismontane woodland, valley and foothill grassland.	Gravelly shale or clay; often in open areas. 315-2400 m.	Medium	No	On 2022 CNDDB database search. All observations to the north. Some at Castac Lake.	CNDDB
Ericameria cooperi	Cooper's goldenbush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park. Last detected in 2023.	Park Species List
Ericameria linearifolia	linear-leaved goldenbush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Ericameria nauseosa	rubber rabbitbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Ericameria parryi	Parry’s rabbitbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Erigeron foliosus	leafy fleabane	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriodictyon crassifolium	thickleaf yerba santa	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriodictyon parryi	poodle-dog bush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriogonum angulosum	angle-stemmed buckwheat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriogonum callistum	Tehachapi buckwheat	None	None	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral | Limestone	Chaparral.	Openings; rocky, limestone substrate. 1400-1800 m.	Low	No	On 2022 CNDDB database search. Lack of limestone habitat.	CNDDB
Eriogonum elegans	elegant wild buckwheat	None	None	4.3	N/A	Cismontane woodland, Valley and foothill grassland	N/A	Gravelly (usually), Roadsides (sometimes), Sandy (usually), Washes (often).	Low	No	On 2022 CNPS database search. All observations are further west.	CNPS

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Eriogonum elongatum	longstem buckwheat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Eriogonum fasciculatum	California buckwheat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Eriogonum fasciculatum var. polifolium	Eastern Mojave buckwheat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriogonum inflatum	desert trumpet	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriogonum kennedyi var. austromontanum	southern mountain wild-buckwheat	Threatened	None	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Lower montane coniferous forest | Pavement plain	Pebble (pavement) plain, lower montane coniferous forest.	Usually found in pebble plain habitats. 1765-3020 m.	Low	No	On 2022 IPAC database search. Found above 2000 m.	IPaC
Eriogonum nudum	nude buckwheat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriogonum nudum var. indictum	protruding buckwheat	None	None	4.2	N/A	Chaparral, Chenopod scrub, Cismontane woodland	N/A	Clay, Serpentinite.	Low	No	On 2022 CNPS database search. All are to the northeast.	CNPS

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Eriogonum pusillum	yellow turban	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriogonum roseum	wand buckwheat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriophyllum confertiflorum	golden yarrow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eriophyllum lanatum var. hallii	Fort Tejon woolly sunflower	None	None	1B.1	USFS_S-Sensitive	Chaparral | Cismontane woodland	Chaparral, cismontane woodland.	Often on slopes in loamy soils. 1065-1435 m.	Medium	No	On 2022 CNDDB database search. Found at Fort Tejon	CNDDB
Eriophyllum pringlei	Pringle's wooly sunflower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Erodium cicutarium	filaree**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Erysimum capitatum	western wallflower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Erythranthe guttata	yellow monkey flower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Erythranthe inconspicua	small-flowered monkeyflower	None	None	4.3	N/A	Chaparral, Cismontane woodland, Lower	N/A	Mesic	Low	No	On 2022 CNPS database search. Needs	CNPS

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
						montane coniferous forest					streams or seeps.	
Eschscholzia californica	California poppy	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Eschscholzia lemmonii ssp. kernensis	Tejon poppy	None	None	1B.1	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden | SB_USDA-US Dept of Agriculture	Chenopod scrub | Valley & foothill grassland	Valley and foothill grassland, chenopod scrub.	Little information available on habitat. 135-1355 m.	Medium	No	On 2022 CNDDB database search. Found at Fort Tejon	CNDDB
Eschscholzia minutiflora	pygmy gold poppy	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eucrypta chrysanthemifolia	spotted eucrypta	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Eulobus californicus	California primrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Euphorbia albomarginata	whitemargin sandmat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Festuca myuros	rat tail fescue**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Frangula californica	coffeeberry	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Frasera neglecta	pine green-gentian	None	None	4.3	SB_CalBG/RSABG; SB_SBBG	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest	N/A	N/A	Medium	No	On 2022 CNPS database search. Observations to the west and >1400 m.	CNPS
Fremontodendron californicum	flannel bush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Fritillaria agrestis	stinkbells	None	None	4.2	N/A	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	N/A	Clay, Serpentinite (sometimes).	Low	No	On 2022 CNPS database search. Found below 500 m.	CNPS

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Fritillaria pinetorum	pine fritillary	None	None	4.3	SB_CalBG/RSABG	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest	N/A	Granitic (sometimes), Metamorphic (sometimes).	Low	No	On 2022 CNPS database search. Found above 1800 m.	CNPS
Galium andrewsii	phlox leaved bedstraw	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Galium sp.	bedstraw	N/A	N/A	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Garrya flavescens	ashy silk tassel	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Gilia brecciarum	Nevada gilia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Gilia capitata	globe gilia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Gilia interior	inland gilia	None	None	4.3	N/A	Cismontane woodland, Joshua tree "woodland", Lower montane	N/A	Rocky.	Medium	No	On 2022 CNPS database search. Found	CNPS

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
						coniferous forest					to the west and north.	
Gilia latiflora	broad flowered gilia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Gilia latiflora ssp. cuyamensis	Cuyama gilia	None	None	4.3	N/A	Pinyon and juniper woodland	N/A	N/A	Medium	No	On 2022 CNPS database search. Found nearby in both directions.	CNPS
Gilia leptantha ssp. pinetorum	pine gilia	None	None	4.3	N/A	Lower montane coniferous forest	N/A	N/A	Medium	No	On 2022 CNPS database search. Found nearby in both directions.	CNPS
Gilia transmontana	transmontane gilia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Goodmania luteola	golden goodmania	None	None	4.2	N/A	Meadows and seeps, Mojavean desert scrub, Playas, Valley and foothill grassland	N/A	Alkaline (sometimes), Clay (sometimes).	Low	No	On 2022 CNPS database search. Observations are further east.	CNPS
Greeneocharis circumscissa	western forget-me-not	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Grindelia sp.	gumplant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Gutierrezia sarothrae	matchweed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Helianthus annuus	common sunflower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Heliotropium curassavicum	alkali heliotrope	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Hesperocyparis nevadensis	Piute cypress	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_USDA-US Dept of Agriculture	Chaparral | Cismontane woodland | Closed-cone coniferous forest | Limestone | Pinon & juniper woodlands | Ultramafic	Closed-cone coniferous forest, chaparral, cismontane woodland, pinyon and juniper woodland.	On dry slopes; known from granodiorite, gabbro and limestone. 715-1585 m.	High	Yes	Detected in the park.	Park Species List
Hesperoyucca whipplei	chaparral yucca	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Heterotheca grandiflora	telegraph weed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Heuchera caespitosa	urn-flowered alumroot	None	None	4.3	SB_CalBG/RSABG; USFS_S	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Upper montane coniferous forest	N/A	Rocky.	Low	No	On 2022 CNPS database search. Found above 1900 m.	CNPS
Hirschfeldia incana	short-podded mustard**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Hordeum brachyantherum	meadow barley	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Hordeum murinum ssp.leporinum	foxtail barley*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Hulsea vestita ssp. gabrielensis	San Gabriel Mountains sunflower	None	None	4.3	SB_CalBG/RSABG; USFS_S	Lower montane coniferous forest, Upper montane coniferous forest	N/A	Rocky.	Low	No	On 2022 CNPS database search. Talus slopes above 1500 m.	CNPS
Iris longipetala	coast iris	None	None	4.2	N/A	Coastal prairie, Lower montane coniferous forest,	N/A	Mesic.	Low	No	On 2022 CNPS database search. Mostly	CNPS

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						Meadows and seeps					coastal, bay area.	
Juglans californica	Southern California black walnut	None	None	4.2	IUCN_NT; SB_CalBG/ RSABG; SB_USDA	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	N/A	N/A	Low	No	On 2022 CNPS database search. Found below 900 m.	CNPS
Juncus acutus ssp. leopoldii	southwestern spiny rush	None	None	4.2	SB_CalBG/ RSABG; SB_CRES	Coastal dunes, Marshes and swamps, Meadows and seeps	N/A	N/A	Low	No	On 2022 CNPS database search. Found below 300 m.	CNPS
Juncus balticus	baltic rush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Juncus xiphioides	irisleaf rush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Juniperus californica	California juniper	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Keckiella ternata	blue-stemmed keckiella	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Krascheninnikovia lanata	winter fat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Lagophylla ramosissima	common hareleaf	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Langliosia setosissima	bristly langloisia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lasthenia californica	goldfields	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lasthenia gracilis	California goldfields	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Lathyrus vestitus	pacific pea	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Layia glandulosa	white tidy tips	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Layia heterotricha	pale-yellow layia	None	None	1B.1	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden |	Cismontane woodland | Coastal scrub | Pinon & juniper woodlands | Valley & foothill grassland	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland.	Alkaline or clay soils; open areas. 90-1800 m.	Medium	No	On 2022 CNDDB database search. Observations to the west and north.	CNDDB

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					USFS_S-Sensitive							
Layia platyglossa	coastal tidy tips	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lepidium fremontii	desert pepperweed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lepidium latifolium	perennial pepperweed**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lepidium perfoliatum	shield cress, clasping pepperweed*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lepidospartum squamatum	scalebroom	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Leptosiphon aureus	golden linanthus	None	None	4.2	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Leptosiphon brevicaulus	Mojave linanthus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Leptosiphon parviflorus	variable linanthus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List

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Leptosyne californica	California coreopsis	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Leptosyne douglasii	Douglas' coreopsis	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lesptosyne bigelovii	Bigelow's corepsis	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lessingia glandulifera	valley lessingia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lessingia tenuis	spring lessingia	None	None	4.3	N/A	Chaparral, Cismontane woodland, Lower montane coniferous forest	N/A	Openings.	Medium	No	On 2022 CNPS database search. Observations nearby in all directions.	CNPS
Linanthus bigelovii	Bigelow's linanthus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Linanthus californicus	California prickly phlox	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Linanthus dichotomous	evening snow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Linanthus parryae	Parry's linanthus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Linaria dalmatica ssp. dalmatica	dalmatian toadflax**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Loeseliastrum schottii	Schott's calico	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Lomatium mohavense	Mojave desert parsley	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lomatium utriculatum	hog fennel	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lonicera subspicata var. denudata	Johnston's honeysuckle	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lotus corniculatus	bird's foot lotus*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lupinus benthamii	spider lupine	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lupinus bicolor	miniature lupine	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lupinus concinnus	bajada lupine	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Lupinus excubitus	grape soda lupine	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lupinus microcarpus var. densiflorus	chick lupine	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Lycium cooperi	peach thorn	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Malacothamnus davidsonii	Davidson's bush mallow	None	None	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland	Coastal scrub, riparian woodland, chaparral, cismontane woodland.	Sandy washes. 150-1525 m.	Low	No	On 2022 CNDDB database search. All observations further southeast in Los Angeles County.	CNDDB
Malacothamnus fremontii	Fremont's bush mallow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Malacothamnus orbiculatus	round-leaved bush mallow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Malacothrix californica	California desert dandelion	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Malacothrix glabrata	desert dandelion	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Marah horrida	Sierra man-root	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Marah macrocarpa	chilicothe	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Marrubium vulgare	white horehound**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Matricaria discoidea	pineapple weed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Melica imperfecta	small-flowered melic	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Melilotus sp.	sweetclover*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Melissa officinalis	bee balm*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Mentzelia albicaulis	whitestem blazing star, whitestem stickleaf	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Mentzelia veatchiana	Veatch's blazing star	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Microseris sylvatica	sylvan microseris	None	None	4.2	N/A	Chaparral, Cismontane	N/A	Serpentinite (rarely).	Medium	No	On 2022 CNPS	CNPS

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
						woodland, Great Basin scrub, Pinyon and juniper woodland, Valley and foothill grassland					database search. There are observations east of Gorman.	
Microsteris gracilis	slender phlox	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Mirabilis laevis	desert wishbone bush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Monardella breweri	mustang mint	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Monardella linoides ssp. oblonga	Tehachapi monardella	None	None	1B.3	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest	Lower montane coniferous forest, upper montane coniferous forest, pinyon and juniper woodland.	On dry slopes of yellow pine forest, decomposed granitic soils; also in roadside disturbed areas. 1430-2655 m.	Low	No	On 2022 CNDDB database search. Found above 1500 m.	CNDDB
Monolopia lanceolata	common monolopia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Monoptilon bellidiforme	desert star	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Mucronea perfoliata	desert saucers	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Muhlenbergia rigens	deergrass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Muhlenbergia utilis	aparejo grass	None	None	2B.2	N/A	Chaparral | Cismontane woodland | Coastal scrub | Marsh & swamp | Meadow & seep | Ultramafic	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland.	Sometimes alkaline, sometimes serpentinite. 25-2325 m.	Low	No	On 2022 CNDDB database search. Wet sites below 1000 m.	CNDDB
Muilla maritima	sea muilla	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Nama demissa	purple mat	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Nasturtium gambelii	Gambel's watercress	Endangered	Threatened	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES	Alkali playa | Chenopod scrub | Marsh & swamp | Vernal pool | Wetland	Vernal pools, chenopod scrub, marshes and swamps, playas.	San Diego hardpan and San Diego claypan vernal pools; in swales and vernal	Low	No	On 2022 IPAC database search. Needs water. <350 m. None nearby.	IPaC

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
					Native Gene Seed Bank			pools, often surrounded by other habitat types. 15-850 m.				
Nasturtium officinale	watercress	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Navarretia fossalis	spreading navarretia	Threatened	None	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Brackish marsh | Freshwater marsh | Marsh & swamp | Wetland	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	Low	No	On 2022 IPAC database search. Needs wetlands, vernal pools.	IPaC
Navarretia peninsularis	baja navarretia	None	None	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Lower montane coniferous forest | Meadow & seep | Pinon & juniper woodlands	Lower montane coniferous forest, chaparral, meadows and seeps, pinyon and juniper woodland.	Wet areas in open forest. 1150-2365 m.	Low	No	On 2022 CNDDB database search. Needs wet areas in forest >1400 m.	CNDDB
Navarretia setiloba	Piute Mountains navarretia	None	None	1B.1	BLM_S-Sensitive | USFS_S-Sensitive	Cismontane woodland | Pinon & juniper woodlands | Valley &	Cismontane woodland, pinyon and juniper woodland, valley and	Red clay soils, or on gravelly loam. 180-1645 m.	Medium	No	On 2022 CNDDB database search. Found at Fort Tejon.	CNDDB

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
						foothill grassland	foothill grassland.					
Nemacladus secundiflorus var. robbinsii	Robbins' nemacladus	None	None	1B.2	USFS_S-Sensitive	Chaparral | Valley & foothill grassland	Chaparral, valley and foothill grassland.	Dry, sandy or gravelly slopes. Openings. 360-1710 m.	High	Yes	On 2022 CNDDB database search. One observation near Hungry Valley in 2005.	CNDDB
Nemophila menziesii	baby blue eyes	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Nemophila parviflora var. quercifolia	oak-leaved nemophila	None	None	4.3	N/A	Cismontane woodland, Lower montane coniferous forest	N/A	N/A	Medium	No	On 2022 CNPS database search. Observations near Castac Lake.	CNPS
Oenothera californica	California evening primrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Oenothera deltoides	dune primrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Oenothera elata	Hooker's evening primrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Oenothera primiveris	yellow desert evening primrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Opuntia basilaris	beavertail cactus	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Opuntia basilaris var. brachyclada	short-joint beavertail	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam. 425-2015 m.	High	Yes	On 2022 CNDDB database search.	CNDDB
Opuntia basilaris var. treleasei	Bakersfield cactus	Endangered	Endangered	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chenopod scrub | Cismontane woodland | Valley & foothill grassland	Chenopod scrub, valley and foothill grassland, cismontane woodland.	Coarse or cobbly well-drained granitic sand on bluffs, low hills, and flats, within grassland. 85-550 m.	Low	No	On 2022 CNDDB database search. Found below 150 m.	CNDDB
Opuntia phaecantha	brown-spined prickly pear	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Orcuttia californica	California orcutt grass	Endangered	Endangered	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-	Vernal pool | Wetland	Vernal pools.	10-660 m.	Low	No	On 2022 IPAC database search. Found in vernal pools.	IPaC

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					San Diego Zoo CRES Native Gene Seed Bank							
Packera breweri	Brewer's ragwort	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Packera ionophylla	Tehachapi ragwort	None	None	4.3	N/A	Lower montane coniferous forest, Upper montane coniferous forest	N/A	Granitic, Rocky.	Low	No	On 2022 CNPS database search. Found in pine forest >1400 m.	CNPS
Pectocarya penicillata	winged combseed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Pectocarya setosa	moth combseed	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Penstemon centranthifolius	scarlet bugler	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Penstemon grinnellii	Grinnell's beardtongue	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Perideridia pringlei	adobe yampah	None	None	4.3	N/A	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland	N/A	Clay (often), Serpentinite.	Medium	No	On 2022 CNPS database search. Observations nearby in all directions.	CNPS

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Peritoma arborea	bladderpod	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Phacelia ciliata	great valley phacelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Phacelia distans	distant phacelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Phacelia egena	rock phacelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Phacelia exilis	Transverse Range phacelia	None	None	4.3	N/A	Lower montane coniferous forest, Meadows and seeps, Pebble (Pavement) plain, Upper montane coniferous forest	N/A	Gravelly (sometimes), Sandy (sometimes).	Medium	No	On 2022 CNPS database search. Observations to the west.	CNPS
Phacelia fremontii	Fremont's phacelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Phacelia imbricata	imbricate phacelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Phacelia tanacetifolia	lacy phacelia	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Phoradendron villosum	pacific mistletoe	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Pinus monophylla	single-leaf pinyon pine	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Plagiobothrys arizonicus	Arizona popcorn flower	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Platanus racemosa	California sycamore	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Platystemon californicus	cream cups	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Poa annua	annual bluegrass*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Poa secunda	pine bluegrass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Populus fremontii	Fremont cottonwood	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen in a few locations in the park.	Park Species List
Potentilla sp.	cinquefoil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Prunus ilicifolia	holly leaf cherry	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Pseudognaphalium sp.	cudweed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Pterostegia drymarioides	fairy mist	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Purshia stansburryana	Stansbury's cliffrose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Purshia tridentata	bitterbrush	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Quercus chrysolepis	canyon live oak	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Quercus john-tuckeri	Tucker’s oak	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Quercus lobata	valley oak	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen in a few locations in the park.	Park Species List
Rafinesquia neomexicana	desert chicory	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Rhamnus ilicifolia	hollyleaf redberry	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Rhus aromatica	fragrant sumac	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Ribes divaricatum	spreading gooseberry	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ribes malvaceum	chaparral currant	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Ribes menziesii var. ixoderme	aromatic canyon gooseberry	None	None	1B.2	N/A	Chaparral | Cismontane woodland	Chaparral, cismontane woodland.	In forest openings. 610-1325 m.	Medium	No	On 2022 CNDDB database search. Observations to the north in the Castac Lake area.	CNDDB
Ribes quercetorum	oak gooseberry	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Rosa californica	California wild rose	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Rumex hymenosepalus	wild rhubarb, canaigre	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salix gooddingii	black willow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salix laevigata	red willow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salix lasiandra	shining willow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Salix lasiolepis	arroyo willow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salix scouleriana	Scouler's willow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salsola paulsenii	barbwire Russian thistle**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salvia apiana	white sage	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salvia carduacea	thistle sage	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salvia columbariae	chia sage	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salvia dorrii	purple sage, Dorr's sage	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Salvia mellifera	black sage	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Sambucus nigra ssp. caerulea	blue elderberry	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen regularly throughout the park.	Park Species List
Schismus barbatus	old han schismus**	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Secale cereale	cereal rye	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Senecio flaccidus	shrubby ragwort	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Sidalcea neomexicana	salt spring checkerbloom	None	None	2B.2	USFS_S-Sensitive	Alkali playa | Chaparral | Coastal scrub | Lower montane coniferous forest | Mojavean desert scrub | Wetland	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 3-2380 m.	Low	No	On 2022 CNDDB database search. Needs alkaline springs, marshes.	CNDDB
Sisymbrium altissimum	tumble mustard*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Solanum xanti	purple nightshade	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Solidago sp.	goldnerod	N/A	N/A	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Sphaeralcea ambigua	desert mallow, apricot mallow	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Stanleya pinnata	Prince's plume	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

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Stephanomeria pauciflora	brown plume wirelettuce, desert straw	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Stephanomeria virgata ssp. pleurocarpa	wand wirelettuce	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Stipa cernua	nodding needle grass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Stipa hymenoides	indian rice grass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Stipa pulchra	purple needle grass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Stipa speciosa	desert needle grass	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Streptanthus medeirosii	Tejon jewelflower	None	None	1B.1	N/A	Cismontane woodland | Limestone	Cismontane woodland.	Granitic or carbonate. 1360-1880 m.	Low	No	On 2022 CNDDB database search. New species found in Tejon in oak-fir forest.	CNDDB

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Stylocline gnaphaloides	everlasting neststraw	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in park in 2023.	Park Species List
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	Low	No	On 2022 CNDDB database search. Found in wetlands.	CNDDB
Symphyotrichum greatae	Greata's aster	None	None	1B.3	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest | Chaparral | Cismontane woodland | Lower montane coniferous forest | Riparian woodland	Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland.	Mesic canyons. 335-2015 m.	Low	No	On 2022 CNDDB database search. Found in damp places in canyons.	CNDDB
Syntrichopappus lemmonii	Lemmon's syntrichopappus	None	None	4.3	SB_CalBG/RSABG	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland	N/A	N/A	Medium	No	On 2022 CNPS database search. Observations to the northeast.	CNPS

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Tetrapteron palmeri	Palmer's Sun Cup	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Thysanocarpus curvipes	fringe pod	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Tragopogon porrifolius	purple salsify*	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Trifolium albopurpureum	rancheria clover	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Trifolium gracilentum	pin point clover	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Trifolium willdenovii	tomcat clover	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Tropidocarpum gracile	dobie pod, slender keep fruit	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Typha sp.	cattail	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Umbellularia californica	California bay Laurel	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Uropappus lindleyi	silver puffs	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List

Scientific Name	Common Name	Federal Status	State Status	CA Rare Plant Rank	Other Status	Habitats	General Habitat (if special status species)	Microhabitat (if special status species)	Potential to Occur within SVRA	Known to Occur within SVRA	Justification	Database
Urtica dioica ssp. holosericea	stinging nettle	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Vicia americana	American vetch	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Viola pedunculata	Johnny jump up	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Viola pinetorum ssp. grisea	grey-leaved violet	None	None	1B.2	BLM_S-Sensitive	Meadow & seep | Subalpine coniferous forest | Upper montane coniferous forest	Subalpine coniferous forest, upper montane coniferous forest, meadows and seeps.	Dry mountain peaks and slopes. 1580-3700 m.	Low	No	On 2022 CNDDB database search. Found on mountain peaks above 1980 m.	CNDDB
Wyethia ovata	southern mule ears	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Xylorhiza tortifolia	Mojave aster	None	None	N/A	N/A	N/A	N/A	N/A	High	Yes	Detected in the park.	Park Species List
Yucca brevifolia	western Joshua tree	None	Candidate Threatened	N/A	N/A	N/A	N/A	N/A	High	Yes	Seen in a few locations in the park.	Park Species List

9.3 Appendix 3: Management Action Details

Once a management project or action has been selected for implementation, it will undergo assessment using the CDPR Project Evaluation Form (PEF) to determine necessary documentation for compliance with CEQA.

Management actions related to ongoing natural resource and maintenance activities:

- **Prevention and naturalizing of unauthorized and redundant trails.**

  New unauthorized trail development can be detected during annual Trail Condition Evaluations or incidental sightings during day-to-day work. These trails will be barricaded with straw bales or fencing, signage will be displayed, and native vegetation will either be planted or allowed to repopulate the area. Unauthorized trail development may be prevented by installing permanent barricades, such as fencing or rocks, or enforcing an area closure. CCR "4306. Plant and Driftwood" will also be enforced to keep riders on designated trails in trails-only riding areas through law enforcement patrols. Preventing new, unauthorized trail development and resulting damage to native vegetation will aid in conserving existing native vegetation and habitat.

- **Active management of invasive plant species.**

  Staff will chemically and mechanically remove dalmatian toadflax (*Linaria dalmatica*), Russian thistle (*Salsola paulsenii*), yellow star-thistle (*Centaurea solstitialis*), and perennial pepperweed (*Lepidium latifolium*). New detections of these invasive plants may be made using the EDRR program or through day-to-day park operations.

- **Protection of wildlife and their habitat.**

  Other management actions that conserve or improve habitat or vegetation communities correlate with protecting species that use those spaces for shelter or foraging. Example management actions include:

  - Removing trash and debris from natural areas
  - Adding barriers to open pipes
  - Leaving snags or downed trees in natural areas unless they are a hazard to staff or visitors

Management actions related to landscape conservation and improvement projects:

- **Cage sapling oaks to increase chances of survival.**

  To protect and maintain the 27 acres of sensitive valley oak grove habitat (*Quercus lobata* Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs, staff may cage young valley oaks to increase their chances of survival and increase recruitment.

- **Plant native species from the *Ericameria nauseosa* Shrubland Alliance.**

In order to reestablish 0.5 acres of the *Ericameria nauseosa* Shrubland Alliance to 5% cover within the Tumbleweed Fire burn area in the Quail Canyon MU, staff will plant native plants from the *Ericameria nauseosa* Shrubland Alliance, such as rubber rabbitbrush (*Ericameria nauseosa*), common sagebrush (*Artemesia tridentata*), California buckwheat (*Eriogonum fasiculatum*), and green ephedra (*Ephedra viridis*).

Management actions related to policy and regulation compliance:

- **Implement the Soil Conservation Plan (SCP).**

  Repair and eliminate red-rated trails and features. Maintain authorized roads and trails to ensure compliance with the 2020 Soil Conservation Standard. See the Soil Conservation Plan (CDPR 2023) for details.

- **Conduct required project impact evaluations and monitoring and implement best management practices to ensure compliance with project permits, management plans, and state and federals laws and regulations.**

- **Continue project impact evaluations and require standard project requirements and/or mitigation as required through the CEQA process. Start with the CDPR Form 183: Project Evaluation.**

  Form and identify any additional CEQA processes or permitting required during this impact analysis**.**

- **Conduct pre-construction nesting bird surveys and monitoring.**

- **Conduct pre-construction special-status plant and animal habitat surveys.**

- **Require adequate mufflers for noise regulation and spark arrestors on all OHVs.**

9.4 Appendix 4: Monitoring Methodology

Monitoring Tied to WHPP Goals

VegCAMP

California's standard for vegetation classification and mapping is set by CDFW's Vegetation Classification and Mapping Program (VegCAMP). The standard VegCAMP methods, including the combined "Rapid Assessment and Relevé" survey protocols will be used to meet the following WHPP goals and objectives:

Goal 1, Objective 1: Protect 27 acres of Valley Oak groves (*Quercus lobata* Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs from OHV activity through 2027.

Goal 1, Objective 2: Protect 970 acres of native grassland vegetation communities in the western section of the Native Grasslands MU from unauthorized OHV activity through 2027.

Baseline:

Baseline acreage of each vegetation community was determined through VegCAMP surveys conducted in 2021-2023.

Methods:

CDFW developed the State Vegetation Standard, based on the National Vegetation Classification Standard, in collaboration with state resources departments, including CDPR and other federal, non-profit, and private entities (see "A Shared Vision for the Survey of California Vegetation"). The VegCAMP map will be updated every 5 years along with the WHPP. Vegetation polygons will be reviewed against the most recent NAIP imagery, areas that show changes from the previous map will be marked for surveying, and polygons will be redrawn and reattributed if necessary. Particular attention will be given to any areas that have experienced fires, floods, rehabilitation, or other management changes that might affect vegetation composition or cover. Surveys and mapping updates will follow standard VegCAMP protocols (CDFW 2020).

Uncertainties:

VegCAMP surveys utilize visual estimates to determine absolute cover of plant species. Estimates can vary slightly, even between surveyors. To address this, new surveyors should be trained by experienced surveyors, and all surveyors should calibrate their estimates by conducting a few surveys as a group at the beginning of each seasonal sampling effort.

VegCAMP surveys also take a considerable amount of effort, so there could be a shortage of funding or staffing at certain times that would make completing surveys difficult. Additionally, it is possible that standard survey methods may be updated by CDFW in the future.

Rapid Assessment/Relevé Surveys and Plant Survivorship Surveys

Simplified rapid assessment and relevé surveys will be used to address the following WHPP goals and objectives:

Goal 2, Objective 1: Reduce invasive plant species, specifically dalmatian toadflax (*Linaria dalmatica*), in the 970-acre western section of the Native Grasslands MU through 2027.

Goal 2, Objective 2: Reestablish 4 acres of the vegetation communities that existed within the South Oak Grove MU prior to the Post Fire through 2027.

Goal 2, Objective 3: Revegetate a minimum of 1,000 linear feet of redundant trails with the *Ericameria linearifolia – Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, or California Annual Forb/Grass Vegetation Group in the 410-acre western section of the Open Riding MU by 2027.

Plant survivorship surveys will also be conducted for vegetation planted in the project area for goal 2, objective 2.

Baseline:

We will determine baseline plant percent cover using rapid assessment and relevé surveys in 2024 for objectives 1 and 3. Percent vegetation cover for objective 2 is currently 0, but an updated percent cover will be determined in 2025 after one growing season post fire. After the project area is revegetated in the Post Fire burn area, we will also collect baseline data on plant survivorship.

Methods:

Specific methodology for these objectives is still being determined. In general, we will conduct rapid assessment and relevé surveys following VegCAMP protocols but with modifications specific to the objectives associated with goal 2.

For objective 1, we created 20 5x5-meter plots throughout the target 970-acre section of the Native Grasslands MU. Plot selection was based on known toadflax infestation areas that have been chemically treated in the past. Ten of the plots are placed in areas of known toadflax infestation, whereas the other 10 plots are placed in what we considered a buffer zone around the known infestation areas. Some of the buffer zones have not been monitored at all, so we are uncertain if toadflax is present or not. Within each plot, we will determine the percent cover of toadflax on an annual basis. These plots will be monitored during the bloom period of dalmatian toadflax from April to September. We will also collect data on the percent cover of native grasses, forbs, shrubs, and invasive plants other than toadflax and take photos documenting plot

status each year. We will make a species list at each plot to determine the presence of species other than toadflax and observe changes from year to year. Using the average percent cover of toadflax across all 20 plots, we will be able to extrapolate the approximate infestation acreage across the 970-acre target area. This will be recorded on datasheets (see below) made specifically for relevé surveys conducted in the Northern Grasslands MU.

Objectives 2 and 3 will have similar methods developed but instead of establishing plots throughout an area, we will be focusing on the project area that is revegetated to determine the changes in vegetation percent cover in the project area. A rapid assessment survey datasheet will be created for these two objectives, and plant survivorship surveys will be incorporated for replanting vegetation in the burn area associated with objective 2.

Uncertainties:

Rapid assessment/relevé surveys utilize visual estimates to determine absolute cover of plant species. Estimates can vary slightly, even between surveyors. To address this, new surveyors should be trained by experienced surveyors, and all surveyors should calibrate their estimates by conducting a few surveys as a group at the beginning of each seasonal sampling. With any revegetation project, there are many variables that cannot be controlled, such as weather patterns or rider trespass. These unforeseen variables may impact plant cover and plant survivorship in the project areas.

Grassland Relevè Surveys – Toadflax Surveillance (5x5-m plot)

Plot # _____ Date _____

Toadflax % Cover _____

Native Grass % Cover _____

Native Forb % Cover _____

Native Shrub % Cover _____

Total Native % Cover _____

Total Invasive % Cover _____

Total Vegetation % Cover _____

Species list:

Notes:

★ Take photo from NW corner stake across to SE corner of plot.

Phenology: Photo ID: _____

Grassland Relevè Surveys – Toadflax Surveillance (5x5-m plot)

Plot # _____ Date _____

Toadflax % Cover _____

Native Grass % Cover _____

Native Forb % Cover _____

Native Shrub % Cover _____

Total Native % Cover _____

Total Invasive % Cover _____

Total Vegetation % Cover _____

Species list:

Notes:

Phenology: Photo ID: _____

Early Detection Rapid Response (EDRR) Invasive Plant Surveys and Surveillance Monitoring in Areas of Known Invasive Species Presence

EDRR and surveillance monitoring for invasive species are completed along trails and in areas where invasive species have previously been detected. These surveys will be used to meet the following WHPP goals and objectives:

Goal 1, Objective 1 - Protect 27 acres of Valley Oak groves (*Quercus lobata* Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs from OHV activity through 2027.

Goal 1, Objective 2 - Protect 970 acres of native grassland vegetation communities in the western section of the Native Grasslands MU from unauthorized OHV activity through 2027.

Goal 2, Objective 1: Reduce invasive plant species, specifically dalmatian toadflax (*Linaria dalmatica)*, in the 970-acre western section of the Native Grasslands MU through 2027.

Goal 2, Objective 2: Reestablish 4 acres of the vegetation communities that existed within the South Oak Grove MU prior to the Post Fire through 2027.

Baseline:

No focused mapping for widespread or EDRR invasive plants has been completed at Hungry Valley SVRA. However, the aforementioned objectives focus on two sensitive natural habitats (valley oak groves and native grasslands), both of which will be monitored for invasive plant species presence. A more accurate baseline of invasive species cover will be captured after initial surveys in 2024 and 2025.

Methods:

This methodology is for the pilot season at Hungry Valley SVRA. After completing one year of pilot surveys in 2024, the protocol may be modified to improve the surveys. EDRR surveys are generally conducted between March and August using the protocol developed in the CDPR EDRR Handbook for Invasive Species Management (CDPR 2020b).

Surveys will be conducted when target species are most detectable, primarily during the flowering season. Surveys will be conducted on foot in the South Oak Grove/Cañada and Oak Preserve MUs, primarily along the main road and trail corridors. Surveys will be conducted on foot and by vehicle along all trail corridors in the 970-acre western section of the Native Grasslands MU. Survey data will be collected using ArcGIS Survey123. Target species were selected based on habitat availability and feasibility from the California Invasive Plant council WeedMapper species list for the area surrounding the Hungry Valley SVRA detection region (Table 10). These target species are either not yet widespread in the park or not yet present within certain areas of resource conservation concern, but they can become widespread and encroach on sensitive habitats if not detected and managed in a timely manner.

A report summarizing Hungry Valley SVRA survey efforts and results will be prepared annually and provided to NRD. The information to be included in the report will be treatment applications used, number of staff involved and person-hours spent, any changes to species lists or survey locations, and maps showing tracklogs and species mapped.

Uncertainties:

Park staff trained to use the CDPR EDRR Handbook focus on non-SVRAs. It will be a challenge to properly manage EDRR when OHVs can travel throughout most of the park, potentially carrying invasive species with them. Since this is a novel program, there is expected to be a learning curve in finalizing survey methodology, timing, and techniques and collecting and analyzing data.

Table 10. List of EDRR target plant species at Hungry Valley.

EDRR Target Species	Common Name	Family	Bloom Period
Centaurea stoebe ssp. micranthos (maculosa)	spotted knapweed	Asteraceae	July - October
Cynara cardunculus	artichoke thistle	Asteraceae	April - July
Onopordum acanthium	Scotch thistle	Asteraceae	March - August
Brassica tournefortii	Saharan mustard, African mustard	Brassicaceae	December - June
Brassica rapa	birdsrape mustard, field mustard	Brassicaceae	January - June
Bassia hyssopifolia	fivehook bassia	Chenopodiaceae	June - July
Salsola tragus	Russian thistle	Chenopodiaceae	July - October
Linaria dalmatica	dalmatian toadflax	Plantaginaceae	April - September
Pennisetum setaceum	crimson fountaingrass	Poaceae	July - August
Stipa capensis	Mediterranean steppegrass	Poaceae	March - April
Stipa tenuissima	Mexican feathergrass	Poaceae	June - August
Carthamus lanatus	woolly distaff thistle	Asteraceae	May - September
Tamarix ramosissima	saltcedar, tamarisk	Tamaricaceae	April - August
Tamarix parviflora	smallflower tamarisk	Tamaricaceae	April - May
Salsola paulsenii	barbwire Russian thistle	Chenopodiaceae	July - October

Surveillance Monitoring of Known OHV Trespass

Surveillance monitoring of known OHV trespass is completed in the South Oak Grove/ Cañada, Oak Preserve, and Native Grasslands MUs, which contain sensitive native vegetation communities. These surveys will be used to meet the following WHPP goals and objectives:

Goal 1, Objective 1 - Protect 27 acres of Valley Oak groves (Quercus lobata Alliance) in the South Oak Grove/Cañada and Oak Preserve MUs from OHV activity through 2027.

Goal 1, Objective 2 - Protect 970 acres of native grassland vegetation communities in the western section of the Native Grasslands MU from unauthorized OHV activity through 2027.

Baseline:

There is no baseline for this type of monitoring because it involves routine field observations rather than targeted surveys. However, general surveillance monitoring will be conducted throughout these MUs and if new OHV trespass has occurred, we will close the areas to prevent further trespass from occurring.

Methods:

Surveillance monitoring has no defined methodology but rather consists of chance observations that occur incidentally while staff are in the field. These are general surveillance surveys that are conducted when staff drive through the park. If trespass is detected, we will record information on the trespass using ArcGIS Field Maps. We will act quickly to prevent off-trail riding by displaying signage and using fence and hay bale barriers. We will also enforce California Code of Regulations "4306. Plants and Driftwood" to keep riders on designated trails in trails-only riding areas through law enforcement patrols.

Uncertainties:

This surveillance monitoring is general in nature and has no temporal aspect. The observations are not standardized, so their level of importance and validity must be considered.

Surveillance Monitoring of Known Redundant OHV Trails and Aerial Imagery Surveys

Surveillance monitoring of known redundant OHV trails is completed in the Open Riding MU with the use of aerial imagery. These surveys will be used to meet the following WHPP goal and objective:

Goal 2, Objective 3 - Revegetate a minimum of 1,000 linear feet of redundant trails with the *Ericameria linearif*olia – *Cleome isomeris* Alliance, *E. cooperi* Provisional Alliance, or California Annual Forb/Grass Vegetation Group in the 410-acre western section of the Open Riding MU by 2027.

Baseline:

The baseline data on redundant trails for the 410-acre western section of the Open Riding MU was determined to be 15,500 linear feet using measurements of aerial imagery from Google Earth.

Methods:

This monitoring measured the linear feet of redundant OHV trails within the 410-acre western section of the Open Riding MU using aerial imagery from Google Earth and by manually tracing the redundant trails and measuring their length in linear feet with the Google Earth distance measurement function. This monitoring will be followed by surveillance monitoring of the area to evaluate whether habitat improvements are successful in meeting the target of maintaining 14,500 linear feet or less redundant trails in the area. Surveillance monitoring will consist of conducting rapid assessment surveys to monitor the overall plant cover in the restored 1,000-linear feet trail segment each year and measure redundant OHV trails using aerial imagery in the area every five years concurrent with the WHPP update. Drone flights and GPS tracked field surveys can also be implemented to help measure the length of redundant OHV trails in the 410-acre western section of the Open Riding MU area when aerial imagery through Google Earth or the National Agriculture Imagery Program (NAIP) is outdated.

Uncertainties:

The Google Earth distance measurement tool may have a margin of inaccuracy. Recent aerial imagery is not always readily available. Drone imagery is available on an as needed basis for Hungry Valley SVRA as of the fall of 2022, but the drone operation is contingent on one Environmental Scientist in the district with approval for drone flight or on the OHMVRD pilot's availability. Drone operation may not be possible in five years if a pilot is not available. Drone imagery is also time consuming for the amount of acreage in each MU. If recent aerial imagery is not available, field surveys will be done to measure the length of redundant trails and trespasses. Restoring areas in an open riding area is not protected by law because of the open riding designation of the area. The riding public know where their favorite unauthorized trails are located and can undo revegetation/rehabilitation work quickly. Rapid assessment/relevé surveys need to be calibrated to previous surveyor estimates to be comparable to previous data.

General Field Observations

General field observations are incidental observations that occur while staff are in the park but not necessarily conducting specific monitoring surveys. General field observations will be used to meet all goals and objectives.

Baseline:

There is no baseline for this type of monitoring because it involves chance field observations rather than targeted surveys.

Methods:

General field observations have no defined methodology but are rather chance observations that occur incidentally while staff are in the field.

Uncertainties:

These observations are general in nature and have no temporal aspect. The observations are not standardized, so their level of importance and validity must be considered.

Inventory Update and HMS Taxa Monitoring Protocols

9.4.1 Habitat Monitoring System

An extensive Habitat Monitoring System (HMS) was developed and implemented at Hungry Valley SVRA beginning in 1997 (McClenaghan et al. 1997). The HMS utilizes 10 of the 100 1-hectare plots that were established during the original 1989-1990 inventory (Kutilek et al. 1991). The plots were designated as either riding or non-riding (control) and were spread across four designated vegetation communities: grassland, mixed shrub, pinyon-juniper-oak woodland, and juniper shrubland (Kutilek et al. 1991, McClenaghan et al. 1997). An additional plot was added in a riparian area that was not represented in the original inventory making the total number of monitoring plots 11 (McClenaghan et al. 1997). In 2021, 11 new plots were added to the original 11 to represent areas in the park that had never been surveyed.

The HMS survey methods were determined based on the original HMS surveys in 1997 (McClenaghan et al. 1997). The HMS monitors vegetation, mammals, birds, reptiles, and amphibians on paired plots throughout the varied habitats found at Hungry Valley SVRA. This monitoring program has remained in place for the past 26 years to determine long-term ecological trends within the park. The goal of the HMS was to systematically measure possible impacts from OHV activities and determine if species are increasing, decreasing, or maintaining in abundance within the park over time. Another goal of the HMS was to maintain an accurate species inventory and recognize the presence of any rare or listed species. Below are datasheets that are used for updating Hungry Valley SVRA's wildlife inventory through wildlife monitoring surveys.

Bird Surveys

Bird surveys at Hungry Valley SVRA have been conducted since 1997. Bird variable circular-plot surveys (Reynolds et al. 1980) are performed twice yearly in winter (January) and spring (June) at 22 plots between 06:00 and 12:00. A 250-m transect is traveled, and sampling occurs at five station points evenly dispersed along the transect length. At each station point, the observer records any audible or visual bird activity for a five-minute period and records all species identified as well as their distance from the observer. Distance is estimated with a rangefinder. These surveys allow staff to determine species presence and habitat associations. Data are used to estimate diversity and evenness at each plot. There are limitations with any survey, and bird transect surveys are limited because it is only a snapshot of the bird species present at a given time, seasonality and weather conditions play a role in bird presence, and skill level and number of surveyors can influence survey results. Other limitations include inability to calculate

population size or survival without mark-recapture efforts, difficulty differentiating between certain species from a distance resulting in potential identification errors, and the restricted sample area and whether it represents the overall habitat.

Starting in 2020, Hungry Valley SVRA began collaborating with the Institute for Bird Populations (IBP) to monitor bird populations via acoustic monitors called Autonomous Recording Units (ARUs). In 2020 and 2021, during the circular-plot bird surveys, ARUs were deployed at each of the five station points along the transect. In 2020, ARUs were also left to record for 6 hours at certain plots in addition to being deployed in tandem on the transects. In 2022 and winter 2023, ARUs were only left at select plots for recording up to 24 hours. Starting in spring 2023, a new ARU study was initiated where ARUs are left for one week at each plot location and paired with a second ARU used to record OHV noise for two weeks. Recorded acoustic data are sent to IBP for analysis to determine bird diversity throughout the park. The data may show new species not previously detected by human observers. Limitations of ARU surveys include the time and effort required to deploy the detectors, the extended length of time it takes to analyze call files, the risk of misidentification, and the fact that you cannot identify birds that are not vocalizing.

Mammal Surveys (Excluding Bats)

Originally, small mammal live-trapping surveys were conducted in spring (approximately April-May) every other year at 11 plots starting in 1997. After adding new plots in 2021, we alternated between monitoring 11 different plots each year (even numbered years for original plots and odd numbered years for new plots). However, starting in 2022, we decided that trapping would occur only as needed to minimize impacts to small mammal populations and the habitat. When trapping occurs, 50 Sherman live-traps are set out in two parallel transects, with 25 traps per transect and a 10-m interval between traps. Traps are baited with seed and peanut butter and set in the afternoon, checked just after sunrise the following morning, closed for the remainder of the day to avoid trap mortality, and reset in the afternoon. This continues for three consecutive days, and all captured animals are identified to species, sexed, measured (total, tail, hindfoot, and ear lengths), weighed, and reproductive status is recorded. Small mammals are temporarily marked with a Sharpie to distinguish recaptures and then released at point of capture. These surveys allow us to determine species presence and to calculate diversity and evenness at each plot. Limitations include the inability to calculate population size or survival without mark-recapture efforts, difficulty differentiating between certain species (especially *Peromyscus*) resulting in potential identification errors, trap fatalities, and the restricted sample area and whether it represents the overall habitat.

Large mammal presence monitoring has been completed in July of each year since 1999. Wildlife cameras with infrared motion detectors are set up to run 24 hours a day for two weeks at 10-12 camera sites throughout Hungry Valley SVRA. The photos are then reviewed, and the number of species from each site is recorded.

Herpetofauna (Reptiles and Amphibians) Surveys

Starting in 1997, herpetofauna (reptile and amphibian) monitoring was completed at 11 plots each May. After adding new plots in 2021, we alternated between monitoring 11 different plots each year (even numbered years for original plots and odd numbered years for new plots). However, starting in 2022, we decided to only monitor as needed to minimize impacts to herpetofauna populations and the habitat. When monitoring occurs, an 80-minute time constrained search is completed in the morning at four permanent 400-m long, 15-m wide belt transects beginning at the center of each plot and radiating out in the four cardinal directions, for 20 minutes in each direction. In the past, an 80-minute time constrained search was also completed in the afternoon, but those surveys were reduced to 40 minutes in 2021 because generally fewer reptiles are encountered in the afternoon heat. The 40-minute time-constrained search is completed in the afternoon at the same plots on the same day, for 10 minutes in each direction. All herpetofauna seen are identified to species and when possible, sex, life stage, weight, and snout-vent length (SVL) are also determined. These surveys allow us to determine species presence and to calculate diversity and evenness at each plot. Limitations include the inability to calculate population size or survival without mark-recapture efforts, difficulty differentiating between certain species from a distance resulting in potential identification errors, the restricted sample area and whether it represents the overall habitat, it is only a snapshot of the reptiles present at a given time, seasonality and weather conditions play a role in reptile presence, and skill level and number of surveyors can influence survey results.

In 2020, a Blainville's Horned Lizard (*Phrynosoma blainvillii*) monitoring program was initiated and has continued through 2024. Horned lizards are captured, sexed, measured, weighed, photographed, and released. Weather data, microhabitat characteristics, elevation, and GPS coordinates are collected at the capture location in order to monitor horned lizard presence and habitat usage throughout the park. Horned lizard data are submitted yearly to the California Natural Diversity Database (CNDDB) for monitoring of this species of special concern.

Hungry Valley SVRA has few aquatic features, and the majority of the waterways are ephemeral. Amphibians have only been detected at one monitoring plot during recent herpetofauna surveys. Frogs, toads, and salamanders have been previously documented, but recently only frogs and toads have been observed both firsthand and in large mammal monitoring photos. Therefore, a targeted study is needed to gauge their current status. A presence survey specific to riparian and other aquatic areas could be useful to gain an updated baseline of amphibians in the park.

Bat Acoustic Surveys

Bat acoustic monitoring commenced in 2015. Originally, acoustic bat surveys were conducted twice per year (late winter/early spring and summer/early fall) in 2015 (six sites), 2016 (five sites), 2017 (five sites), and 2019 (six sites) by Hungry Valley staff and a consultant. In 2018, no bat surveys were conducted. In 2020, bat acoustic surveys began being conducted three times per

year in late winter (February-March), late spring/early summer (June-July), and early fall (September-October) exclusively by Hungry Valley SVRA staff. Acoustic surveys are conducted three times each year to document species diversity from multiple seasons and to detect migratory and non-migratory bat species. Bats are monitored using Wildlife Acoustic SM4BAT acoustic recording devices and ultrasonic microphones that record the ultrasonic frequencies of bat calls. Acoustic detectors are placed at six set locations near perennial water sources (both natural and artificial) for a minimum of two weeks. The six sites include a densely vegetated perennial riparian area with steep slopes, three water troughs/spring boxes, an oak woodland perennial spring, and a water treatment settling pond.

Acoustic files are analyzed using SonoBat software. SonoBat auto-ID is used to determine species presence. SonoBat parameters include the consideration of a maximum of 32 calls per file and an acceptable call quality of 0.80. In SonoBat, the maximum likelihood estimate (MLE) is used, which provides a statistical probability of species presence. If the MLE is over 70%, that species is considered present but only after manually vetting several identified calls for that species and comparing it to the SonoBat reference call library. For species that SonoBat is less confident with (i.e., MLE < 70%), we compared the calls for that species to the reference library for identification. Files for the species that are not confidently identified are compiled and sent off to expert acoustic analysts for review. If review of inconclusive files is not possible, the species presence is considered as “probable” based upon our confidence in identifying the calls. The park’s acoustic data from 2020 and 2021 were submitted to the North American Bat Monitoring Program (NABat) in order to collaborate with a national program comprised of many different agencies to further bat research and knowledge.

Acoustic detection has its limitations, including lack of 100% certainty on species identification, which can only be obtained with the bat in hand; inability to estimate number of individuals present; inability to obtain specific data on each individual, such as sex, weight, reproductive condition, body size, etc.; and restrictions on understanding bat behavior, roost proximity, and habitat associations because the bat is never seen. To supplement these discrepancies, supplemental mist netting started in 2022 to better understand species presence, habitat associations, potential roost sites, and morphometric data (see Section 5.2: Scientific Research).

Small Mammal Trapping Data Sheet

Plot #: **Time:** **Wind:** **Observers:**

Date: **Temp:** **Cloud %:**

Sex: M = male, F = female

Reproductive Status: Male: (testes) A = abdominal, S = scrotal

Female: (vagina) NP = nonperforate, P = perforate; (mammae): S = small, M = medium, L = large

	Recap	Species	Sex	Repro.	Weight (g)	Total (mm)	Tail (mm)	Hindfoot (mm)	Ear (mm)	Comments
1										
2										
3										
4										
5										
6										
7										
8										
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Avian Field Data Collection Sheet

Plot #:
Date:
Time:
Habitat Type:

Temp:
Wind Speed:
Wind Direction:
Cloud Cover:

<u>Station:</u> 1 -5 **<u>Period:</u> 1 (1 - 3 min), 2 (3 - 4 min), 3 (4 - 5 min)**

Station	Period	Species	# Ind	Distance (m)	Visual	Auditory	Notes

Herpetofauna Field Data Collection Sheet

AM / PM **Cloud %:** **Wind Speed:**

Plot #: **Date:** **Habitat Type:** **Air temp.:** **Ground temp.:**

Station	Species	Sex (M/F)	Age (A/J)	Weight (g)	SVL (mm)	Air Temp	Sur. Temp	Time	Microhabitat