SFPUC Alameda Creek Watershed Sheep Camp Creek (Grazing Unit 12) Alameda County, California

Hetch Hetchy
Regional Water System
Services of the San Francisco Public Utilities Commission

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February 3, 2026

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Acronyms

AUMs	animal unit months
BGEPA	Bald and Golden Eagle Protection Act
BHR	Bioregional Habitat Restoration
BMPs	Best Management Practices
Cal-IPC	California Invasive Plant Council
CNDDB	California Natural Diversity Database
EDRR	Early Detection and Rapid Response
FR	Federal Register
Grazing Unit 12	Sheep Camp Creek
GU	Grazing Unit
GU-12	Sheep Camp Creek
GUMP	grazing unit management plan
IPM	Integrated Pest Management
MBTA	Migratory Bird Treaty Act
NNIP	non-native invasive plant
NRCS	Natural Resources Conservation Service
RDM	residual dry matter
RMP	Rangeland Management Plan
SFPUC	San Francisco Public Utilities Commission
USFWS	United States Fish and Wildlife Service
WMP	Watershed Management Plan

1. Introduction

1.1 Purpose of the Grazing Unit Management Plan

This grazing unit management plan (GUMP) outlines the existing conditions and rangeland management goals for the Sheep Camp Creek (Grazing Unit 12 [GU-12]) lease. This document establishes management expectations between San Francisco Public Utilities Commission (SFPUC) and the tenant for the grazing unit and guides program operations and capital improvements to achieve the SFPUC's Rangeland Management Plan (RMP) goals. This GUMP is consistent with and informed by the watershed-wide RMP, the Alameda Watershed Management Plan (WMP), and the Water Enterprise Environmental Stewardship Policy in which the SFPUC commits to proactively managing the watersheds in a manner that maintains the integrity of natural resources, restores habitats for native species, and enhances ecosystem function.

1.2 Rangeland Management Program

The SFPUC developed the Alameda Creek Watershed RMP to document the rangeland management program for livestock grazing for the SFPUC-owned and -managed grazing units of the Alameda Creek Watershed. The RMP establishes a rangeland management program that is consistent with plans and policies that apply to management of SFPUC watershed lands, as well as with current best practices in rangeland management.

The goals of the SFPUC rangeland management program are to:

- Protect and improve water quality;
- Preserve and enhance the health of ecological systems;
- Reduce the threat of wildland fire by decreasing fuel densities;
- Adaptively manage the RMP lands based on new information and conditions;
- Provide a basis for consistent management of the RMP lands; and
- Support an economically and ecologically sustainable grazing operation.

1.3 Rangeland Management Plan Objectives

To achieve these goals, the RMP outlines broad management objectives to protect water quality and natural resources. These objectives include the following:

- Maintain sufficient vegetative residual dry matter (RDM) to protect soil and water quality.
- Minimize negative impacts to sensitive aquatic habitats such as riparian and spring systems.
- Implement rangeland management practices that preserve and protect special-status species and their habitats.
- Maintain or improve native species biodiversity.
- Monitor and control non-native invasive plant (NNIP) and wildlife populations.
- Reduce the risk of introduction or spread of plant diseases, particularly from human activities.

- Reduce sediment sources to riparian habitats associated with road systems and insufficient vegetative cover.
- Reduce risk of introducing livestock- and wildlife-related pathogens into waterways of the RMP lands.

The RMP also includes the following objectives to promote effective administration of the grazing units:

- Use the results of monitoring and routine inspections to adaptively manage the RMP lands.
- Effectively communicate and implement rangeland management goals and expectations with the RMP grazing tenant(s).
- Consult with SFPUC rangeland staff and RMP grazing tenant(s) during the development of any policies that would change the management of RMP lands.
- Implement cost-sharing rangeland improvement projects between the SFPUC and its grazing tenant(s) in the RMP lands.
- Use grazing to manage wildland fuel loads.

2. Lease Overview

2.1 Sheep Camp Creek Lease, Grazing Unit 12

The Sheep Camp Creek lease covers Grazing Unit 12 (GU-12), which consists of approximately 474.5 acres in the northern portion of the SFPUC Alameda Creek watershed (Figure 1). It is bounded by Highway 84 and the Maguire Peaks lease (GU-16) to the south, and by Interstate 680 and the Paloma (GU-13) and Arroyo de la Laguna South (GU-11) leases to the west. Private land adjoins the northern and eastern portions of GU-12. Primary land uses in the surrounding areas are ranching and residential. Most of the lease area is within the 425-acre Sheep Camp Creek Bioregional Habitat Restoration (BHR) site, which is under a conservation easement in perpetuity.

2.2 Environmental Conditions

The grazing unit consists of flat to steep slopes with non-native annual grassland, oak savanna, and oak woodlands. Sheep Camp Creek, an intermittent stream draining into Arroyo de la Laguna, runs east to west bisecting the grazing unit. Most of the ephemeral drainages in the grazing unit drain into Sheep Camp Creek. Elevation in the grazing unit ranges from 260 feet to 624 feet above sea level. The grazing unit is split into five subsections, Fields A through E.

Field A is located in the northwest portion of the grazing unit, an area composed of non-native grassland, oak savanna, and dense corridors of oak woodland. Topography in Field A is hilly, with over 60 percent of the area on slopes of 25 percent or greater. Pond E (PA168) is the only pond in this field. Moving east across the northern portion of the lease, Field B is a small, 12-acre strip on the eastern edge of Field A. East of Field B is Field C, an area bordered by Sheep Camp Creek on its eastern edge. This field is mostly composed of non-native annual grassland, with flat-moderate slopes. Pond B (PA001) is located on the western edge of Field C.

Sheep Camp Creek bisects the grazing unit, and all the property south of the creek is referred to as Field D. Topography in this field is moderate, with pockets of steep (>40 percent) slopes

along ephemeral drainages. Vegetation is primarily composed of non-native annual grassland with some oak savanna and a dense pocket of oak woodland in the northwestern portion of Field D along the banks of Sheep Camp Creek. The intermittent drainage Sheep Camp Creek is referred to as Field E, which includes Ponds C and D (PA002 and PA160). Field E is primarily composed of open grassland/wetland habitats that are planted with what will become an overstory of riparian and oak woodland species.

2.3 Easements

The Sheep Camp Creek BHR site conservation easement covers the entire grazing unit. The BHR site is comprised of 425 acres of mostly grassland, oak woodland, and pond enhancement. Grazing in the enhancement area is generally not limited by the BHR site. The approximately 31 acres around Sheep Camp Creek contain numerous native plantings and a fenced cattle exclusion area to allow for temporary or seasonal grazing as prescribed by the BHR manager. The BHR site is managed to meet goals, objectives, and success criteria dictated by environmental permits that apply to this site. As such, the SFPUC or its representatives may need to work with the tenant to adjust grazing practices to meet legal requirements for the BHR site.

2.4 Grazing Operation

The current tenant runs a seasonal (approximately November through June) cow/calf operation on the grazing unit. Cattle are dispersed across the grazing unit when they are brought there; cattle typically move across the fields east to west as the season progresses. The seasonal movement of cattle is influenced by forage, with the eastern portion of the grazing unit providing feed earlier in the year and the western portion providing forage later in the year.

2.5 Stocking Rates

Estimated grazing capacity and stocking rates for the grazing unit were determined using Natural Resources Conservation Service (NRCS) soil productivity rates adjusted by vegetative cover and a fall RDM target of 1,000 pounds per acre. The baseline grazing capacity for the grazing unit is 332 animal unit months (AUMs) and will be adjusted annually by the SFPUC based on forage productivity, infrastructure updates, RDM levels, and vegetation condition.

3. Biological Conditions

3.1 Habitat Conditions

The Sheep Camp Creek grazing unit is mostly within a managed conservation easement and provides mitigation credit for special-status species. All riparian corridors and most pond areas are surrounded by cattle exclusion fencing; cattle water sources are limited to troughs onsite. The pathogen that causes sudden oak death has been documented within Sheep Camp Creek, so access to those areas requires decontamination before and after entry. The tenant will work closely with SFPUC staff to protect sensitive habitats on site, including sycamore riparian forest, oak woodland, seasonal wetland, sage scrub, native grassland, and pond. Trees within the exclusion areas are also tubed and caged to prevent deer and vole herbivory.

3.2 Special-Status Species

The species known to occur in the grazing unit that are subject to regulation by the State of California and the federal government are listed in Table 1. California red-legged frog (*Rana draytonii*) and California tiger salamander (*Ambystoma californiense*) have a well-documented

history of breeding at the Sheep Camp Creek BHR site. The Sheep Camp Creek grazing unit is located within a corridor that the United States Fish and Wildlife Service (USFWS) proposed[1] to establish connectivity between the Alameda whipsnake recovery unit on Hayward-Pleasanton Ridge (Unit 3) and the Sunol-Cedar Mountain Recovery Unit (Unit 5) south of San Antonio Reservoir, and there is a small area of Alameda whipsnake (*Masticophis lateralis euryxanthus*) core habitat (shrub) present in the grazing unit.

Table 1 Special-Status Species Observed in Sheep Camp Creek (GU-12)

Common Name	Scientific Name	Listing Status[1]
Wildlife/Fisheries		
California red-legged frog	*Rana draytonii*	FT, SSC
California tiger salamander	*Ambystoma californiense*	FT, ST
Golden eagle	*Aquila chrysaetos*	BGEPA, MBTA, SP
Loggerhead shrike	*Lanius ludovicianus*	MBTA, SSC
Tricolored blackbird	*Agelaius tricolor*	MBTA, ST
Western pond turtle	*Actinemys marmorata*	FPT, SSC
Plants		
Narrowleaf milkweed	*Asclepius fascicularis*	host plant for the FPT monarch butterfly

[1] Listing Status (California Natural Diversity Database [CNDDB], "Special Animals List," California Department of Fish and Wildlife, Sacramento, CA, July 2025):

Federal Status:
FT = Federally listed as threatened
FPT = Federally proposed for listing as threatened
Western pond turtle is proposed to be listed as threatened as of October 2023; pending finalization (88 Federal Register [FR] 68370)
Monarch butterfly is proposed to be listed as threatened as of December 2024; pending finalization (89 FR 100662)
BGEPA = Bald and Golden Eagle Protection Act
MBTA = Migratory Bird Treaty Act species from the Migratory Bird of Concern List

California (State) Status:
ST = State listed as threatened
SP = Fully protected. A fully protected species may not be taken or possessed at any time, except as specified in the Fish and Game Code.
SSC = Species of Special Concern

3.3 Native Vegetation Objectives

The Alameda WMP outlines general native vegetation goals that include the following:

- Protect, conserve, and enhance wetlands and riparian communities.
- Protect and restore unique, local, and/or indigenous plant species to maintain biodiversity and specialized habitat values.
- Manage grasslands and rangelands to balance, wherever possible, wildlife habitat values, the restoration of native perennial species, and the reduction of fuel loads and noxious weeds.

[1] U.S. Fish and Wildlife Service, Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California, Region 1, Portland, OR, xvi + 306 pp., 2002.

- Manage shrub communities to reduce fuel loads, prevent soil erosion and sedimentation, improve wildlife habitat access and use, and control invasive plants.
- Manage woodlands and forests to maintain healthy, vigorous, and diverse stands with a multiplicity of age and size classes.

Specific native vegetation strategies that apply to this grazing unit are listed in Table 2.

Table 2 Objectives and Strategies for Managing Native Vegetation

Objectives from the RMP	Grazing Unit Strategy
OBJECTIVE 1: Maintain sufficient RDM to protect soil and water quality.	• Evaluate pasture areas with exposed soil or low RDM and implement methods to increase vegetative cover.
OBJECTIVE 2: Minimize negative impacts to sensitive aquatic habitats such as riparian and spring systems.	• Do not allow cattle into exclusion areas without permission and guidance from the SFPUC. • Additional pond exclusions may be implemented in the future to facilitate vegetation growth around pond edges.
OBJECTIVE 3: Implement rangeland management practices that preserve and protect special-status species and their habitats	• Adapt rangeland management practices, as necessary, to support special-status species; incorporate the latest research and local expertise (ranchers, scientists, land managers).
OBJECTIVE 4: Maintain or improve native species biodiversity	• All dead wood should be left onsite, and may be distributed under large trees to prevent loafing and protect root zones.
OBJECTIVE 6: Reduce the risk of introduction or spread of plant diseases, particularly from human activities	• Do not enter exclusion areas without permission and guidance from the SFPUC.
OBJECTIVE 13: Use grazing to manage wildland fuel loads.	• Distribute mineral sources away from interior gravel roads and instead out toward exterior fence lines, closer to Highway 84, Little Valley Road, and Koopmann Road.

RMP = Rangeland Management Plan
SFPUC = San Francisco Public Utilities Commission

3.4 Non-Native Invasive Plants

The SFPUC's Integrated Pest Management (IPM) program focuses on:

- Protecting rangeland productivity by reducing NNIPs that negatively impact forage quality; and
- Protecting high value habitat and ecosystem services by reducing the introduction or spread of NNIPs and plant pathogens.

A reconnaissance-level survey of NNIP species was conducted in 2009 and 2020 in the watershed.[2] This survey was spatially limited to select areas (along roads and other places more easily reached by foot) and not all species were identifiable at the time of the surveys. In 2025, SFPUC staff conducted a survey to update occurrences and priorities for management. Table 3 lists NNIPs identified in the grazing unit during the 2009 and 2020 surveys, the 2025 staff survey, and discussions with the current tenant and SFPUC grazing manager. Species detections noted during periodic site visits may or may not have coincided with the optimal timing to identify certain NNIP species. The table also includes the California Invasive Plant Council (Cal-IPC) rating and the invasion curve level.[3] The SFPUC prioritizes NNIP management actions (i.e., prevention, eradication, or containment) based on invasion curve level 1 through 4, which depict the area infested over time.

GU-12 has substantial patches of medusahead (*Elymus caput-medusae*) occurring in the upland grasslands, along with increasing abundance of stinkwort (*Dittrichia graveolens*), yellow starthistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*), and shortpod mustard (*Hirschfeldia incana*) along access roads.

There is a BHR site under a long-term management plan that involves a higher level of monitoring and maintenance than other leases.

To help reduce NNIPs, expectations of tenants include the following:

- Attend an annual SFPUC training regarding NNIP Best Management Practices (BMPs).
- Report to the SFPUC any new observations of Bermuda buttercup (*Oxalis pes-caprae*), fennel (*Foeniculum vulgare*), harding grass (*Phalaris aquatica*), purple starthistle (*Centaurea calcitrapa*), stinkwort, tall fescue (*Festuca arundinacea*), yellow starthistle, or barb goatgrass (*Aegilops triuncialis*) (refer to the invasive species identification guide, attached).
- When cattle are transported onto the grazing unit, notify the SFPUC and when reasonable implement appropriate BMPs such as the following:
    - Provide weed-free forage or pelletized feed (approved by the SFPUC) to cattle for at least three days before transport onto the grazing unit
    - If available, utilize a transitional pasture within the grazing unit
    - Decontaminate vehicles and equipment entering the grazing unit according to the SFPUC's decontamination policy

3.5 Nuisance Wildlife

California ground squirrel (*Otospermophilus beechyi*) numbers are relatively high for this grazing unit, particularly in northeast portions of the grazing unit where dense burrows are contributing to erosion.

[2] Nomad Ecology, Non-indigenous Plant Species Inventory and Mapping Alameda Watershed, Alameda and Santa Clara Counties, California, Prepared for the SFPUC, 2009; and Nomad Ecology, 2020 Alameda Watershed Invasive Plant Report, Prepared for the SFPUC, 2020.
[3] Department of Primary Industries, *Invasive plants and animals: policy framework*, Victoria Department of Primary Industries, Melbourne, Australia, 2010.

Table 3 Non-Native Invasive Plants Managed in Sheep Camp Creek (GU-12)

Common Name	Scientific Name	Cal-IPC Rating[2]	GU-12 Invasion Curve Level[1]
Artichoke thistle	*Cynara cardunculus* subsp. *flavescens*	Moderate	1
Barbed goatgrass	*Aegilops triuncialis*	Moderate	1
Bermuda buttercup	*Oxalis pes-caprae*	High	2
Cape ivy	*Delairea odorata*	Moderate	1
Caper spurge	*Euphorbia lathyris*	Watch	1
English ivy	*Hedera helix*	High	1
Fennel	*Foeniculum vulgare*	High	2
French broom	*Genista monspessulana*	High	1
Fuller's teasel	*Dipsacus sativus*	Moderate	1
Giant reed	*Arundo donax*	High	1
Harding grass	*Phalaris aquatica*	High	2
Himalayan blackberry	*Rubus armeniacus*	High	1
Italian thistle[3]	*Carduus pycnocephalus*	Moderate	4
Jubata/ Pampas grass	*Cortaderia* sp.	High	1
Medusahead[3]	*Elymus caput-medusae*	Moderate	3
Poison hemlock	*Conium maculatum*	Moderate	1
Purple starthistle	*Centaurea calcitrapa*	Moderate	2
Russian thistle[3]	*Salsola soda*	Moderate	1
Scotch broom	*Cytisus scoparius*	High	1
Shortpod mustard[3]	*Hirschfeldia incana*	Moderate	4
Spiny cocklebur	*Xanthium spinosum*	None	1
Stinkwort	*Dittrichia graveolens*	Moderate	2
Tall fescue[3]	*Festuca arundinacea*	Moderate	2
Tocalote	*Centaurea melitensis*	High	1
Tree of heaven	*Ailanthus altissima*	Moderate	1
Tree tobacco	*Nicotiana glauca*	High	1
Whitetop	*Lepidium latifolium/ Lepidium draba*	Mod/ High	1
Yellow starthistle	*Centaurea solstitialis*	High	2

IPM = Integrated Pest Management
SFPUC = San Francisco Public Utilities Commission

[1] Non-Native Invasive Plants (NNIP) Management Approach by Level on Invasion Curve:
1. Prevention: SFPUC IPM will conduct Early Detection and Rapid Response (EDRR) surveys.
2. Eradication: SFPUC IPM will treat to eradicate.
3. Containment: SFPUC IPM will treat to protect high value resources or to eradicate isolated populations.
4. Widespread: SFPUC IPM will focus on long-term management and asset-based protection

[2] California Invasive Plant Council (Cal-IPC) ratings (Cal-IPC 2024) rate NNIPs based on dispersal rate and environmental impact (https://www.cal-ipc.org/plants/inventory/).

[3] Species managed within the BHR conservation easement.

4. Rangeland Infrastructure

A detailed grazing infrastructure survey was conducted from 2013 to 2015. Infrastructure assets were updated for BHR in 2023 (Figure 2). The number, condition, and location of various types of infrastructure such as barns, corrals, springs, and troughs were assessed and are summarized in this section.

4.1 Roads

The Sheep Camp Creek grazing unit has 3.3 miles of unpaved vehicle-accessible road. The grazing unit is accessed via Koopmann Road. A maintained ranch road bisects the grazing unit along Sheep Camp Creek. Additional unimproved roads off this main road branch off to access the northern and southern portion of the grazing unit. Two armored ford crossings have been installed through Sheep Camp Creek to move cattle across the creek through Field E. The downstream crossing is located near the Koopmann Road entrance and the second crossing is located on the fire break on the northeastern property line.

Many of the roads in the grazing unit were graded to improve drainage and reliability as a part of the BHR project in 2014 and repairs were completed in 2025 to address storm damage. Most access roads provide safe access within the grazing unit.

4.2 Fences

GU-12 contains approximately 2.3 miles of perimeter fencing which surrounds the entire grazing unit. Interior riparian cattle exclusion fencing installed in 2014 separated the grazing unit into five separate fields, three of which will be regularly grazed.

4.3 Corrals and Barns

The only cattle processing infrastructure within the grazing unit is a single corral in Field A. The corral contains a squeeze and loading chute.

The corral appears to be in good condition although a water trough(s) could be added to the corral using the existing well water supply line located adjacent to the road.

4.4 Water Sources

Table 4 provides a summary of the type and functionality of the water infrastructure features found within the Sheep Camp Creek lease.

Table 4 2013-2015 Water-Related Grazing Infrastructure Assessment Results for Sheep Camp Creek (GU-12)

Infrastructure Type	Functioning	Non-Functioning	Total
Solar Panels	1	0	1
Solar Pump and Panel(s)	1	0	1
Tank	8	0	8
Trough	11	0	11
Well	1	0	1

As a part of the BHR project, 11 new concrete water troughs were installed throughout the grazing unit, with eight of the troughs in the active grazing fields. Three of the 11 troughs are in the riparian grazing exclusion areas and would only be used in limited circumstances. The well water supply to ten of the troughs is a well located west of the GU-12 in the Arroyo de la Laguna South (GU-11) grazing unit near the intersection of Koopmann Road and Pleasanton Sunol Road. Water is pumped from the well powered by a solar array located in GU-12 along the main access road near the main Koopmann Road entrance. Water is pumped to six water tanks located on the ridgelines or adjacent to the trough. This distribution could be more effectively regulated by installing an automated RanchBot or similar technology. Only one trough, TR0122, is supplied by Pond PA004. A solar-powered pump, SN00002, pumps pond water to a tank, TK0030, located adjacent to the trough. Water from the well located within the grazing unit contains levels of boron that are not considered safe for cattle.

There are five ponds in GU-12 (Table 5). Two of the ponds (PA002 and PA160) on Sheep Camp Creek are excluded from grazing. Cross fencing separates the ponds from the remaining Field E exclusion area so that the area around the ponds can be grazed independently of Field E for maintaining desired habitat conditions or to provide water for cattle when needed to meet management objectives. In an average rain year, Ponds PA001 and PA002 provide water year-round. The remaining ponds provide seasonal water, with PA004 and PA160 persisting the longest into the season.

Table 5 2012-2015 Pond Assessment Results for Sheep Camp Creek (GU-12)

Pond ID	Pond Condition	Water Source
PA001*	Good condition. Steep sided pond. Pond spillway was rehabilitated as a part of the BHR program.	Streamflow, surface runoff
PA002*	Good condition. Embankment of the in-stream pond was recently rebuilt. Spillway was rehabilitated as a part of the BHR program.	Streamflow
PA004*	Good condition. Embankment has some California ground squirrel burrows. Spillway has been rehabilitated as a part of the BHR program.	Surface runoff, streamflow
PA160	Moderate condition. The pond has a lot of sediment in the bottom and no graded embankment.	Seepage from embankment of large pond that is adjacent to PA160
PA170	Good condition. The pond is a natural pond formed by a landslide slump that has been excavated at one time to hold more water. The pond is full of sediment and no longer holds much water drying out early in the year.	Surface runoff

BHR = Bioregional Habitat Restoration
ID = identification
*Pond spillways were rehabilitated after ponds were surveyed.

The trough in Field A in the northwestern portion of the grazing unit is currently situated near the top of a steep hill. It would facilitate cattle access if it were moved to the west of its current location for easier access for cattle. In addition, most cattle troughs installed in the grazing unit for the BHR need gravel and/or cement pads to prevent cracking damage of the trough over time. As of 2015, no new water developments are proposed in GU-12.

5. Grazing Unit Management

This GUMP outlines the existing conditions and management goals for the Sheep Camp Creek lease to guide the long-term rangeland management of the grazing unit. Annual monitoring, inspections, and tenant meetings will be used to adapt the management based on seasonal variation and rangeland health. The SFPUC will conduct annual inspections of each grazing unit to evaluate infrastructure condition, rangeland health, and biological considerations relative to the goals of the RMP. In addition, the SFPUC will conduct rangeland monitoring, including periodic composition monitoring and RDM monitoring in specified plots. The annual inspection and monitoring data will be summarized to share with the tenant and inform the Annual Operating Plan.

Each year, the SFPUC Rangeland Management Team will meet with the tenant to review the rangeland condition, document issues, and discuss goals for the grazing unit. The Rangeland Management Team includes the Rangeland Manager, the Watershed Resources Manager, the Senior Integrated Pest Management Specialist, the Senior Biologist, and the Watershed Forester. Based on this discussion, the SFPUC will develop an Annual Operating Plan that outlines specific management objectives for the following year. The Annual Operating Plan will document current monitoring and rangeland assessment data, outline stocking rates based on forage production and rangeland condition, and summarize annual management objectives for grazing infrastructure improvements, Managed Riparian Areas, NNIP management, and environmental stewardship. The SFPUC will prioritize investments in infrastructure and operations based the Rangeland Management Plan goals and conditions in the grazing units across the watershed.

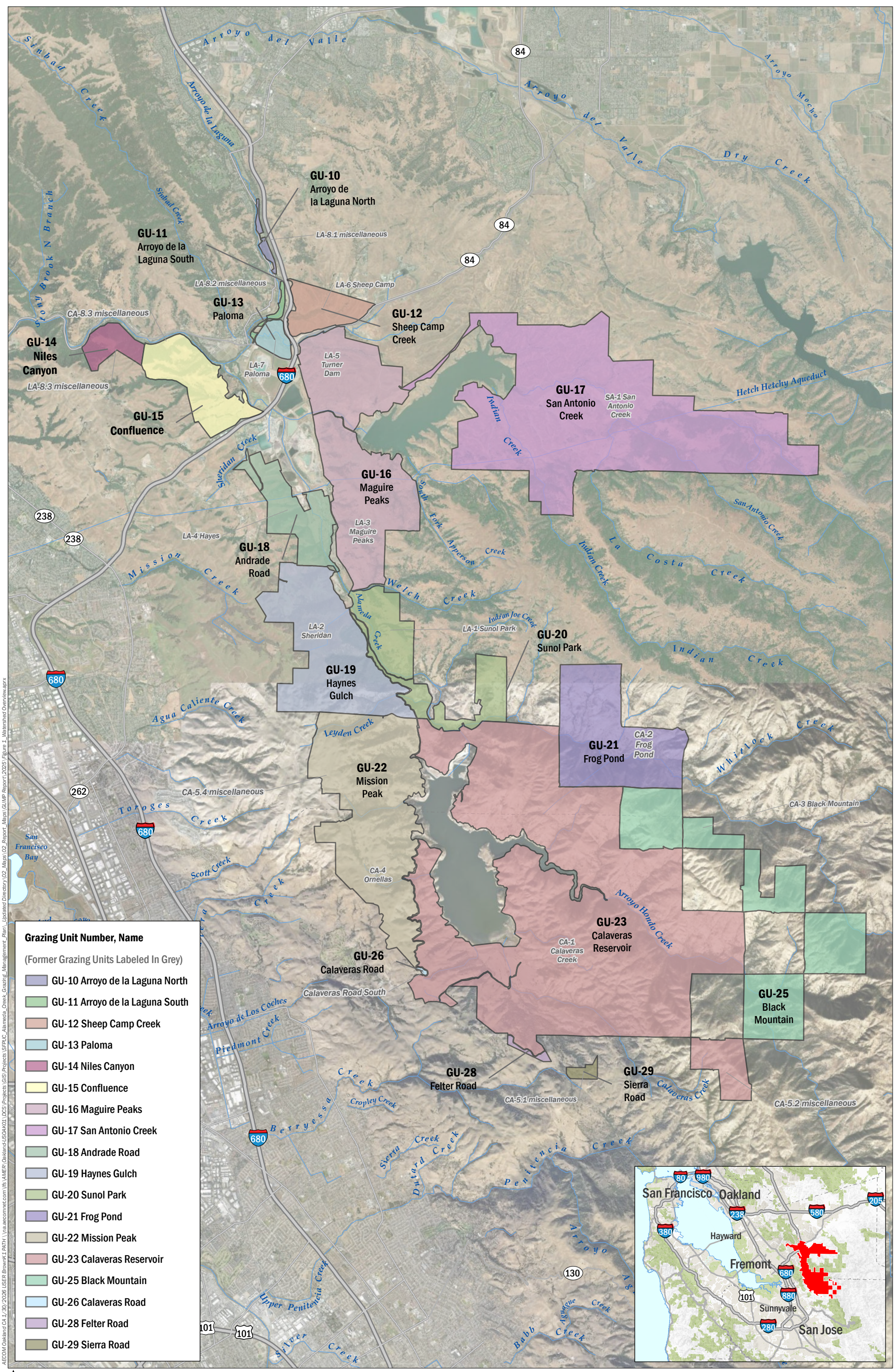

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Figure 1: SFPUC Alameda Creek Watershed Grazing Unit Overview

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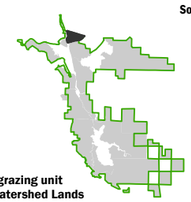
- SFPUC Grazing Unit Boundary
- BHR Conservation Easement
- BHR Exclusion Area
- Managed Riparian Area
- Fence
- Paved road
- Unpaved road
- Intermittent stream
- Pond

Grazing Infrastructure

- Corral
- Solar Panel
- Stream Diversion
- Tank (non-functioning or unknown)
- Tank (functioning)
- Trough (non-functioning or unknown)
- Trough (functioning)
- Well



Location of grazing unit within SFPUC Watershed Lands

Sources: AECOM, 2025; ESRI Imagery, 2025; SFPUC, 2025; Rangeland Conservation Science, 2025.

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Figure 2: GRAZING UNIT 12 SHEEP CAMP CREEK

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