

Attachment C

Biological Resources Memorandum



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memorandum

date July 30, 2026

to Paul Sellier and Lucy Croy, Marin Water

cc Tahsa Sturgis, Andy Collison, Jason White, and Justin Whitfield, Environmental Science Associates (ESA)

from Elizabeth Hill, ESA

subject Nicasio Reservoir Vegetation Management Project Biological Resources Technical Memorandum

Introduction

The Nicasio Reservoir Vegetation Management Project (Project) is located along Nicasio Creek, upstream of Nicasio Reservoir and downstream of Lafranchi Lane, near the town of Nicasio in unincorporated western Marin County, California (**Figure 1**). With input from Marin Water, Environmental Science Associates (ESA) completed reconnaissance surveys of the study area, which is defined to include areas on both the left and right banks of Upper Nicasio Creek from Nicasio Reservoir (Reservoir) to Lafranchi Lane.

Methods

Review of Background Information

Before performing a biological resources reconnaissance surveys, ESA conducted a desktop review of publicly available and subscription-based biological resources occurrence data, in addition to reports provided by Marin Water. Data sources that assisted in this analysis include:

- The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) list of plant and wildlife species documented within the following five U.S. Geological Survey 7.5-minute topographic quadrangles of the study area: San Geronimo, Inverness, Petaluma, Novato, and Bolinas (CDFW 2026).
- The California Native Plant Society (CNPS) online database of plant species documented on the San Geronimo, Inverness, Petaluma, Novato, and Bolinas quadrangles (CNPS 2026).
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) for the study area (USFWS 2026).
- Technical documents provided by Marin Water, including Marin Open Space District's *San Anselmo Creek Foothill Yellow-Legged Frog Survey Results* (Kleinfelder 2025) and the *Northern Spotted Owl*

Monitoring on Marin County Parks and Marin Water Lands, 2025 Report (Point Blue Conservation Science 2025).

- Online biological resources databases, including Marin Fine Scale Vegetation Map (One Tam and Golden Gate National Parks Conservancy 2021), iNaturalist (2026), and eBird (2026).
- Historic and current aerial imagery (Google Earth 2026).

The CDFW, CNPS, and USFWS species lists are provided in **Attachment A**.

Biological Resources Reconnaissance Survey

ESA biologists Liz Hill and Nicole Ibañez conducted a biological resources reconnaissance-level survey and aquatic resources assessment of the study area on April 13 and July 7, 2026. The results of the aquatic resources assessment are provided in a separate memorandum.

The biological resources reconnaissance survey consisted of a pedestrian survey through accessible portions of Nicasio Creek, including within the channel and along the banks, within the study area to identify and map vegetation communities, identify habitats that could support sensitive biological resources, and map aquatic resources. In some portions of the study area, aerial imagery was referenced to map vegetation communities in those portions of the study area that were not readily accessible on Marin Water property.

The findings of the biological resources reconnaissance, literature review, and database queries were used to compile the list of special-status species that may occur in the study area, to define areas of vegetative communities and habitat types present, and to characterize the study area, described below. This biological resources characterization occurred before identification of staging areas for the proposed Project.

Environmental Setting

The study area is in the Northern California Coast ecological region and Marin Hills and Valleys ecological subsection (Miles and Goudey 1997). The Upper Nicasio Creek watershed drains into Nicasio Reservoir (capacity of 22,340 acre-feet). Seeger Dam, located on Nicasio Creek about 1 mile upstream of the confluence with Lagunitas Creek, is an earth-fill dam built in 1960 that impounds Nicasio Reservoir. The reservoir's current spillway crest elevation is 165 feet National Geodetic Vertical Datum of 1929, which corresponds to an inundated area of approximately 797 acres. Nicasio Reservoir and Seeger Dam (dam) are downstream of the study area.

The Northern California coast encompasses diverse topography, including mountains, hills, valleys, and plains in the Northern California Coast Ranges and portions of the Klamath Mountains. The Marin Hills and Valleys subsection includes mountains and hills between San Francisco Bay and the San Andreas Fault that are north of the Golden Gate. Elevation ranges from sea level up to 2,579 feet on Mt. Tamalpais. The region is sufficiently close to the Pacific Ocean for the climate to be moderated greatly by marine influence. Summers are characterized by fog, cool temperatures, and higher humidity than exhibited inland. Mean annual temperatures range from a high of 71.0 degrees to a low of 48.0 degrees Fahrenheit, and annual mean precipitation is 42.33 inches.



Figure 1
Nicasio Reservoir Vegetation Management Project
Study Area

- Nicasio Creek
- Halleck Creek
- Study Area

- Parcels
- Marin Municipal Water District
 - Other Parcels



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The study area is located within the greater Tomales–Drakes Bay watershed. The Tomales–Drakes Bay watershed collects water from the western slopes of the North Coast Ranges in the western half of Marin County and a portion of Sonoma County and drains to Tomales Bay. The study area is in the Olema–Lagunitas Creek watershed within the greater Tomales–Drakes Bay watershed. The main channel in the study area, Nicasio Creek, flows into Nicasio Reservoir. From Nicasio Reservoir, water is released below the dam and approximately 1.20 miles downstream flows into Lagunitas Creek, which continues to flow west draining into Tomales Bay and eventually to the Pacific Ocean.

The study area consists of Nicasio Creek upstream of Nicasio Reservoir and downstream of Lafranchi Lane and lands surrounding the creek, and includes private ranchlands, Nicasio Unified School District property, and Marin Water–managed lands at elevations that range from 168 to 188 feet. The approximately 14.8-acre study area includes access routes for workers and small equipment. Areas upstream and downstream of the study area are not assessed in this report.

Natural Communities and Wildlife Habitats

Natural communities are assemblages of plants found in particular environments that vary based on soils, hydrology, rainfall, humidity, soil and water salinities, wind exposure, and altitude. Natural communities generally correspond to wildlife habitats that are occupied by an associated suite of animal species. The vegetation communities presented here are largely consistent with the CDFW Natural Communities, which comply with the National Vegetation Classification Standard.

The study area supports the following general vegetation and wildlife habitat types: willow forested wetland, willow riparian woodland, coast live oak/bay laurel woodland, waters (intermittent and ephemeral streams) that are mainly unvegetated, non-native annual grasslands, and ruderal/developed (**Figure 2**). Representative photographs of natural communities in the study area are included in **Attachment B**.

CDFW’s Natural Heritage Division identifies sensitive natural communities (CDFW 2025), which are those that are naturally rare and whose extent has been greatly diminished through changes in land use and have a state rarity rank of 1, 2, or 3.¹ One sensitive natural community occurs in the study area, characterized as coast live oak (*Quercus agrifolia*) and California bay laurel (*Umbellularia californica*) woodland in the vegetation community description below, and classified as the *Umbellularia californica*–*Quercus agrifolia*/*Toxicodendron diversilobum* association² (California Government Code Section 74.100.22) within the California bay forest and woodland alliance.³

¹ Natural communities with state rarity ranks of 1–3 are considered sensitive natural communities. See <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive> for additional information.

² Association is a vegetation classification unit defined by a diagnostic species, a characteristic range of species composition, physiognomy, and distinctive habitat conditions (Jennings et al. 2006). Associations reflect local topo-edaphic climates, substrates, hydrology, and disturbance regimes.

³ Alliance is a classification unit of vegetation, containing one or more associations and defined by one or more diagnostic species, often of high cover, in the uppermost layer or the layer with the highest canopy cover. Alliances reflect physiognomy as well as regional to subregional climates, substrates, hydrology, and disturbance regimes (Jennings et al. 2006; FGDC 2008).

Willow Forested Wetland

Willow forested wetland occurs along the left and right streambanks of Upper Nicasio Creek (Attachment B, **Photos 1, 2, 3, 4, and 5**). This community is dominated by a relatively dense overstory of arroyo willow (*Salix lasiolepis*) and Oregon ash (*Fraxinus latifolia*), with occasional occurrences of bigleaf maple (*Acer macrophyllum*) and California bay laurel. The understory of the willow forest is dominated by native shrubs and herbs such as California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), iris-leaved rush (*Juncus xiphioides*), starry false lily of the valley (*Maianthemum stellatum*), gooseberry (*Ribes* sp.), and snowberry (*Symphoricarpos albus*). In the northeastern portion of the study area, a small patch of slough sedge (*Carex obnupta*) is present beyond the willow canopy.

Willow Riparian Woodland

Willow riparian woodland occurs intermittently along the left and right streambanks of Upper Nicasio Creek (Attachment B, **Photo 6**). This community is dominated by limited to dense stands of arroyo willow overstory with intermittent occurrences of other tree species, including Oregon ash and conifers. The understory includes shrub-like willows, in addition to California blackberry, poison oak, cow parsnip (*Heracleum maximum*), and non-native grass, in addition to leaf litter. Although this community is located within the greater 100-year floodplain, it lacks an understory dominated by hydrophytic plants, hydric soils, and hydrological indicators.

Coast Live Oak and California Bay Woodland

Coast live oak and California bay woodland occur in portions of the study area that are upland from the willow riparian wetland (Attachment B, **Photos 7, 8, and 9**). The community is dominated by mature coast live oak and bay laurel trees and scattered occurrences of valley oak (*Quercus lobata*) interspersed with an understory of ferns, blackberry, poison oak, French broom (*Genista monspessulana*), and other herbaceous species and vines. The coast live oak and California bay woodland community would be best characterized as a California bay forest and woodland, which is considered a state Rank 3⁴ sensitive natural community (CDFW 2025).

Waters

The following intermittent and ephemeral streams are present in the study area:

- Nicasio Creek, an approximately 20- to 30-foot-wide intermittent stream, bisects the study area generally in the north–south direction (Attachment B, **Photo 10**) and is bordered by stands of arroyo willows. The substrate of the stream reach within the study area largely consists of sand/silt downstream of its confluence with Halleck Creek, while the majority of the creek substrate upstream of Halleck consists of gravel and cobble along a very slight gradient.

⁴ Sensitive Rank 3 denotes a vulnerable natural community or plant alliance and has a moderate risk of disappearing due to restricted range, few occurrences, or ongoing threats.

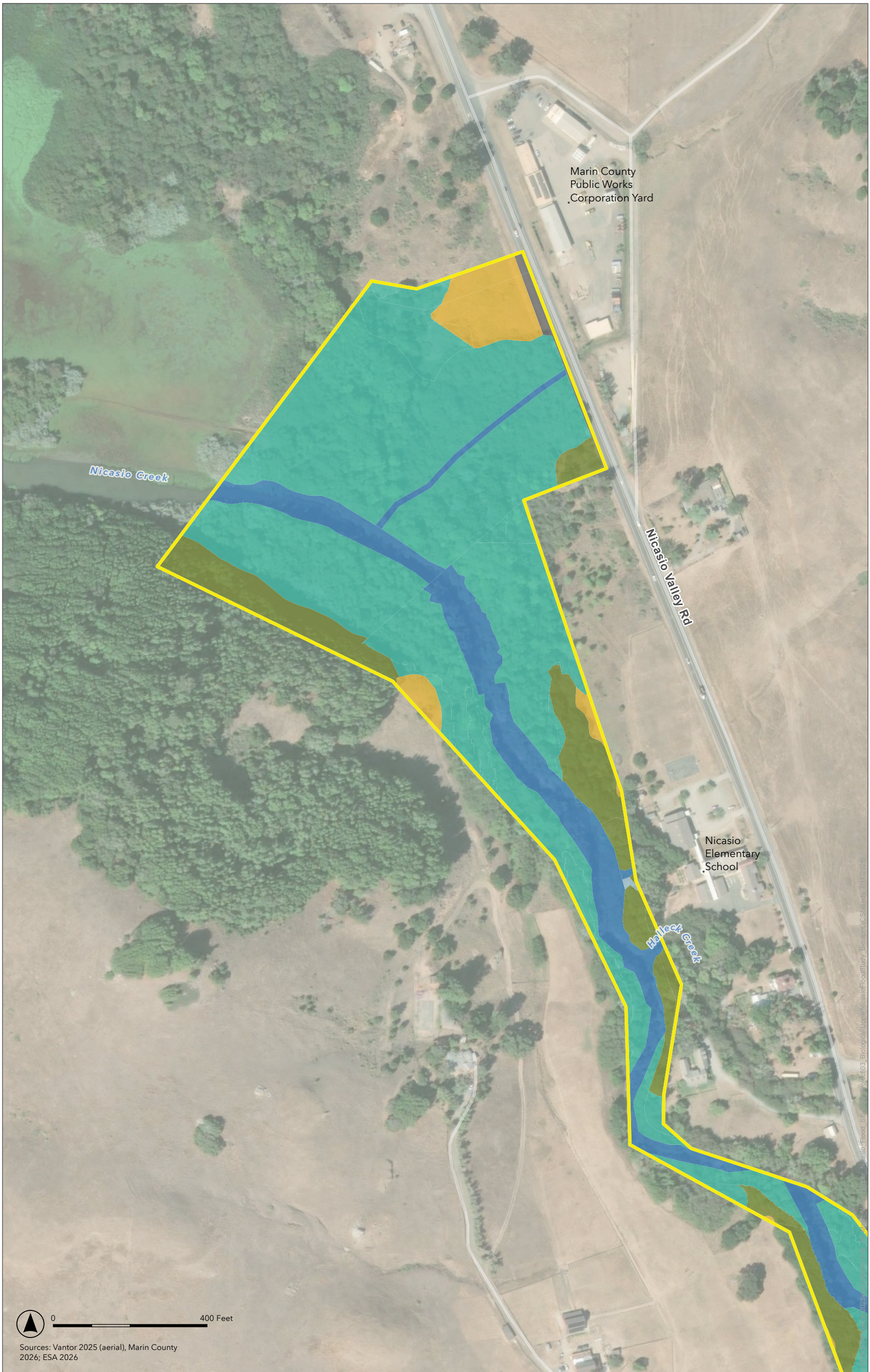


Figure 2
Nicasio Reservoir Vegetation Management Project
Vegetation Communities and Habitat Types

Note: The Study Area encompasses the direct physical footprint of a proposed project alongside a surrounding buffer zone to evaluate indirect environmental effects on local habitats and wildlife.

 Study Area

Land Cover Classification

Non-Native Annual Grasslands

Coast Live Oak/California Bay Woodland

Ruderal/Developed

Ephemeral Channel

Intermittent Channel

Willow Forested Wetland



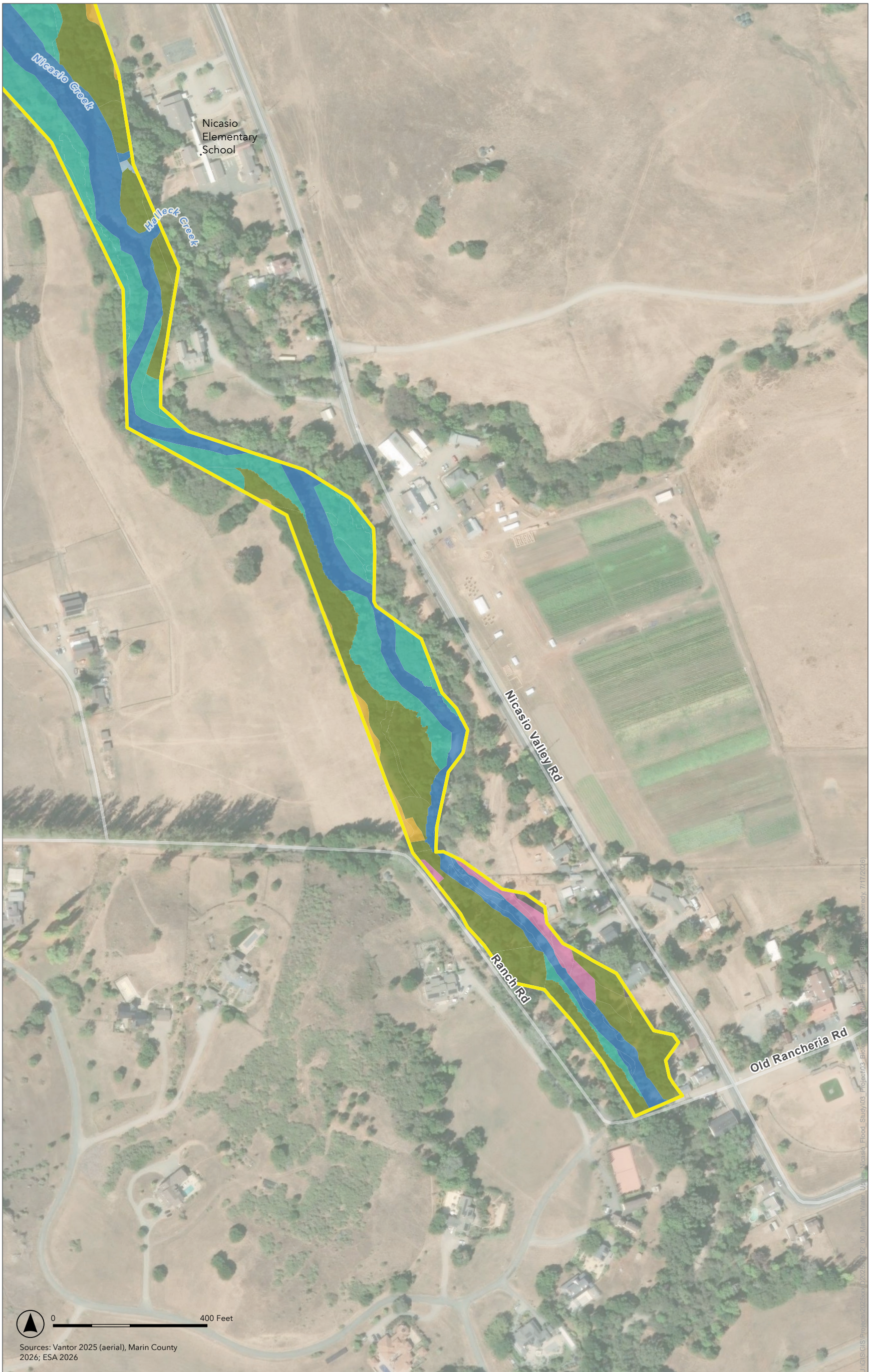


Figure 2
Upper Nicasio Vegetation Maintenance Project
Vegetation Communities and Habitat Types

Note: The Study Area encompasses the direct physical footprint of a proposed project alongside a surrounding buffer zone to evaluate indirect environmental effects on local habitats and wildlife.

 Study Area

Land Cover Classification

Non-Native Annual Grasslands

Coast Live Oak/California Bay Woodland

Ruderal/Developed

Ephemeral Channel

Intermittent Channel

Willow Forested Wetland

Willow Riparian Woodland



- Halleck Creek (Attachment B, **Photo 11**) is an approximately 25-foot-wide intermittent tributary to Nicasio Creek and occurs on the east side of the study area. Substrates in Halleck Creek consist primarily of small gravel (less than 4 inches in size) in the study area. There is an approximately 20-linear-foot sand beach near the confluence with Nicasio Creek. Halleck Creek is surrounded by stands of willow forested wetland vegetation, as described above. The portion of Halleck Creek within the study area is limited to 70 feet upstream from its confluence with Nicasio Creek.
- Two unnamed intermittent streams are present in the study area. One unnamed approximately 4-foot-wide intermittent stream flows from the eastern hillsides through the Nicasio Unified School District property and into Nicasio Creek (Attachment B, **Photo 12**). Another unnamed intermittent stream is present in the northeastern portion of the study area that flows into Nicasio Creek.⁵ This stream is surrounded by willow forested wetland and drains uplands runoff from outside of the study area through a culvert under Nicasio Valley Road.
- Less than 50 feet south of the unnamed intermittent stream at the Nicasio Unified School District property, two ephemeral streams are present. Ephemeral streams carry water only during precipitation events. The ephemeral streams vary in width from 2 to 3 feet wide and contain substrates of mud, gravel, and cobble. These streams were dry at the time of the spring 2026 habitat assessment.

Non-Native Annual Grasslands

Annual grassland is found in several locations on the northern, eastern and western banks of the reservoir (Attachment B, **Photo 13**). The annual grasslands are dominated by non-native grasses with mixed native and non-native forbs. Common grass species observed in this community included wild oat (*Avena barbata*), soft chess brome (*Bromus hordeaceus*), and ripgut brome (*Bromus diandrus*). Common non-native forbs observed include summer mustard (*Hirschfeldia incana*) and Italian thistle (*Carduus pycnocephalus*). Native forbs that occur in the annual grassland included arroyo lupine (*Lupinus succulentus*), farewell-to-spring (*Clarkia* sp.) and grassy tarweed (*Madia gracilis*).

Ruderal/Developed

Ruderal vegetation is typified by plants that are often the first to colonize a disturbed area, arising spontaneously and spreading widely without human intervention (i.e., control). In California, ruderal vegetation is often composed of an assemblage of non-native grasses and forbs (Sawyer et al., 2009; Holland, 1986). Ruderal habitat is located on private parcels and appears to be seasonally mowed (Attachment B, **Photo 14**). These areas are mostly within fenced pastures accessible to livestock bordered by residential and agricultural structures and are dominated by mowed non-native annual grasses and upland forbs such as mustard (*Brassica* sp.), sweet fennel (*Foeniculum vulgare*), and scarlet pimpernel (*Lysimachia arvensis*).

Developed areas such as livestock infrastructure and residential structures generally lack habitat for wildlife; however, buildings and culverts may be used by bat species for day or night roosts and by birds for nesting.

⁵ Channel was documented through aerial imagery and available online databases.

Special-Status Species with Potential to Occur in the Study Area

A list of species with documented occurrences from the vicinity of the study area was compiled from the CNDDDB (CDFW 2026), CNPS Inventory of Rare and Endangered Plants (CNPS 2026), and USFWS IPaC (USFWS 2026). Attachment B contains the USFWS Official Species List for the study area, as well as the CNPS and CNDDDB lists, which provides the basis for species considered and evaluated as part of this habitat assessment.

Table C-1 and Table C-2 in **Attachment C** provide an evaluation of the special-status species identified and summarize their listing/protected status and preferred habitats; provides an evaluation of their potential to occur in the study area; and summarizes any documented occurrences. **Figure 3a** displays the CNDDDB occurrences of special-status species in the vicinity of the study area, while **Figure 3b** displays the results of recent surveys for foothill yellow-legged frog (FYLF) (*Rana boylei* population 1) performed on behalf of Marin County Open Space District (Kleinfelder 2025).

The potential for the study area to support special-status plant or wildlife species was assessed using database results, previous biological reports for the regional vicinity, and the findings of the habitat assessment surveys. Low (unlikely), moderate, or high potential for species occurrence in the study area was determined based on special-status species' documented occurrences, known geographical and elevation ranges, and current habitat conditions. Only species with a moderate or high potential for occurrence are discussed further in this assessment. Special-status species that require specialized habitat not found within the study area but in the larger regional vicinity, such as coastal dunes, coastal scrubland, salt marsh, vernal pools, chaparral or serpentine soils, and foothill and valley grasslands, were eliminated from further discussion because those habitat types are not present in the study area.

Special-Status Plant Species

No special-status plants were observed during the 2026 biological reconnaissance surveys. The following special-status plants have moderate to high potential to occur within the study area, based on nearby records and suitable habitat in the study area. California Rare Plant Ranks (CRPRs) 1 and 2 are formally considered for California Environmental Quality Act (CEQA) review as they meet the “endangered, rare, or threatened” criteria under CEQA Guidelines Section 15380.⁶

⁶ Non-listed CRPR Ranks 3 and 4 species are sometimes considered if the population has local significance in the area and would be affected by the project. For the purposes of this document, CRPR Rank 3 and Rank 4 plants are omitted from further evaluation, as they were not considered to meet criteria to be considered threatened or endangered under state (Native Plant Protection Act [NPPA]) or federal law.

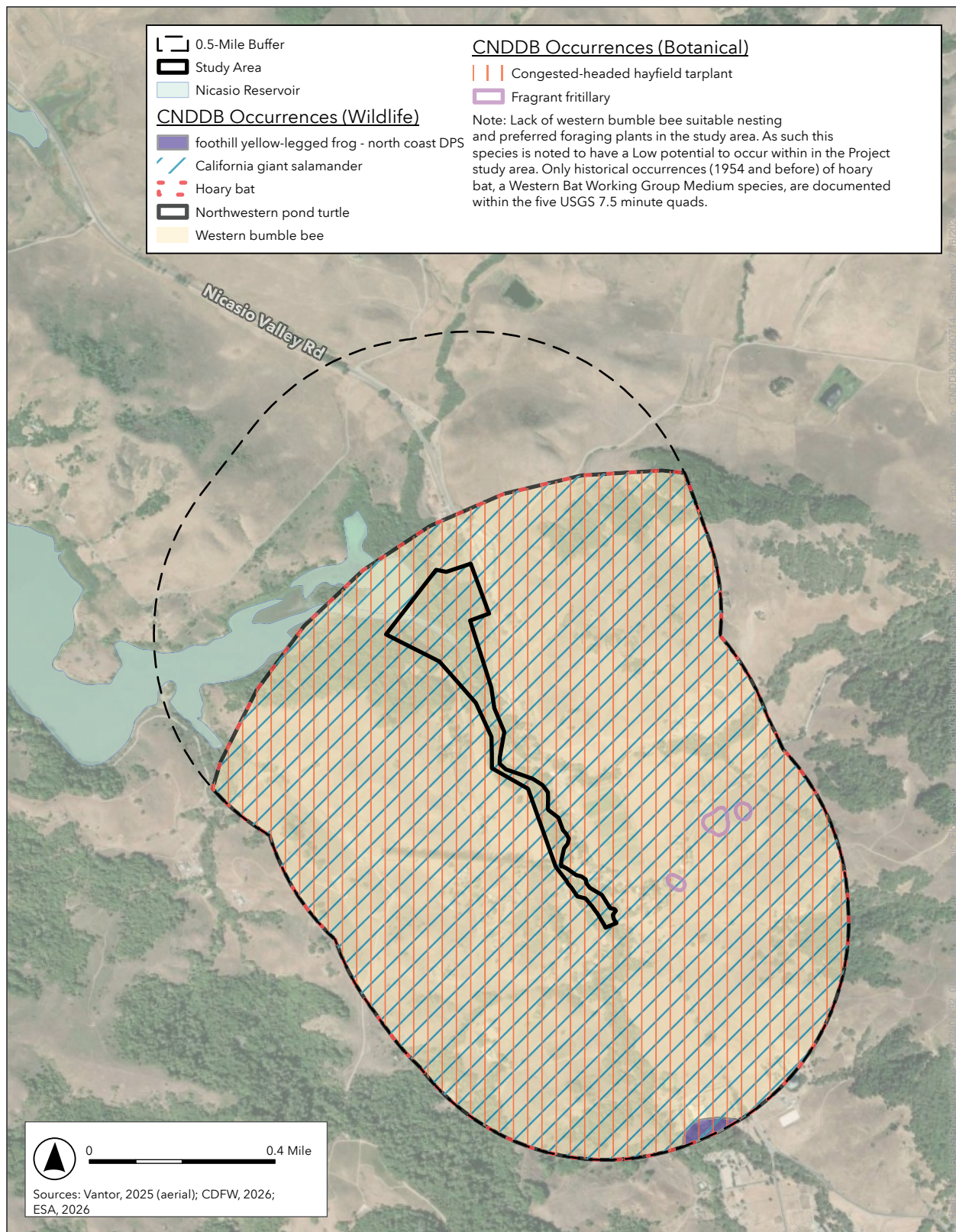
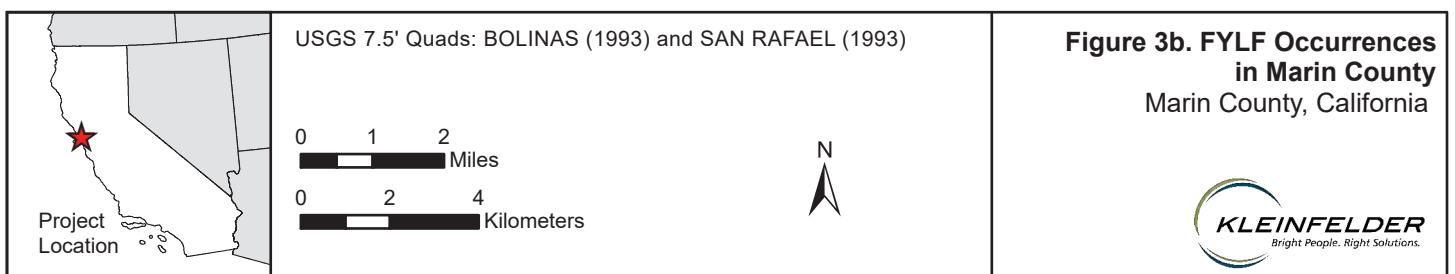
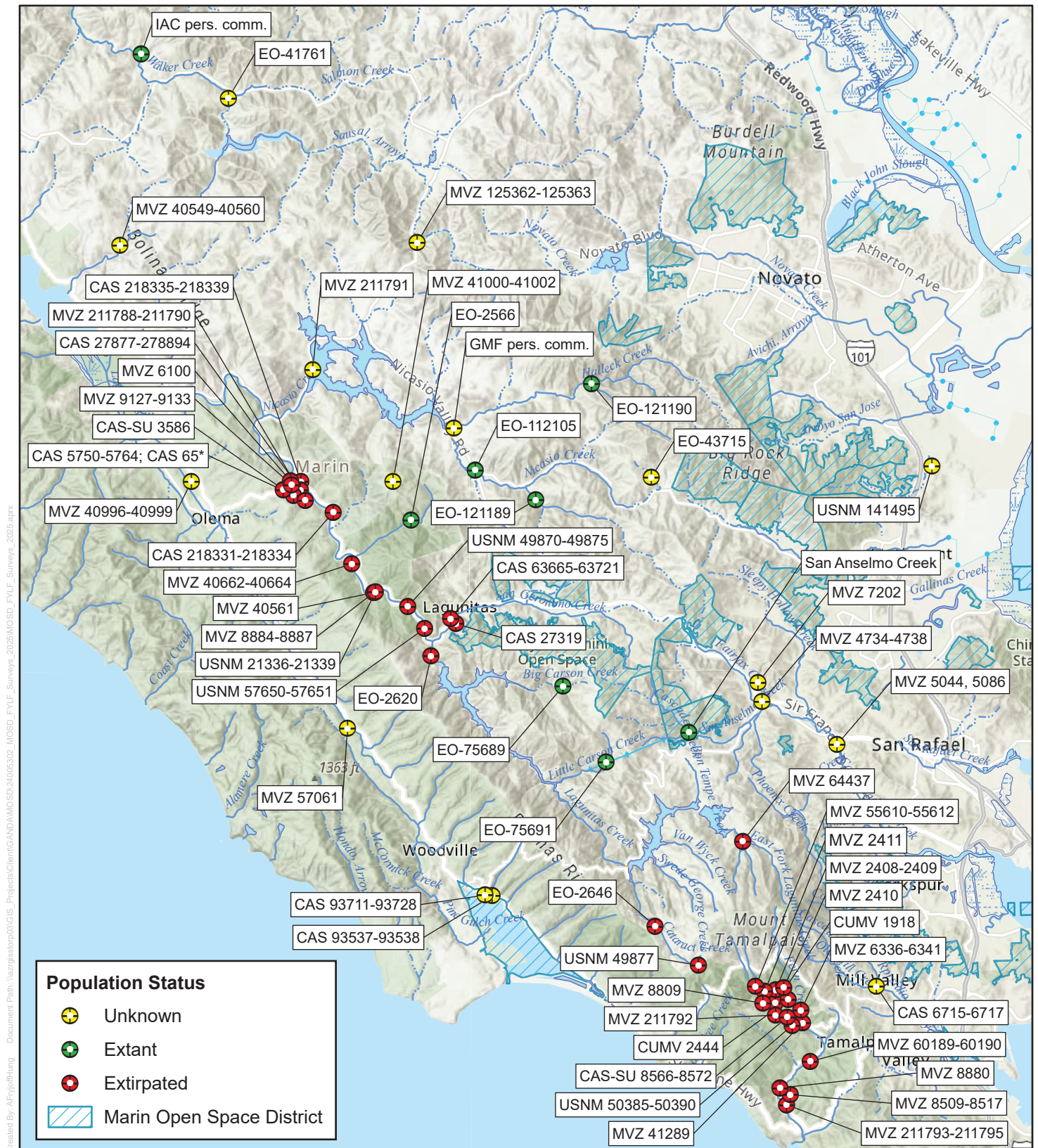


Figure 3a
 Nicasio Reservoir Vegetation Management Project
 California Natural Diversity Database Occurrences
 within a 0.5-Mile Buffer of the Study Area



High Potential

One special-status plant species has high potential to occur in the study area. Suitable habitat is present in the study area and this species has been recorded along a tributary to the study area in the CNDDDB or iNaturalist and are presumed extant:

- **Western leatherwood (*Dirca occidentalis*) (-/-/1B.2).** This species is found in broadleaf upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland. It has been recorded in the Upper Halleck Creek riparian corridor (outside of the study area) in iNaturalist in 2026 and was recorded along a northern tributary to Nicasio Reservoir in iNaturalist in 2019. This species has not been observed in the study area.

Moderate Potential

The following special-status plant species have moderate potential to occur in the study area. Suitable habitat is present in the study area but the species have not been recorded in past surveys or along tributaries to the study area and/or there are no recent occurrences in the CNDDDB or iNaturalist in the vicinity of the study area:

- **Napa false indigo (*Amorpha californica* var. *napensis*) (-/-/1B.2).** This species is found in openings in broadleaf upland forest, chaparral, and cismontane woodland. There are numerous occurrences in woodland areas near the study area and in West Marin (CDFW 2026). The nearest recent occurrence is approximately 3.4 miles southwest of the study area in the Lagunitas Creek riparian corridor.
- **Fragrant fritillary (*Fritillaria liliacea*) (-/-/1B.2).** This species is found often on serpentine, though usually on clay in grassland in coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Recent occurrences along Petaluma-Pt Reyes Road and Nicasio Valley Road on rocky possibly serpentine soils. Grassland in northwest portion of study area could potentially be considered habitat.
- **Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*) (-/-/1B.2).** This species is found in grassy valleys and hills, often in fallow fields; sometimes along roadsides. Grassland habitat in northeastern portion of study area could provide suitable habitat. CNDDDB documents a 1991 occurrence at southern end of Nicasio Reservoir along Nicasio Valley Rd.
- **North Coast semaphore grass (*Pleuropogon hooverianus*) (-/CT/1B.1).** This species is found in broadleaf upland forest, woodlands, or North Coast coniferous forest in meadows and seeps, usually in shady areas, sometimes in freshwater marsh. Suitable habitat is present in the northeastern portion of the willow riparian woodland and there are records 4 miles south of the study area along Sir Francis Drake Boulevard near the Marin Water Treatment Plant (CDFW 2026).
- **Sanford's arrowhead (*Sagittaria sanfordii*) (-/-/1B.2).** This species is found in marshes and swamps, and in standing or slow-moving freshwater ponds, marshes, or ditches. It was recorded in mesic conditions along the northwestern shoreline of Nicasio Reservoir. The most recent record of this population was documented in 2023 in iNaturalist and in 2020 in the CNDDDB (CDFW 2026). Occurrences of this species are scattered across the Central Valley, North Coast and parts of the Sierra Nevada foothills, and not typically known from the Bay Area.

Special-Status Wildlife Species

The following special-status wildlife species were determined to have moderate or high potential to occur within the study area:

- California red-legged frog
- White-tailed kite
- Foothill yellow-legged frog
- Migratory birds
- California giant salamander
- Western red bat and other bat species
- Northwestern pond turtle

California Red-Legged Frog

The California red-legged frog (*Rana draytonii*) (CRLF) is federally listed as a threatened species and is afforded protection under the federal Endangered Species Act (FESA) throughout its range in California and is a CDFW Species of Special Concern. This frog historically occurred over much of the state from the Sierra Nevada foothills to the coast and from Mendocino County to the U.S.–Mexico border. CRLFs typically breed in ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. However, this species is capable of inhabiting a wide variety of perennial aquatic habitats, including coastal lagoons, marshes, springs, stock ponds, and siltation ponds (USFWS 2002). In the summer (non-breeding season), CRLFs are likely to be observed near a deep pool in a creek or a pond, where emergent vegetation, semi-submerged root masses, and undercut banks provide protection from predators (USFWS 2002). CRLFs use upland habitat such as open grasslands for foraging and dispersal. Prey items include invertebrates and small vertebrates. Suitable upland habitat includes moist seeps or springs, burrows, or moist debris piles for dispersal and aestivation (Stebbins and McGinnis 2012). Factors that have contributed to the decline of the CRLF include destruction of riparian habitat from development, agriculture, flood control practices, or the introduction of exotic predators such as American bullfrog (*Lithobates catesbeianus*), crayfish (*Procambarus clarkii*), and a variety of non-native fish.

There is one 2024 iNaturalist CRLF record in upper Halleck Creek, in addition to numerous records downstream of Seeger Dam in Lagunitas Creek, but it has not been observed in Nicasio Creek. iNaturalist records in 2023 and 2025 document CRLFs in drainages south and east of Nicasio Reservoir, both north of the study area. The nearest CNDDDB record (Occurrence #1337) is approximately 3 miles west of the study area in McIsaac Creek, a tributary to Lagunitas Creek (CDFW 2026). The presence of perennial fish would likely preclude this species' breeding in the reservoir, although there is moderate potential for CRLF to transit along the edge to habitat in the creeks or nearby ponds. Suitable emergent aquatic vegetation was absent from the creek. No CRLF were observed in the study area as part of the recent Marin Water surveys, including this 2025 Emergency Vegetation Debris Removal Project, the Nicasio Reservoir Spillway Modification Project, or the reconnaissance habitat assessment. Thus, not likely to permanently inhabit the study area, and if present, likely only for temporary movement and non-breeding aquatic activities.

Foothill Yellow-Legged Frog

The North Coast Distinct Population Segment of foothill yellow-legged frog is a CDFW Species of Special Concern. The FYLF inhabits partly shaded, usually perennial streams with rocky substrate, deep

pools and shallow riffles, and sunny, sandy, or rocky banks for basking. Typical prey includes a wide selection of insects, especially aquatic insects, and snails. Breeding occurs between mid-March and early June and spawning lasts just a few weeks at any one spawning site. FYLFs attach eggs to available substrate in the streambed, often stones or emergent vegetation such as sedges. Frog larvae need at least 15 weeks to attain metamorphosis, which lasts a few days and during which metamorphs are concentrated in great numbers along the shore of the stream. Conservation threats include damming of rivers or other reduction of spring water flows and/or periodic water releases during the breeding season, which shears eggs from their attachment site and washes them and newly hatched larvae downstream. A second conservation threat is the introduction of non-native predatory game fish into many streams and rivers, where the fish prey on FYLF eggs and larvae (Stebbins and McGinnis 2012).

FYLFs have been recorded in both Nicasio and Halleck creeks upstream of the study area (CDFW 2026). There is moderate potential for FYLFs to use rocky areas with deep pools for breeding in Nicasio and Halleck creeks; however, this species has not been observed in the study area as part of recent Marin Water Surveys including the 2025 Emergency Vegetation Debris Removal Project, the Nicasio Reservoir Spillway Modification Project, or the reconnaissance habitat assessment. Given substrates in Nicasio Creek, suitable habitats are limited to the portion of Nicasio Creek upstream of Halleck Creek confluence.

California Giant Salamander

The California giant salamander (*Dicamptodon ensatus*) is a CDFW Species of Special Concern. This species is found in and around cold, semi-permanent and permanent streams and seepages in mesic forests from Sonoma and Napa counties to Santa Cruz County. Adults are elusive and seek cover under rocks, logs, and other substrate and forage on the forest floor during wet weather. During the breeding season, adults are found under rocks within small to medium-sized streams and create subterranean nests for eggs (AmphibiaWeb 2022). The primary threats to this species are stream siltation and habitat loss and fragmentation due to urbanization, agricultural development, and logging.

This species has been recorded on Lucas Valley Road about 1.6 miles east of Nicasio Valley Road (CNDDDB Occurrence #71) (CDFW 2026). It prefers slow-moving streams with cool, clear water in shallow pools. Although this species has not been observed in the study area, there is potential for California giant salamander to use the streams and adjacent riparian and upland habitat.

Northwestern Pond Turtle

The northwestern pond turtle (*Actinemys marmorata*) is a federally proposed threatened species and a CDFW Species of Special Concern. This species is normally associated with permanent ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams and requires basking sites and suitable upland habitat for egg laying. Storer (1930) suggested that two distinct habitats may be used for oviposition: (1) along large slow-moving streams, in which eggs are deposited in nests constructed in sandy banks, and (2) along foothill streams, where females may climb hillsides, sometimes moving considerable distances to find a suitable nest site. This species can tolerate full-strength seawater for a short period of time but normally is found in fresh water.

There is one CNDDDB record within the study area, south of Nicasio Reservoir along Nicasio Creek (CNDDDB Occurrence #59) (CDFW 2026). This species was observed during 2025 surveys conducted by

ESA in Nicasio Reservoir as part of the Nicasio Reservoir Spillway Modification Project. However, this species was not observed in Nicasio Creek as part of the other recent Marin Water work including the 2025 Emergency Vegetation Debris Removal Project, and the reconnaissance habitat assessment. Nicasio Creek particularly where woody debris, emergent rocks, and other basking sites are present is considered suitable aquatic habitat for the species. The willow forested wetland and willow riparian woodland in the study area could provide nesting habitat for this species, although the density of undergrowth vegetation would limit species mobility.

White-Tailed Kite

The white-tailed kite (*Elanus leucurus*) is a CDFW Fully Protected species that is found in rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes are used for foraging close to isolated, dense-topped trees for nesting and perching. There is moderate potential for white-tailed kite to use the forested and woodland habitat in the study area as nesting and foraging habitat.

Other Breeding and Migratory Birds

The willow forested wetland, willow riparian woodland, and coast live oak/bay laurel woodland within the study area provide nesting and foraging habitat for a variety of resident and migratory birds in mature trees, in dense shrubs, or on the ground. The federal Migratory Bird Treaty Act and the California Fish and Game Code protect raptors, native migratory birds, and most breeding birds that would occur in the study area and/or nest in the surrounding vicinity.

Special-Status Bats

Bats and other non-game mammals are protected under the California Fish and Game Code. Suitable habitat for the western red bat (*Lasiurus frantzii*)—a CDFW Species of Special Concern with a Western Bat Working Group designation of High—occurs in the study area. The western red bat roosts in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas, where it is associated with intact riparian habitat, particularly willows. The nearest CNDDDB-documented occurrence of western red bat to the study area is along Olema Creek near Bear Valley Road in 2003 (CDFW 2026). Bats, including the red bat, have potential to occur in the study area where riparian trees provide suitable roost habitat and may forage over water in the study area.

Critical Habitat

USFWS and the National Marine Fisheries Service can designate critical habitat for species that have been listed as threatened or endangered. “Critical habitat” is defined in Section 3(5)(A) of the FESA as those lands (or waters) within a listed species’ current range that contain the physical or biological features that are considered essential to its conservation. No critical habitat is present in the study area. Designated critical habitat located in the vicinity of the study area is depicted in **Figure 4**.

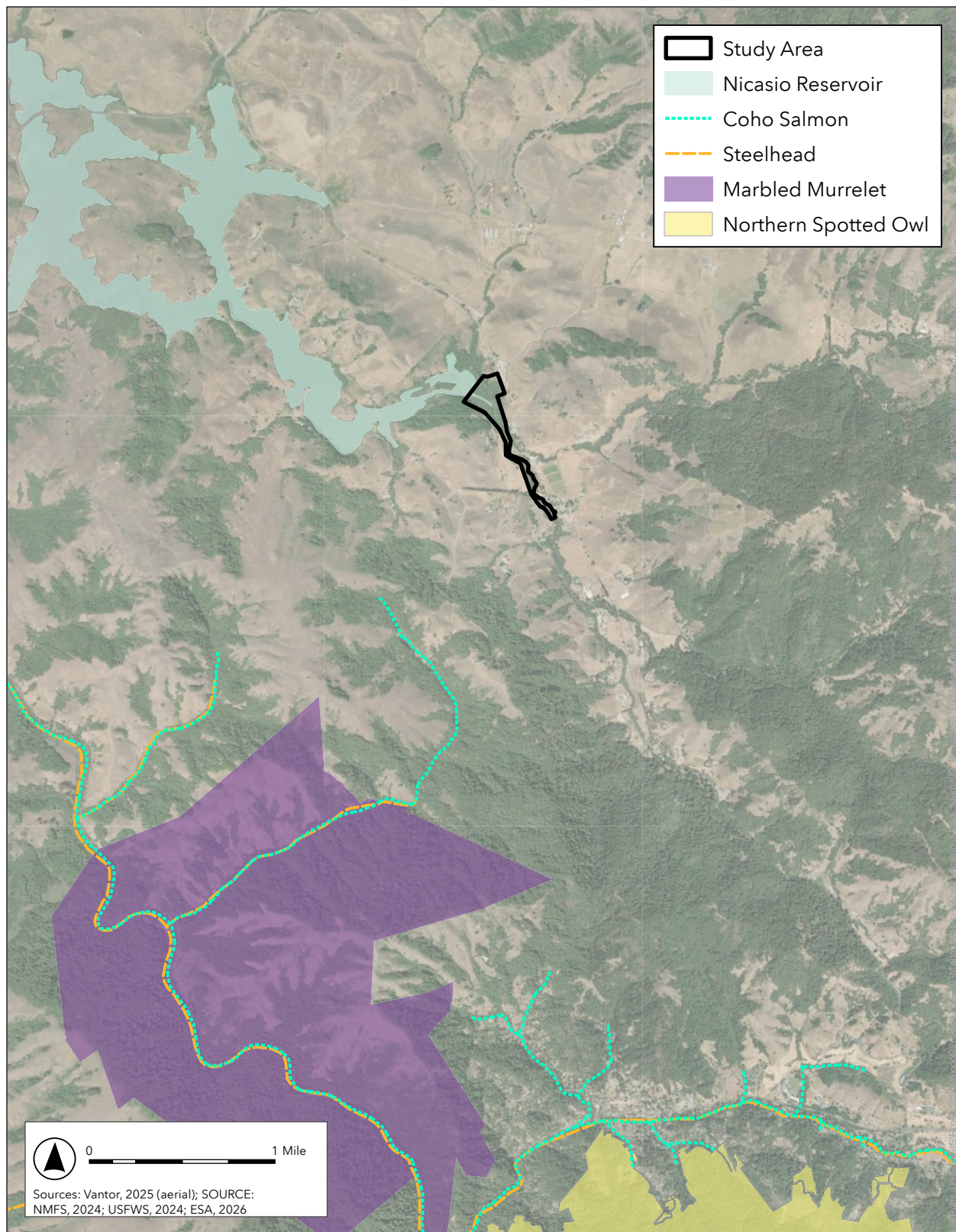


Figure 4
Nicasio Reservoir Vegetation Management Project
Critical Habitat

References

- AmphibiaWeb. 2022. “*Dicamptodon ensatus*: California Giant Salamander.” Berkeley: University of California, Berkeley. Last modified January 18, 2022. <https://amphibiaweb.org/species/3866>.
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Attachment A

Database Results



Summary Table Report

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Query Criteria: Quad IS (San Geronimo (3812216) OR Petaluma (3812226) OR Novato (3812215) OR Inverness (3812217) OR Bolin

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Abronia umbellata</i> var. <i>breviflora</i> pink sand-verbena	G4G5T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 50	61 S:2	0	0	0	1	0	1	2	0	2	0	0
<i>Acipenser medirostris</i> pop. 1 green sturgeon - southern DPS	G2T1 S1	Threatened None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	0 0	14 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Actinemys marmorata</i> northwestern pond turtle	G2 SNR	Proposed Threatened None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	24 400	1160 S:14	1	8	2	1	0	2	8	6	14	0	0
<i>Adela oplerella</i> Opler's longhorn moth	G2 S2	None None		500 1,300	14 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Agrostis blasdalei</i> Blasdale's bent grass	G2G3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	200 1,200	62 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	G4G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		25 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus	G5T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	40 300	21 S:2	0	0	0	0	2	0	2	0	0	0	2
<i>Ambystoma californiense</i> pop. 3 California tiger salamander - Sonoma County DPS	G3T2 S2	Endangered Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable		85 S:1	0	0	0	0	1	0	1	0	0	1	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Amorpha californica var. napensis</i> Napa false indigo	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	180 1,500	123 S:10	2	4	2	0	0	2	0	10	10	0	0
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz	795 1,967	93 S:4	0	0	0	0	0	4	1	3	4	0	0
<i>Anarhynchus nivosus nivosus</i> western snowy plover	G3T3 S3	Threatened None	CDFW_SSC-Species of Special Concern	0 20	140 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Antrozous pallidus</i> pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	40 730	425 S:10	1	1	0	1	2	5	10	0	8	2	0
<i>Aplodontia rufa phaea</i> Point Reyes mountain beaver	G5T2 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	200 400	9 S:4	0	0	0	0	2	2	4	0	2	2	0
<i>Arctostaphylos montana ssp. montana</i> Mt. Tamalpais manzanita	G3T3 S3	None None	Rare Plant Rank - 1B.3 SB_UCBG-UC Botanical Garden at Berkeley	1,000 1,200	15 S:8	0	1	0	0	0	7	6	2	8	0	0
<i>Arctostaphylos virgata</i> Marin manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	5 1,532	32 S:19	1	3	1	1	0	13	16	3	19	0	0
<i>Ardea alba</i> great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	18 100	43 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	18 250	156 S:6	0	1	0	0	1	4	5	1	5	1	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i> coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley		24 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz	30 30	65 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Athene cunicularia</i> burrowing owl	G4 S2	None Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-2 1,731	2513 S:13	2	0	3	0	1	7	4	9	12	1	0
<i>Bombus caliginosus</i> obscure bumble bee	G2G3 S1S2	None None	IUCN_VU-Vulnerable	50 1,000	181 S:10	0	0	0	0	0	10	9	1	10	0	0
<i>Bombus occidentalis</i> western bumble bee	G3 S1	None Candidate Endangered	IUCN_VU-Vulnerable USFS_S-Sensitive	25 400	306 S:7	0	0	0	0	0	7	7	0	7	0	0
<i>Buteo swainsoni</i> Swainson's hawk	G5 S4	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	120 120	2587 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Caecidotea tomalensis</i> Tomales isopod	G2 S2S3	None None		100 100	6 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Calicina diminua</i> Marin blind harvestman	G1 S1	None None		150 150	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Callophrys mossii marinensis</i> Marin elfin butterfly	G4T1 S2	None None		182 539	4 S:2	0	1	0	1	0	0	0	2	2	0	0
<i>Cardamine angulata</i> seaside bittercress	G4G5 S3	None None	Rare Plant Rank - 2B.2		38 S:1	0	0	0	0	0	1	1	0	1	0	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Carex lyngbyei</i> Lyngbye's sedge	G5 S3	None None	Rare Plant Rank - 2B.2 IUCN_LC-Least Concern	10 100	37 S:4	1	1	0	0	0	2	2	2	4	0	0
<i>Castilleja affinis</i> var. <i>neglecta</i> Tiburon paintbrush	G4G5T1T2 S1S2	Endangered Threatened	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	900 900	7 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Castilleja ambigua</i> var. <i>humboldtiensis</i> Humboldt Bay owl's-clover	G5T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	5 6	31 S:3	1	2	0	0	0	0	2	1	3	0	0
<i>Ceanothus decornutus</i> Nicasio ceanothus	G1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	800 950	2 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Ceanothus gloriosus</i> var. <i>porrectus</i> Mt. Vision ceanothus	G4T2 S2	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	60 1,000	18 S:3	0	2	0	0	0	1	2	1	3	0	0
<i>Ceanothus masonii</i> Mason's ceanothus	G1 S1	None Rare	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	700 1,500	8 S:6	1	2	1	0	0	2	3	3	6	0	0
<i>Chloropyron maritimum</i> ssp. <i>palustre</i> Point Reyes salty bird's-beak	G4?T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	0 10	80 S:19	3	5	2	2	0	7	2	17	19	0	0
<i>Chorizanthe valida</i> Sonoma spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	30 30	6 S:1	0	0	0	0	1	0	1	0	0	1	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Cicindela hirticollis grvida</i> sandy beach tiger beetle	G5T2 S2	None None		10 10	34 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Cicuta maculata var. bolanderi</i> Bolander's water-hemlock	G5T4T5 S2?	None None	Rare Plant Rank - 2B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	40 40	17 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Cirsium andrewsii</i> Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 95	31 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Cirsium hydrophilum var. vaseyi</i> Mt. Tamalpais thistle	G2T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	600 1,300	14 S:7	2	2	0	0	0	3	5	2	7	0	0
<i>Coastal Brackish Marsh</i> Coastal Brackish Marsh	G2 S2.1	None None			30 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Collinsia corymbosa</i> round-headed collinsia	G1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	10 470	635 S:8	0	1	0	0	1	6	6	2	7	1	0
<i>Coturnicops noveboracensis</i> yellow rail	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	6 6	45 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Cypseloides niger</i> black swift	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFWS_BCC-Birds of Conservation Concern	600 600	46 S:1	0	0	0	0	0	1	1	0	1	0	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Danaus plexippus plexippus pop. 1</i> monarch - California overwintering population	G4T1T2Q S2	Proposed Threatened None	IUCN_EN-Endangered USFS_S-Sensitive	20 250	408 S:12	0	7	3	0	2	0	8	4	10	1	1
<i>Delphinium bakeri</i> Baker's larkspur	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	705 705	6 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Delphinium luteum</i> golden larkspur	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	150 150	11 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Dicamptodon ensatus</i> California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	50 800	254 S:20	4	1	0	0	0	15	13	7	20	0	0
<i>Dirca occidentalis</i> western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	140 600	90 S:7	0	2	1	0	0	4	2	5	7	0	0
<i>Eastwoodiella californica</i> swamp harebell	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 800	155 S:7	0	2	0	0	0	5	7	0	7	0	0
<i>Egretta thula</i> snowy egret	G5 S4	None None	IUCN_LC-Least Concern	18 18	20 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Elanus leucurus</i> white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	75 75	190 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Entosthodon kochii</i> Koch's cord moss	G1 S1S2	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive		6 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Erethizon dorsatum</i> North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	200 200	525 S:1	0	0	0	0	0	1	1	0	1	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Eriogonum luteolum</i> var. <i>caninum</i> Tiburon buckwheat	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	500 1,025	26 S:8	2	0	0	0	0	6	5	3	8	0	0
<i>Erysimum concinnum</i> bluff wallflower	G2G3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		30 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Eucyclogobius newberryi</i> tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	10 35	127 S:2	0	0	0	0	2	0	2	0	0	0	2
<i>Fritillaria lanceolata</i> var. <i>tristulis</i> Marin checker lily	G5T2 S2	None None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	40 1,000	32 S:12	0	0	5	0	0	7	10	2	12	0	0
<i>Fritillaria liliacea</i> fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	40 900	82 S:10	0	4	4	0	0	2	5	5	10	0	0
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 170	114 S:8	0	2	0	0	0	6	8	0	8	0	0
<i>Gilia capitata</i> ssp. <i>chamissonis</i> blue coast gilia	G5T2 S2	None None	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	20 40	37 S:2	0	0	1	0	0	1	2	0	2	0	0
<i>Gilia capitata</i> ssp. <i>tomentosa</i> woolly-headed gilia	G5T2 S2	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	245 955	18 S:4	1	0	0	0	0	3	1	3	4	0	0
<i>Gilia millefoliata</i> dark-eyed gilia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		54 S:1	0	0	0	0	0	1	1	0	1	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_UCBG-UC Botanical Garden at Berkeley	20 1,400	52 S:11	0	1	3	0	0	7	9	2	11	0	0
<i>Hesperoleucus venustus subditus</i> southern coastal roach	GNRT2 S2	None None	CDFW_SSC-Species of Special Concern	10 20	15 S:2	1	1	0	0	0	0	2	0	2	0	0
<i>Hesperolinon congestum</i> Marin western flax	G1 S1	Threatened Threatened	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	550 1,315	27 S:8	2	2	1	0	0	3	1	7	8	0	0
<i>Heteranthera dubia</i> water star-grass	G5 S2	None None	Rare Plant Rank - 2B.2 IUCN_LC-Least Concern	80 80	9 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Horkelia marinensis</i> Point Reyes horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz		36 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Horkelia tenuiloba</i> thin-lobed horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,300 1,300	27 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	G2? S2?	None None		160 160	13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hypogymnia schizidiata</i> island tube lichen	G2G3 S2	None None	Rare Plant Rank - 1B.3		10 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Ischnura gemina</i> San Francisco forktail damselfly	G2 S2	None None	IUCN_EN-Endangered	25 25	7 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasionycteris noctivagans</i> silver-haired bat	G4 S3S4	None None	IUCN_LC-Least Concern	580 580	139 S:2	0	0	0	0	0	2	2	0	2	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lasiurus cinereus</i> hoary bat	G3G4 S4	None None	IUCN_LC-Least Concern	40 1,215	238 S:6	0	0	0	0	0	6	6	0	6	0	0
<i>Lasiurus frantzii</i> western red bat	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	43 43	128 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Lasthenia californica ssp. macrantha</i> perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	80 80	59 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Laterallus jamaicensis coturniculus</i> California black rail	G3T1 S2	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_EN-Endangered	0 375	304 S:16	4	2	0	1	0	9	9	7	16	0	0
<i>Lessingia micradenia var. micradenia</i> Tamalpais lessingia	G2T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	1,000 1,000	9 S:5	0	1	0	0	0	4	3	2	5	0	0
<i>Lichnanthe ursina</i> bumblebee scarab beetle	G2 S2	None None			8 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	G2 S2	None Rare	Rare Plant Rank - 1B.1	5 5	206 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Lilium maritimum</i> coast lily	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_BerrySB-Berry Seed Bank SB_UCBG-UC Botanical Garden at Berkeley	20 20	84 S:1	0	0	0	0	0	1	1	0	1	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lilium pardalinum ssp. pitkinense</i> Pitkin Marsh lily	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture		4 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Lindriella occidentalis</i> California lindriella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	111 111	509 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Melospiza melodia samuelis</i> San Pablo song sparrow	G5T2 S2	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	0 20	41 S:9	0	3	0	0	0	6	9	0	9	0	0
<i>Microseris paludosa</i> marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz		38 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Mielichhoferia elongata</i> elongate copper moss	G5 S3S4	None None	Rare Plant Rank - 4.3 USFS_S-Sensitive	100 100	20 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Navarretia rosulata</i> Marin County navarretia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	900 1,450	15 S:7	1	2	0	0	0	4	3	4	7	0	0
<i>Northern Coastal Salt Marsh</i> Northern Coastal Salt Marsh	G3 S3.2	None None		10 15	53 S:5	0	0	0	0	0	5	5	0	5	0	0
<i>Northern Maritime Chaparral</i> Northern Maritime Chaparral	G1 S1.2	None None		300 300	17 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Northern Vernal Pool</i> Northern Vernal Pool	G2 S2.1	None None		240 240	20 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	G5T2Q S2	Endangered Endangered	AFS_EN-Endangered	180 180	23 S:1	0	1	0	0	0	0	1	0	1	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Oncorhynchus mykiss irideus</i> pop. 8 steelhead - central California coast DPS	G5T3Q S3	Threatened None	AFS_TH-Threatened CDFW_SSC-Species of Special Concern	40 120	56 S:2	0	0	1	1	0	0	1	1	2	0	0
<i>Pandion haliaetus</i> osprey	G5 S4	None None	CDF_S-Sensitive CDFW_WL-Watch List IUCN_LC-Least Concern	400 400	504 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Phacelia insularis</i> var. <i>continentis</i> North Coast phacelia	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley		15 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Plagiobothrys mollis</i> var. <i>vestitus</i> Petaluma popcornflower	G4?TX SX	None None	Rare Plant Rank - 1A	20 20	1 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	G2 S2	None Threatened	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_BerrySB-Berry Seed Bank SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	350 500	34 S:4	1	0	0	1	1	1	2	2	3	1	0
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	G3 S3	None None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1 1	15 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Polygonum marinense</i> Marin knotweed	G2 S2	None None	Rare Plant Rank - 3.1	5 5	32 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Pomatiopsis binneyi</i> robust walker	G1 S1	None None		150 150	2 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Pomatiopsis californica</i> Pacific walker	G1 S1	None None	IUCN_DD-Data Deficient	66 66	4 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Quercus parvula</i> var. <i>tamalpaisensis</i> Tamalpais oak	G4T2 S2	None None	Rare Plant Rank - 1B.3	532 1,635	19 S:5	0	1	0	0	0	4	2	3	5	0	0
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	G3T1 S2	Endangered Endangered	CDFW_FP-Fully Protected	3 18	99 S:7	1	4	0	0	0	2	2	5	7	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Rana boylii</i> pop. 1 foothill yellow-legged frog - north coast DPS	G3T4 S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern USFS_S-Sensitive	18 1,681	1610 S:23	1	4	3	0	7	8	16	7	16	5	2
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	6 965	1806 S:50	3	9	3	0	0	35	21	29	50	0	0
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	G1G2 S3	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	3 3	151 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Sagittaria sanfordii</i> Sanford's arrowhead	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	170 170	143 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Serpentine Bunchgrass</i> Serpentine Bunchgrass	G2 S2.2	None None		1,000 1,000	22 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Setophaga petechia</i> yellow warbler	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	20 20	78 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> Point Reyes checkerbloom	G5T2 S2	None None	Rare Plant Rank - 1B.2	30 300	34 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Sidalcea hickmanii</i> ssp. <i>viridis</i> Marin checkerbloom	G2TH SH	None None	Rare Plant Rank - 1B.1	1,390 1,390	1 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Spirinchus thaleichthys</i> pop. 2 longfin smelt - San Francisco Bay-Delta DPS	G5TNRQ S1	Endangered Threatened	IUCN_LC-Least Concern	0 0	35 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Streptanthus anomalus</i> Mount Burdell jewelflower	G1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	535 535	2 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Streptanthus batrachopus</i> Tamalpais jewelflower	G2 S2	None None	Rare Plant Rank - 1B.3 SB_UCSC-UC Santa Cruz	1,100 1,480	8 S:3	1	1	1	0	0	0	2	1	3	0	0
<i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i> Mt. Tamalpais bristly jewelflower	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	420 1,300	24 S:18	1	5	0	0	0	12	17	1	18	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Stygobromus hyporheicus</i> hyporheic amphipod	G1 SX	None None		540 540	1 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Syncaris pacifica</i> California freshwater shrimp	G2 S2	Endangered Endangered	IUCN_EN-Endangered	30 120	20 S:2	0	0	2	0	0	0	2	0	2	0	0
<i>Talanites ubicki</i> Ubick's gnaphosid spider	G1 S1	None None		150 150	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Taricha rivularis</i> red-bellied newt	G2 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	20 20	136 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	40 200	648 S:4	0	0	1	0	0	3	3	1	4	0	0
<i>Trachusa gummifera</i> San Francisco Bay Area leaf-cutter bee	G1 S1	None None		1,130 1,130	3 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Trifolium amoenum</i> two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley SB_USDA-US Dept of Agriculture	300 300	26 S:3	0	0	0	0	2	1	3	0	1	2	0
<i>Triphysaria floribunda</i> San Francisco owl's-clover	G2? S2?	None None	Rare Plant Rank - 1B.2		50 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Triquetrella californica</i> coastal triquetrella	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive		13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	6 6	39 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Vespericola marinensis</i> Marin hesperian	G2 S2	None None		35 580	23 S:11	0	0	0	0	0	11	11	0	11	0	0

CNPS Database Query May 12, 2026
USGS 7.5' Quadrangle(s): San Geronimo, Petalum, Bolinas, Inverness, Novato
Elevation : 150 to 180 feet

ScientificName	CommonName	Family	Lifeform	CRPR	SRank	CESA	FESA	BloomingP	Habitat	Micro Habitat Details	Micro Habitat	ElevationLow_ft	ElevationH	Notes
Agrostis blasdalei	Blasdale's bent grass	Poaceae	perennial rhizomatous herb	1B.2	S2	None	None	May-Jul	Coastal bluff scrub, Coastal dunes, Coastal prairie			0	490	Historical occurrences need field surveys. Includes A. blasdalei var. marinensis, which is state-listed Rare.
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	perennial bulbiferous herb	1B.2	S2	None	None	(Apr)May-Ju	Cismontane woodland, Valley and foothill grassland		Clay, Serpentine (often), Volcanic	170	1000	See Phytologia 73(4):310 (1992) for original description.
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	Poaceae	perennial herb	1B.1	S1	None	FE	May-Jul	Marshes and swamps (freshwater), Riparian scrub			15	1200	Two occurrences introduced in 1987 (485C, 485D), but both appear to have failed as of 1993. Historical localities need field surveys. See A. aequalis in The Jepson Manual.
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub	1B.2	S2	None	None	Apr-Jul	Broadleafed upland forest (openings), Chaparral, Cismontane woodland			165	6560	See Manual of the Flowering Plants of California, p. 556 (1925) by W.L. Jepson for original description, and Rhodora 77:348-350 (1975) for taxonomic treatment.
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	1B.2	S3	None	None	Mar-Jun	Cismontane woodland, Coastal bluff scrub, Valley and foothill grassland			10	1640	Many collections old; current status information needed. Does plant occur in SHA and SIS counties?
Arabis blepharophylla	coast rockcress	Brassicaceae	perennial herb	4.3	S4	None	None	Feb-May	Broadleafed upland forest, Coastal bluff scrub, Coastal prairie, Coastal scrub		Rocky	10	3610	See Rhodora 43(511):348-349 (1941) for taxonomic treatment, and Contributions from the Gray Herbarium 204:149-154 (1973) for taxonomic information.
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	Fabaceae	perennial herb	1B.2	S2	None	None	(Apr-May)Ju	Coastal dunes (mesic), Coastal scrub, Marshes and swamps (coastal salt, streamsides)			0	180	Possibly threatened by cattle trampling, erosion, and competition. See Proceedings of the American Academy of Arts and Sciences 6:526 (1865) for original description, and Memoirs of the New York Botanical Garden 13:811-813 (1964) for taxonomic treatment.
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	1B.2	S1	None	None	Mar-Jun	Playas, Valley and foothill grassland (adobe clay), Vernal pools		Alkaline	5	195	Threatened by development, competition from non-native plants, and habitat destruction, especially agricultural conversion. Possibly threatened by trampling. Potentially threatened by energy transmission line construction. See Proceedings of the American Academy of Arts and Sciences 6:206 (1864) for original description, and Systematic Botany 17(3):367-379 (1992) for distributional information.
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	4.2	S4	None	None	(Jan)Mar-Ju	Chaparral, Coastal scrub		Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes)	35	4005	Potentially threatened by development. Possibly threatened by fire suppression and road maintenance. Plant appears to be widely scattered but uncommon everywhere, and most collections are old; needs field surveys. See Proceedings of the American Academy of Arts and Sciences 11:124 (1876) for original description.
Cardamine angulata	seaside bittercress	Brassicaceae	perennial herb	2B.2	S3	None	None	(Jan)Mar-Ju	Lower montane coniferous forest, North Coast coniferous forest	wet areas	Streambanks	50	3000	Many occurrences are historical; need field surveys. Possibly threatened by foot traffic, and road maintenance. See Flora Boreali-Americana 1(1):44-45 (1829) for original description.
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	4.2	S3S4	None	None	Mar-Aug	Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Valley and foothill grassland, Vernal pools (margins)			0	1425	Threatened by development. See C. ambigua ssp. ambigua in TJM 2. See Phytologia 90(1):63-82 (2008) for revised nomenclature.
Ceanothus gloriosus var. exaltatus	glory brush	Rhamnaceae	perennial evergreen shrub	4.3	S4	None	None	Mar-Jun(Au	Chaparral			100	2000	Threatened by habitat disturbance. See Leaflets of Western Botany 2:44 (1937) for original description.
Ceanothus gloriosus var. gloriosus	Point Reyes ceanothus	Rhamnaceae	perennial evergreen shrub	4.3	S4	None	None	Mar-May	Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal scrub		Sandy	15	1705	Can intergrade with Ceanothus gloriosus var. porrectus.
Ceanothus gloriosus var. porrectus	Mt. Vision ceanothus	Rhamnaceae	perennial evergreen shrub	1B.3	S2	None	None	Feb-May	Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Valley and foothill grassland			80	1000	Known from fewer than 20 occurrences in the Mt. Vision area near Pt. Reyes. Some plants destroyed by quarrying; occurs in areas grazed by cattle. Possibly threatened by competition. Can intergrade with Ceanothus gloriosus var. gloriosus.
Chorizanthe valida	Sonoma spineflower	Polygonaceae	annual herb	1B.1	S1	CE	FE	Jun-Aug	Coastal prairie (sandy)			35	1000	Thought extinct for 77 years; only known extant occurrence was rediscovered in 1980 at Pt. Reyes NS. Experimental introduction work ongoing as of 2000. Closely related to C. pungens. See Proceedings of the American Academy of Arts and Sciences 12:271 (1877) for original description, Phytologia 66(2):132-134 (1989) for taxonomic treatment, Fremontia 18(1):17-18 (1990) for species account, and Madrono 39(4):271-280 (1992) and 40(4):285-288 (1993) for discussion of grazing effects.
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Apiaceae	perennial herb	2B.1	S2?	None	None	Jul-Sep	Marshes and swamps (brackish, coastal, freshwater)			0	655	
Cirsium andrewsii	Franciscan thistle	Asteraceae	perennial herb	1B.2	S3	None	None	Mar-Jul	Broadleafed upland forest, Coastal bluff scrub, Coastal prairie, Coastal scrub		Mesic, Serpentine (sometimes)	0	490	Threatened by development and non-native plants. See Proceedings of the American Academy of Arts and Sciences 10:45 (1874) for original description, and A Flora of Western Middle California , p. 506 (1901) by W. L. Jepson for revised nomenclature.
Delphinium luteum	golden larkspur	Ranunculaceae	perennial herb	1B.1	S1	CR	FE	Mar-May	Chaparral, Coastal prairie, Coastal scrub		Rocky	0	330	Plants from MRN Co. are apparently not hybrids with D. decorum ssp. decorum; hybridizes with D. nudicaule. Threatened by development, grazing, and road maintenance. Possibly threatened by horticultural collecting. See Bulletin of the Southern California Academy of Sciences 2:68-69 (1903) for original description, and Conservation Biology 15(6):1608-1618 (2001) for information on origin.

Dichondra occidentalis	western dichondra	Convolvulaceae	perennial rhizomatous herb	4.2	S3S4	None	None	(Jan)Mar-Ju	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland		165	1640	Records for MRN Co. are questionable; report from LAX Co. needs confirmation. Possibly threatened by development. See Muhlenbergia 1:130-131 (1906) for original description.
Dirca occidentalis	western leatherwood	Thymelaeaceae	perennial deciduous shrub	1B.2	S2	None	None	Jan-Mar	(Apr)Broadleafed upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, North Coast coniferous forest, Riparian forest, Riparian woodland	Mesic	80	1395	
Eastwoodiella californica	swamp harebell	Campanulaceae	perennial rhizomatous herb	1B.2	S3	None	None	Jun-Oct	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Marshes and swamps (freshwater), Meadows and seeps, North Coast coniferous forest	Mesic	5	1330	Many occurrences have few plants. Threatened by competition, grazing, development, marsh habitat loss, logging, road maintenance, and trampling. See Proceedings of the California Academy of Sciences 12:158 (1861) for original description.
Elymus californicus	California bottle-brush grass	Poaceae	perennial herb	4.3	S4	None	None	May-Aug	(Nov)Broadleafed upland forest, Cismontane woodland, North Coast coniferous forest, Riparian woodland		50	1540	Possibly threatened by fire suppression.
Erigeron biolettii	streamside daisy	Asteraceae	perennial herb	3	S3?	None	None	Jun-Oct	Broadleafed upland forest, Cismontane woodland, North Coast coniferous forest	Mesic, Rocky	100	3610	Move to List 1B? Location, rarity, and endangerment information needed. Most collections are very old. Intergrades with E. inornatus. Possibly threatened by recreational activities. See Manual of the Botany of the Region of San Francisco Bay, p. 181 (1894) by E. Greene for original description, and Phytologia 72(2):157-208 (1992) for taxonomic treatment.
Eriogonum luteolum var. caninum	Tiburon buckwheat	Polygonaceae	annual herb	1B.2	S2	None	None	May-Sep	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland	Gravelly, Sandy, Serpentine	0	2295	Not clearly distinguishable from var. luteolum north of Tiburon. E. luteolum is similar to E. gracile to the south and E. vimineum to the northeast. Threatened by development, foot traffic, and non-native plants. See Flora Franciscana, pp. 150-151 (1891) by E. Greene for original description, and Phytologia 66(4):378-379 (1989) for alternative treatment which restricts var. caninum to ALA and MRN counties.
Erysimum concinnum	bluff wallflower	Brassicaceae	annual/perennial herb	1B.2	S2	None	None	Feb-Jul	Coastal bluff scrub, Coastal dunes, Coastal prairie		0	605	Largest occurrence known from Pt. Reyes NS; possibly of hybrid origin. Some occurrences from DNT and MEN cos. are also of possible hybrid origin; further study is ongoing. Threatened by development, habitat loss, competition, and non-native plants. See E. menziesii ssp. concinnum in TJM (1993). See Zoe 5(6-8):103 (1901) for original description.
Erysimum franciscanum	San Francisco wallflower	Brassicaceae	perennial herb	4.2	S3	None	None	Mar-Jun	Chaparral, Coastal dunes, Coastal scrub, Valley and foothill grassland	Granitic (often), Roadsides (sometimes), Serpentine (often)	0	1805	Rare and declining in SCR Co. Possibly threatened by recreational activities and non-native plants. Includes E. franciscanum var. crassifolium. Inland plants approach E. capitatum. See Aliso 4(1):118-121 (1958) for original description.
Fritillaria lanceolata var. tristulis	Marin checker lily	Liliaceae	perennial bulbiferous herb	1B.1	S2	None	None	Feb-May	Coastal bluff scrub, Coastal prairie, Coastal scrub		50	490	Plants seem not to set seed but reproduce by offsets.
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	1B.2	S2	None	None	Feb-Apr	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland	Clay, Serpentine (sometimes)	10	1345	
Gilia capitata ssp. chamissonis	blue coast gilia	Polemoniaceae	annual herb	1B.1	S2	None	None	Apr-Jul	Coastal dunes, Coastal scrub		5	655	Threatened by urbanization, recreational development, and non-native plants. Possibly threatened by trampling. See Erythea 3:105 (1895) for original description, and Aliso 2(3):309 (1950) for revised nomenclature.
Gilia capitata ssp. tomentosa	woolly-headed gilia	Polemoniaceae	annual herb	1B.1	S2	None	None	May-Jul	Coastal bluff scrub, Valley and foothill grassland	outcrops Rocky, Serpentine	35	720	Threatened by urbanization, road maintenance, and erosion. Intergrades with ssp. capitata in northeastern San Francisco Bay area. See Aliso 2(3):304 (1950) for revised nomenclature.
Grindelia hirsutula var. maritima	San Francisco gumplant	Asteraceae	perennial herb	3.2	S1	None	None	Jun-Sep	Coastal bluff scrub, Coastal scrub, Valley and foothill grassland	Sandy (sometimes), Serpentine (sometimes)	50	1310	Previously on List 1B. Plants from MNT and SCR counties need verification. Threatened by coastal development and non-native plants. Can be difficult to identify; many herbarium specimens need to be checked for correct identification. May be a hybrid between G. hirsutula var. hirsutula and G. stricta var. platyphylla or G. stricta var. angustifolia; needs further study. Not in TJM 2. See Pittonia 2:289 (1892) for original description and Novon 2(3):215-217 (1992) for revised nomenclature.
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	1B.2	S2	None	None	Apr-Nov	Valley and foothill grassland	Roadsides (sometimes)	65	1835	Threatened by agriculture, development, and road construction. Possibly threatened by grazing. Hybridizes with H. congesta ssp. lutescens. See H. congesta ssp. leucocephala in The Jepson Manual (1993). What was once considered H. congesta ssp. congesta in The Jepson Manual (1993) is now considered H. congesta ssp. lutescens; a common taxon.
Hesperolinon congestum	Marin western flax	Linaceae	annual herb	1B.1	S1	CT	FT	Apr-Jul	Chaparral, Valley and foothill grassland	Serpentine	15	1215	Protected in part at Ring Mtn. Preserve, MRN Co. Threatened by development, non-native plants, and foot traffic. Potentially threatened by hydrological alterations. See Proceedings of the American Academy of Arts and Sciences 6:521 (1865) for original description, and University of California Publications in Botany 32:235-314 (1961) for taxonomic treatment.
Heteranthera dubia	water star-grass	Pontederiaceae	perennial herb (aquatic)	2B.2	S2	None	None	Jul-Oct	Marshes and swamps (alkaline, still, slow-moving water)	Requires a pH > Alkaline	100	4905	Many occurrences historical and some possibly extirpated; needs field surveys. See Observationum Botanicarum 3(9):59 (1768) for original description and The Metaspermae of the Minnesota Valley, pp. 138 (1892) by C. MacMillan for taxonomic treatment.
Horkelia marinensis	Point Reyes horkelia	Rosaceae	perennial herb	1B.2	S2	None	None	May-Sep	Coastal dunes, Coastal prairie, Coastal scrub	Sandy	15	2475	Populations from near Ft. Bragg, MEN Co. may be a distinct variety. Historical occurrences need field surveys. See Systematic Botany 18(1):137-144 (1993) for distributional information.

													Historical occurrences need field surveys. Threatened by development. Possibly threatened by foot traffic, trail maintenance, logging, and non-native plants. See Report of the Pacific Railroad Expedition 4(5):84 (1857) for original description, and Systematic Botany 18(1):137-138 (1857) for taxonomic treatment.
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb	1B.2	S2	None	None	May-Jul(Aug)	Broadleafed upland forest, Chaparral, Valley and foothill grassland	Mesic, Openings, Sandy	165	1640	144 (1993) for taxonomic treatment.
Hosackia gracilis	harlequin lotus	Fabaceae	perennial rhizomatous herb	4.2	S3	None	None	Mar-Jul	Broadleafed upland forest, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Valley and foothill grassland	wetlands Roadsides	0	2295	Designated as Endangered in Canada. Thought to be a larval food plant of the Federally Endangered lotis blue butterfly (Lycaeides argyrognomon ssp. lotis).
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	4.2	S3	None	None	Mar-May(Jun)	Coastal prairie, Lower montane coniferous forest, Meadows and seeps	Mesic	0	1970	Many collections old; need field surveys. May hybridize with Iris missouriensis. Threatened by development and trampling.
Lasthenia californica ssp. macrantha	perennial goldfields	Asteraceae	perennial herb	1B.2	S2	None	None	Jan-Nov	Coastal bluff scrub, Coastal dunes, Coastal scrub		15	1705	Threatened by competition from non-native plants and recreational activities. Potentially threatened by trail construction and foot traffic. See Report of the Pacific Railroad Expedition 4:106 (1857) for original description, University of California Publications in Botany 40:59-62 (1966) for taxonomic treatment, and Madrono 48(3): 208 (2001) for revised nomenclature.
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	4.2	S4?	None	None	Apr-Jul	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland		180	4920	Historical occurrences need verification. Does plant occur in CCA Co.?
Leptosiphon grandiflorus	large-flowered leptosiphon	Polemoniaceae	annual herb	4.2	S3S4	None	None	Apr-Aug	Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Valley and foothill grassland	Sandy (usually)	15	4005	Many historical occurrences extirpated by development; need status information. A synonym of Linanthus grandiflorus in The Jepson Manual. See Pittonia 2:260 (1892) for revised nomenclature, and Aliso 19(1):55-91 (2000) for taxonomic treatment.
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	3	S2S3	None	None	Jun-Oct	Broadleafed upland forest, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	Clay, Serpentine	50	1000	Move to List 4? Need location, rarity, and endangerment information. Probably more widespread in the southern Sacramento Valley, southern North Coast Ranges, and northern S.F. Bay. Possibly threatened by grazing, and non-native plants. See Flora Franciscana, p. 377 (1897) by E. Greene for original description, and University of California Publications in Botany 16:40 (1929) for taxonomic treatment.
Lilium maritimum	coast lily	Liliaceae	perennial bulbiferous herb	1B.1	S2	None	None	May-Aug	Broadleafed upland forest, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest	Roadsides (sometimes)	15	1560	Did this plant occur in SFO Co.? Populations along Highway 1 routinely disturbed by road maintenance; also threatened by urbanization, development, horticultural collecting, logging, grazing, non-native plants, habitat fragmentation, homeless encampments, foot traffic, and recreational activities. Hybridizes with L. pardalinum ssp. pardalinum. See Proceedings of the American Academy of Arts and Sciences 6:140 (1875) for original description.
Lilium pardalinum ssp. pitkinense	Pitkin Marsh lily	Liliaceae	perennial bulbiferous herb	1B.1	S1	CE	FE	Jun-Jul	Cismontane woodland, Marshes and swamps (freshwater), Meadows and seeps	Mesic, Sandy	115	215	Known only from near Sebastopol. Most of marsh habitat has been destroyed; also threatened by horticultural collecting, hydrological alterations, and competition from other plants. Potentially threatened by hybridization with otherL. pardalinum subspecies. See Novon 12(2):253-261 (2002) for revised nomenclature.
Microseris paludosa	marsh microseris	Asteraceae	perennial herb	1B.2	S2	None	None	Apr-Jun(Jul)	Cismontane woodland, Closed-cone coniferous forest, Coastal scrub, Valley and foothill grassland		15	1165	Need quads for MEN Co. Similar to M. laciniaata spp. leptosepala. See Bulletin of the California Academy of Sciences 2(5):52 (1886) for original description, and Leaflets of Western Botany 5:108 (1948) for revised nomenclature.
Mielichhoferia elongata	elongate copper moss	Mielichhoferiaceae	moss	4.3	S3S4	None	None		Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Subalpine coniferous forest	Acidic (usually), Carbonate (sometimes), Metamorphic, Roadsides (often), Vernally Mesic (usually)	0	6430	Previously CRPR 2B.2; more common than originally known. Potentially threatened in PLU Co. by road maintenance. Commonly called "copper mosses" - distinctive glossy blue-green coloration aids identification. See Bryologia Germanica 2(2):186 (1831) for original description.
Phacelia insularis var. continentis	North Coast phacelia	Hydrophyllaceae	annual herb	1B.2	S2	None	None	Mar-May	Coastal bluff scrub, Coastal dunes	Rocky (sometimes), Sandy	35	560	Known from fewer than twenty occurrences. Threatened by foot traffic, non-native plants, and grazing. See American Midland Naturalist 33:474 (1945) for original description.
Plagiobothrys mollis var. vestitus	Petaluma popcornflower	Boraginaceae	perennial herb	1A	SX	None	None	Jun-Jul	Marshes and swamps (coastal salt), Valley and foothill grassland (mesic)		35	165	Known only from the type collection (in 1880) near Petaluma. Field work needed.
Pleuropogon hooverianus	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	1B.1	S2	CT	None	Apr-Jun	Broadleafed upland forest, Meadows and seeps, North Coast coniferous forest	Mesic, Openings	35	2200	Threatened by roadside maintenance, development, timber harvest, feral pigs, and non-native plants. See American Journal of Botany 28:360 (1941) for original description, Leaflets of Western Botany 4(10):247 (1946) for revised nomenclature, and Taxon 27(4):375 (1978) for alternate nomenclature.
Pleuropogon refractus	nodding semaphore grass	Poaceae	perennial rhizomatous herb	4.2	S4	None	None	(Feb-Mar)A	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	Mesic	0	5250	
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	4.2	S3	None	None	Feb-May	Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, Vernal pools	Mesic	50	1540	
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	1B.2	S3	None	None	May-Oct(Nov)	Marshes and swamps (shallow freshwater)		0	2135	Extirpated from southern California, and mostly extirpated from the Central Valley. Several SAC Co. occurrences not relocated during fieldwork in 2005. See Pittonia 2:158 (1890) for original description.
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom	Malvaceae	perennial rhizomatous herb	1B.2	S2	None	None	Apr-Sep	Marshes and swamps (freshwater, near coast)		10	245	Threatened by non-native plants, road maintenance, foot traffic, and pipeline construction. Possibly threatened by grazing. See Manual of the Flowering Plants of California, p. 629 (1925) by W.L. Jepson for original description.

Threatened by fire suppression. Possibly threatened by development. Plants from LAK Co.												
Sidalcea hickmanii ssp. viridis	Marin checkerbloom	Malvaceae	perennial herb	1B.1	SH	None	None	May-Jun	Chaparral (serpentine)		165	1410 (565B) may be a new taxon.
Streptanthus anomalus	Mount Burdell jewelflower	Brassicaceae	annual herb	1B.1	S1	None	None	May-Jun	Cismontane woodland (openings)	Openings, Serpentine	165	490
Toxicoscordion fontanum	marsh zigadenus	Melanthiaceae	perennial	4.2	S3	None	None	Apr-Jul	Chaparral, Cismontane woodland, Lower montane	Serpentine (often),	50	See Leaflets of Western Botany 2:41 (1937) for original description, and Phytologia 73(4):307-
			bulbiferous herb						coniferous forest, Marshes and swamps, Meadows and seeps			
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	1B.1	S1	None	FE	Apr-Jun	Coastal bluff scrub, Valley and foothill grassland		15	Rediscovered in 1993 by P. Conners near Occidental; only one plant found, and subsequent surveys in 1994-1995 unsuccessful. Another occurrence (502C) discovered in 1996. Historical habitat lost to urbanization and agriculture. See Flora Franciscana, p. 27 (1891) by E. Greene 1360 for original description, and Fremontia 22(2):3-7 (1994) for account of rediscovery.
									(sometimes serpentinite)			
Triphysaria floribunda	San Francisco owl's-clover	Orobanchaceae	annual herb	1B.2	S2?	None	None	Apr-Jun	Coastal prairie, Coastal scrub, Valley and foothill grassland	Serpentine (sometimes)	35	525
Triquetrella californica	coastal triquetrella	Pottiaceae	moss	1B.2	S2	None	None		Coastal bluff scrub, Coastal scrub	soil	35	Known in CA from fewer than ten small coastal occurrences, and in in OR from only one occurrence. Threatened by urbanization. See Mem. Calif. Acad. 1:30 (1868) for original description, and Moss. Fl. N.A. 3:201 (1934) for revised nomenclature.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

04/23/2026 17:18:47 UTC

Project Code: 2026-0080645

Project Name: Upper Nicasio Creek Maintenance Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)).

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

PROJECT SUMMARY

Project Code: 2026-0080645

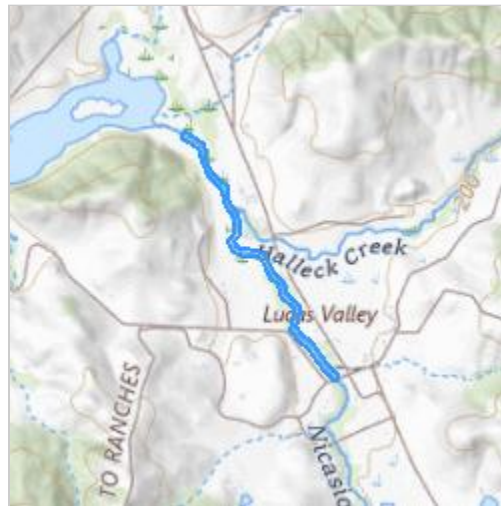
Project Name: Upper Nicasio Creek Maintenance Project

Project Type: Flooding

Project Description: The project targets removal of large wood jams within the stream channel, trimming of the vegetation that encroached into the channel, and sediment removal to restore flow and to reduce localized flooding risks that threaten public facilities and adjacent properties, including Nicasio Elementary School and surrounding private residences, wells and septic systems within these properties.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.06615395,-122.7036327584012,14z>



Counties: Marin County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Least Tern <i>Sternula antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104 General project design guidelines: https://ipac.ecosphere.fws.gov/project/H4Y3ALNVHFFZPDTAMW3MKKMMNI/documents/generated/11271.pdf	Endangered
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123 General project design guidelines: https://ipac.ecosphere.fws.gov/project/H4Y3ALNVHFFZPDTAMW3MKKMMNI/documents/generated/11271.pdf	Threatened

REPTILES

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Northwestern Pond Turtle <i>Actinemys marmorata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111 General project design guidelines: https://ipac.ecosphere.fws.gov/project/H4Y3ALNVHFFZPDTAMW3MKKMMNI/documents/generated/11271.pdf	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 General project design guidelines: https://ipac.ecosphere.fws.gov/project/H4Y3ALNVHFFZPDTAMW3MKKMMNI/documents/generated/11271.pdf	Threatened

FISHES

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57 General project design guidelines:	Endangered

NAME	STATUS
https://ipac.ecosphere.fws.gov/project/H4Y3ALNVHFFZPDTAMW3MKKMMNI/documents/generated/11271.pdf	

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 General project design guidelines: https://ipac.ecosphere.fws.gov/project/H4Y3ALNVHFFZPDTAMW3MKKMMNI/documents/generated/11271.pdf	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Marin Dwarf-flax <i>Hesperolinon congestum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5363	Threatened
Tiburon Paintbrush <i>Castilleja affinis ssp. neglecta</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2687	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: County of Marin
Name: Liz Hill
Address: 575 Market St
Address Line 2: Suite 3700
City: San Francisco
State: CA
Zip: 94105
Email: ehill@esassoc.com
Phone: 4152622362

LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Marin



Attachment B

Representative Photographs



Photo 1. Photo of Nicasio Creek, facing downstream of the creek, surrounded by willow forested wetland. Taken on April 13, 2026.



Photo 2. Photo of the Nicasio Creek, facing upstream, surrounded by willow forested wetland understory. Taken on April 13, 2026.



Photo 3. Photo of dense riparian wetland along Nicasio Creek. Taken on April 13, 2026.



Photo 4. Photo of the downed vegetation debris on eastern bank of Nicasio Creek. Taken on April 13, 2026.



Photo 5. Photo of willow forested wetland fringes along northeastern portion of study area. Taken on April 13, 2026.



Photo 6. Photo of willow riparian woodland on Nicasio Creek east bank. Taken on July 7, 2026.



Photo 7. Photo of oak woodland near northern end of Nicasio School District property. Looking south. Taken on April 13, 2026.



Photo 8. Photo of coast live oak and California bay laurel woodland near the confluence of Halleck Creek and Nicasio Creek. Taken on April 13, 2026.



Photo 9. Photo of oak and California bay laurel woodland. Taken on April 13, 2026.



Photo 10. Photo of Nicasio Creek. Taken on April 13, 2026.



Photo 11. Photo of rocky substrate of Halleck Creek just upstream from its confluence with Nicasio Creek. Taken on April 13, 2026.



Photo 12. Photo of unnamed intermittent tributary east of Nicasio Creek. Taken on April 13, 2026.



Photo 13. Photo of non-native annual grassland in vicinity of Nicasio Creek. Taken on May 27, 2025.



Photo 14. Photo of ruderal and developed community east of Nicasio Creek. Taken on April 13, 2026.



Attachment C

Special-Status Species

TABLE C-1
SPECIAL-STATUS PLANTS CONSIDERED IN THE STUDY AREA

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
Plants	Bryophytes	coastal triquetrella <i>Triquetrella californica</i>	-/-1B.2	Coastal bluff scrub, coastal scrub.	-	Low. Suitable coastal scrub habitat is not present.
		Koch's cord moss <i>Entosthodon kochii</i>	-/-1B.3	Cismontane woodland. Moss growing on soil on river banks.185-365 m.	-	Low. Outside of species' preferred elevation range.
		minute pocket moss <i>Fissidens pauperculus</i>	-/-1B.2	North coast coniferous forest.	-	Not Present. No suitable habitat onsite.
	Dicots, Monocots, and Other	alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	-/-1B.2	Species is found in alkali playa, valley and foothill grassland, and vernal pools.	March-June	Low. Historical occurrence presumed extirpated. Suitable alkali habitat is not present.
		Baker's larkspur <i>Delphinium bakeri</i>	FE/CE/1B.1	Broadleafed upland forest, coastal scrub, valley and foothill grassland.	March-May	Low. Recorded nearby, but species is nearly extinct and unlikely in small acreage of grassland within study area.
		Baker's navarretia <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	-/-1B.1 -	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest.	April-July	Low. Suitable seep habitat not present.
		bent-flowered fiddleneck <i>Amsinckia lunaris</i>	-/-1B.2	Species is found in cismontane woodland, valley and foothill grassland, and coastal bluff scrub.	March-June	Low. Suitable habitat present in small acreage of grassland in study area and records within the Nicasio Creek watershed.
		blue coast gilia <i>Gilia capitata</i> ssp. <i>chamissonis</i>	-/-1B.1	Coastal dunes, coastal scrub, mainly beaches.	April-July	Low. Suitable coastal habitat not present.
		bluff wallflower <i>Erysimum concinnum</i>	-/-1B.2	Species found in coastal dunes, coastal bluff scrub, and coastal prairie.	February-July	Low. Regional occurrences found in coastal prairie habitat in Pt. Reyes.
		Bolander's water-hemlock <i>Cicuta maculata</i> var. <i>bolanderi</i>	-/-2B.1	Species is found in marshes and swamps in fresh or brackish water. 0-20 m.	July-September	Low. Two local CNDDDB occurrences are Shell Beach on west side of Tomales Bay and Olema Marsh (historical [1954]).

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
		coastal marsh milk-vetch <i>Astragalus pycnostachyus</i> <i>var. pycnostachyus</i>	-/-1B.2	Species is found in coastal dunes, marshes, swamps, and coastal scrub. Mesic sites in dunes or along streams or coastal salt marshes. 0-155 m.	June-October (April)	Low. Suitable coastal habitat not present.
		congested-headed hayfield tarplant <i>Hemizonia congesta</i> <i>ssp. congesta</i>	-/-1B.2	Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. 5-520 m.	April-November	Moderate. Small acreage of grassland habitat in study area could provide suitable habitat. 1991 CNDDB occurrence at southern end of Nicasio Reservoir along Nicasio Valley Rd.
		Contra Costa goldfields <i>Lasthenia conjugens</i>	FE/-1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland.	March-June	Not Present. Outside of species' known range.
		dark-eyed gilia <i>Gilia millefoliata</i>	-/-1B.2	Coastal dunes.	April-July	Not Present. Suitable beach habitat not present.
		Diablo helianthella <i>Helianthella castanea</i>	-/-1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland.	March-June	Not Present. Outside of species' known distribution range.
		Franciscan onion <i>Allium peninsulare</i> <i>var. franciscanum</i>	-/-1B.2	Species can be found in cismontane woodland and valley and foothill grassland.	May-June (April)	Low. Not recorded in Marin County.
		Franciscan thistle <i>Cirsium andrewsii</i>	-/-1B.2	Species is found in coastal bluff scrub, broadleafed upland forest, coastal scrub, and coastal prairie.	March-July	Low. Coastal bluff scrub and broadleaf upland forest not present in study area.
		golden larkspur <i>Delphinium luteum</i>	FE/CR/1B.1	Chaparral, coastal prairie, coastal scrub.	March-May	Low. Suitable chaparral/scrub habitat is marginal.
		hairless popcornflower <i>Plagiobothrys glaber</i>	-/-1A	Meadows and seeps, marshes and swamps.	March-May	Not Present. Presumed extirpated from area.
		Humboldt Bay owl's-clover <i>Castilleja ambigua</i> <i>var. humboldtiensis</i>	-/-1B.2	Species is found in coastal saltmarsh with <i>Spartina</i> , <i>Distichlis</i> , <i>Salicornia</i> , <i>Jaumea</i> .	April-August	Low. Suitable coastal habitat not present and study area outside of species' known elevation range.
		Marin checkerbloom <i>Sidalcea hickmanii</i> <i>ssp. viridis</i>	-/-1B.1	Chaparral. Serpentine or volcanic soils; sometimes appears after burns. 1-425 m.	May-June	Low. Marginal habitat, and no recent records nearby.

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
		Marin County navarretia <i>Navarretia rosulata</i>	-/-1B.2	Closed-cone coniferous forest, chaparral. Dry, open rocky places; can occur on serpentine. 185-640 m.	May-July	Low. Suitable rocky habitat not present and study area outside of species' elevation range.
		Marin manzanita <i>Arctostaphylos virgata</i>	-/-1B.2	Species is found in broadleafed upland forest, closed-cone coniferous forest, chaparral, and north coast coniferous forest.	January-March	Low. Although several records in the vicinity; broadleafed upland forest, closed-cone coniferous forest, chaparral not present in study area. Often grows on rocky, steep, sunny slopes in areas characterized by heavy summer fog and coastal influence.
		Marin western flax <i>Hesperolinon congestum</i>	FT/CT/1B.1	Chaparral, valley and foothill grassland in serpentine barrens, serpentine grassland and chaparral.	April-July	Low. Unlikely due to local occurrences documented at higher elevations; also lack of serpentine soils in study area.
		marsh microseris <i>Microseris paludosa</i>	-/-1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland.	April-June (July)	Low. Local occurrences are in more coastal micro-habitats and species not recorded in San Geronimo quad in CNDDb; nearest iNaturalist occurrence in Pt. Reyes.
		Mason's ceanothus <i>Ceanothus masonii</i>	-/CR-1B.2	Species is found in chaparral. Serpentine ridges or slopes in chaparral or transition zone.	March-April	Low. Suitable habitat is marginal Outside typical elevation range. Recent occurrences near SoulaJule.
		Mason's lilaeopsis <i>Lilaeopsis masonii</i>	-/CR-1B.1	Marshes and swamps, riparian scrub. tidal zones, in muddy or silty soil on riverbanks in brackish or freshwater.	April-November	Low. Suitable tidal habitat is not present.
		Mount Burdell jewelflower <i>Streptanthus anomalus</i>	-/- 1B.1	Cismontane woodland in grassy openings on serpentine/	May-June	Low. Lack of serpentine habitat likely precludes presence of species in small grassland habitat in study area. Not observed during ESA botanical surveys around reservoir in 2025.
		Mt. Tamalpais bristly jewelflower <i>Streptanthus glandulosus</i> <i>ssp. pulchellus</i>	-/-1B.2	Chaparral, valley and foothill grassland on serpentine slopes.	May-July (August)	Low. Serpentine slopes not present in grassland portion of study area.
		Mt. Tamalpais manzanita <i>Arctostaphylos montana</i> <i>ssp. montana</i>	-/-1B.3	Species is found in chaparral and valley and foothill grassland on serpentine slopes.	February-April	Low. Although several records are in the vicinity; serpentine slopes not present in study area.

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
		Mt. Tamalpais thistle <i>Cirsium hydrophilum</i> var. <i>vaseyi</i>	-/-1B.2	Species is found in broadleafed upland forest, chaparral, and meadows and seeps.	May-August	Low. Outside of species' preferred elevation range.
		Mt. Vision ceanothus <i>Ceanothus gloriosus</i> var. <i>porrectus</i>	-/-1B.3	Species is found in closed-cone coniferous forest, coastal prairie, coastal scrub, and valley and foothill grassland.	February-May	Not Present. Only known from Mt. Vision area.
		Napa false indigo <i>Amorpha californica</i> var. <i>napensis</i>	-/-1B.2	Species is found in openings in broadleafed upland forest, chaparral, and cismontane woodland.	April-July	Moderate. May be found in woodland habitat openings. There are numerous occurrences in woodland areas near the study area and in west Marin (CDFW 2026). Nearest recent occurrence is approximately 3.4 miles southwest of the study area in the Lagunitas Creek riparian corridor.
		Nicasio ceanothus <i>Ceanothus decornutus</i>	-/-1B.2 -	Species is found in maritime chaparral; serpentinite, rocky, sometimes clay	March-May	Low. Suitable chaparral habitat not present.
		North Coast phacelia <i>Phacelia insularis</i> var. <i>continentis</i>	-/-1B.2	Coastal bluff scrub, coastal dunes. Open maritime bluffs, sandy soil, sometimes rocky habitats.	March-May	Low. Suitable coastal habitat not present.
		perennial goldfields <i>Lasthenia californica</i> ssp. <i>macrantha</i>	-/-1B.2	Coastal bluff scrub, coastal dunes, coastal scrub.	January-November	Low. Suitable coastal habitat not present.
		Petaluma popcornflower <i>Plagiobothrys mollis</i> var. <i>vestitus</i>	-/-1A	Valley and foothill grassland, marshes and swamps.	June-July	Not Present. Presumed extirpated from area.
		pink sand-verbena <i>Abronia umbellata</i> var. <i>breviflora</i>	-/-1B.1	Species found in coastal dunes and coastal strand.	June-October	Low. Suitable coastal habitat not present. Study area above species' elevation range.
		Point Reyes checkerbloom <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i>	-/-1B.2	Marshes and swamps, freshwater near coast.	April-September	Low. Regional occurrences are all on coast documented west of Bolinas Ridge and limited suitable habitat in study area. Only CNDDDB occurrence is located on west side of Mt. Tam/ Big Carson Ridge area. Nearest iNaturalist occurrence in Pt. Reyes Station.
		Point Reyes horkelia <i>Horkelia marinensis</i>	-/-1B.2	Sandy flats and dunes near coast; in grassland or scrub plant communities.	May-September	Low. Suitable habitat absent from study area.

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
		Point Reyes salty bird's-beak <i>Chloropyron maritimum ssp. palustre</i>	-/-1B.2	Species is found in coastal salt marsh with <i>Spartina</i> , <i>Distichlis</i> , <i>Salicornia</i> , <i>Jaumea</i> .	June-October	Not Present. No coastal salt marsh habitat onsite.
		San Francisco Bay spineflower <i>Chorizanthe cuspidata var. cuspidata</i>	-/-1B.2	Species is found in coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub.	April-July (August)	Low. Suitable coastal habitat not present.
		San Francisco owl's-clover <i>Triphysaria floribunda</i>	-/-1B.2 -	Coastal prairie, coastal scrub, valley and foothill grassland, sometimes serpentine.	April-June	Low. Suitable coastal habitat not present.
		Santa Cruz microseris <i>Stebbinsoseris decipiens</i>	-/-1B.2	Broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland.	April-May	Low. Coastal micro habitat in loose or disturbed soils, usually derived from sandstone, shale or serpentine, on seaward slopes not present in study area.
		Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT/CE/1B.1	Coastal prairie, coastal scrub, valley and foothill grassland.	June-October	Low. Presumed extirpated from area.
		seaside bittercress <i>Cardamine angulata</i>	-/-2B.1 -	Species is found in north coast coniferous forest and lower montane coniferous forest.	March-July (January)	Not Present. Outside of species' known range.
		small groundcone <i>Kopsiopsis hookeri</i>	-/-2B.3 -	North coast coniferous forest.	April-August	Low. Suitable conifer habitat not present.
		soft salty bird's-beak <i>Chloropyron molle ssp. molle</i>	FE/CR 1B.2 -	Species is found in coastal salt marsh with <i>Spartina</i> , <i>Distichlis</i> , <i>Salicornia</i> , <i>Jaumea</i> .	June-November	Low. Coastal salt marsh habitat not present.
		Sonoma spineflower <i>Chorizanthe valida</i>	FE/CE 1B.1	Species is found in coastal prairie.	June-August	Low. Presumed extirpated from area.
		Tamalpais jewelflower <i>Streptanthus batrachopus</i>	-/-1B.3	Closed-cone coniferous forest, chaparral.	April-July	Not Present. Outside of species' elevation range.
		Tamalpais lessingia <i>Lessingia micradenia var. micradenia</i>	-/-1B.2	Chaparral, valley and foothill grassland usually on serpentine grassland or chaparral. Often on roadsides.	(June)July-October	Low. Serpentine not known in study area.

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
		Tamalpais oak <i>Quercus parvula</i> var. <i>tamalpaisensis</i>	-/-1B.3	Lower montane coniferous forest, cismontane woodland above, typically above 330 feet in elevation.	March-April	Low. Study area lower than minimum elevation species typically occurs.
		thin-lobed horkelia <i>Horkelia tenuiloba</i>	-/-1B.2	Broadleafed upland forest, chaparral, valley and foothill grassland in sandy soils and mesic openings.	May-July(August)	Low. Sandy soils not present in study area. Very limited occurrences in region.
		Tiburon buckwheat <i>Eriogonum luteolum</i> var. <i>caninum</i>	-/-1B.2	Species found in serpentine soils; sandy to gravaelly sites in chaparral, valley and foothill grassland, cismontane woodland, and coastal prairie (serpentine).	May-September	Low. Local occurrences found in serpentine dry grasslands; suitable habitat not present in study area.
		Tiburon paintbrush <i>Castilleja affinis</i> var. <i>neglecta</i>	FE/CT 1B.2	Species is found in valley and foothill grassland on rocky serpentine sites.	April-June	Low. Rocky serpentine habitat not in study area.
		two-fork clover <i>Trifolium amoenum</i>	FE/-1B.1	Valley and foothill grassland, coastal bluff scrub sometimes on serpentine soil, open sunny sites, swales.	April-June	Low. Only extant occurrence in 4 quad search is from 1969 along Point Reyes Petaluma Rd on road bank. No iNaturalist records in vicinity.
		western leatherwood <i>Dirca occidentalis</i>	-/-1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland.	January-March(April)	High. May be found in woodland areas. It has been recorded in upper Halleck Creek riparian corridor in iNaturalist in 2026 and along a northern tributary to Nicasio Reservoir in iNaturalist in 2019.
		white-rayed pentachaeta <i>Pentachaeta bellidiflora</i>	FE/CE 1B.1	Valley and foothill grassland, cismontane woodland.	March-May	Not Present. Considered extirpated from Marin County
		woolly-headed gilia <i>Gilia capitata</i> ssp. <i>tomentosa</i>	-/-1B.1	Coastal bluff scrub, valley and foothill grassland, riparian woodland. Rocky outcrops, sometimes serpentine.	May-July	Low. CNDDDB occurrence in Nicasio Reservoir on island and iNaturalist occurrences less than 2.5 miles southwest in the Nicasio Creek riparian corridor; however, the study area lacks rocky outcrops/serpentine soils to likely support this species.
		Blasdale's bent grass <i>Agrostis blasdalei</i>	-/-1B.2	Species is found in coastal dunes, coastal bluff scrub and coastal prairie.	May-July	Unlikely. Suitable coastal scrub habitat is not present.
		coast lily <i>Lilium maritimum</i>	-/-1B.1	Closed-cone coniferous forest, coastal prairie, coastal scrub, broadleafed upland	May-August	Low. Suitable sandy habitat is not present.

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
				forest, coniferous forest, marshes and swamps, on sandy soils.		
		fragrant fritillary <i>Fritillaria liliacea</i>	-/-1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland.	February-April	Moderate. Recent occurrences along Petaluma-Pt Reyes Rd and Nicasio Valley Rd on rocky possibly serpentine soils. Grassland in study area could potentially be considered habitat.
		Franciscan onion <i>Allium peninsulare</i> var. <i>franciscanum</i>	-/-1B.2	Species can be found in cismontane woodland and valley and foothill grassland.	May-June (April)	Low. Not recorded in Marin County.
		Lyngbye's sedge <i>Carex lyngbyei</i>	-/-2B.2	Species is found in marshes and swamps (brackish or freshwater).	April-August	Low. Suitable brackish habitat is not present and study area outside species' elevation range (0-35 feet).
		Marin checker lily <i>Fritillaria lanceolata</i> var. <i>tristulis</i>	-/-1B.1	Coastal bluff scrub, coastal scrub, coastal prairie from canyons and riparian areas and rock outcrops; often on serpentine.	February-May	Low. Primary habitat of coast bluff scrub, coastal scrub, and coastal prairie not present in study area. Nearest CNDDDB occurrence on north end of Nicasio Reservoir on north facing hillslope in clay soils with coyote brush. Local occurrences beyond a mile of coast are in vicinity of rock outcrops or more xeric conditions, exclusive of historic occurrences.
		North Coast semaphore grass <i>Pleuropogon hooverianus</i>	-/CT 1B.1	Broadleafed upland forest, meadows and seeps, north coast coniferous forest in wet grassy, usually shady areas, sometimes freshwater marsh in forest environments.	April-June	Moderate. Suitable habitat is present in study area riparian woodlands and wetlands and records four miles south of the study area along Sir Francis Drake near the Marin Water Treatment Plant.
		Pitkin Marsh lily <i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	FE/CE 1B.1	Cismontane woodland, meadows and seeps, marshes and swamps.	June-July	Not Present. Out of species' known range.
		Sanford's arrowhead <i>Sagittaria sanfordii</i>	-/-1B.2	Marshes and swamps in standing or slow-moving freshwater ponds, marshes, and ditches.	May-October (November)	Moderate. Recorded in mesic conditions along northwestern shoreline of Nicasio Reservoir (iNaturalist, 2023).

Organism	Taxonomy	Common Name <i>Scientific Name</i>	Federal/ State CNPS Status	Habitat	Identification/ Survey Period	Potential to Occur
		Sonoma alopecurus <i>Alopecurus aequalis</i> var. <i>sonomensis</i>	FE/-1B.1	Species is found in freshwater marshes and swamps and riparian scrub.	May-July	Low. Only known from Point Reyes peninsula.
		Thurber's reed grass <i>Calamagrostis crassiglumis</i>	-/-2B.1	Species is found in coastal scrub and marshes and swamps.	May-August	Low. Suitable coastal habitat is not present.
		water star-grass <i>Heteranthera dubia</i>	-/-2B.2	Marshes and swamps in alkaline, still or slow-moving water. Requires a pH of 7 or higher, usually in slightly eutrophic waters.	July-October	Low. Suitable alkaline habitat is not present.

Notes: USGS 7.5 minute quads San Geronimo, Inverness, San Rafael, Novato, Petaluma, Bolinas.

KEY TO STATUS CODES:

Federal

Candidate = FC

Delisted = FD

Endangered = FE

None = -

Proposed Endangered = FPE

Proposed Threatened = FPT

Threatened = FT

State

Candidate Endangered = CCE

Candidate Threatened = CCT

Delisted = CD

Endangered = CE

None = -

Rare = CR

Threatened = CT

Other

CNPS Rank Categories:

1A = Plants presumed extirpated in California and either rare or extinct elsewhere

1B = Plants Rare, Threatened, or Endangered in California and elsewhere

2A = Plants presumed extirpated in California, but more common elsewhere

2B = Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3 = Plants about which more information is needed - A Review List

4 = Plants of limited distribution - A Watch List

CNPS Code Extensions:

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

.2 = Fairly endangered in California (20U+002d80% occurrences threatened)

.3 = Not very endangered in California (less than 20% of occurrences threatened or no current threats known)

Sources: CNPS 2026; USFWS 2026; CDFW 2026

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TABLE C-2
SPECIAL-STATUS WILDLIFE CONSIDERED IN THE STUDY AREA

Common Name Scientific Name	Status	Habitat	Potential to Occur
Invertebrates			
Western bumble bee <i>Bombus occidentalis</i>	--/CCE	Found in habitats with flowering plants and suitable soils for burrowing. They typically nest underground in cavities. In Marin, this often includes abandoned rodent burrows (like those of field mice or voles), brush piles, or sometimes hollowed-out spaces at the base of native bunchgrasses or trees. They are generalist foragers but rely heavily on native plant communities, specifically chaparral, oak savannahs, and riparian corridors. Favored local forage includes flowering Ceanothus, manzanita, thistles, and lupines.	Low. Although there are two nearby CNDDB records from open areas in 1969 and 1977 near Nicasio reservoir, species is not likely in study area forested areas due to limited favored foraging and nesting habitat.
Monarch butterfly (overwintering) <i>Danaus plexippus</i>	PT/--	Eucalyptus or Monterey pine groves (winter sites). Does not breed in the vicinity.	Low. Suitable wintering habitat not found in the study area. Milkweed for breeding was also not observed during surveys, though floral resources abound.
California freshwater shrimp <i>Syncaris pacifica</i>	FE/SE	Slow-moving, shallow water, stream edges and eddies with undercut banks with overhanging vegetation like willow roots and blackberry.	Low. No California freshwater shrimp were observed during targeted surveys performed by Marin Water Fisheries Program Manager in Nicasio Creek within the study area on June 19th and 30th, 2026. Sampling downstream of Nicasio school was not possible due to high water but given that that section of the study reach is within the reservoir footprint, that area could be reasonably ruled out as potential shrimp habitat, even as the water levels recede. Even though occurrences of CA freshwater shrimp are documented in iNaturalist from 2019 to 2025 in tributaries to Nicasio Creek east of Nicasio Valley Road, the species has not been recorded in Nicasio Creek, either upstream or downstream of the reservoir. Targeted surveys in 2013, found this species in Lagunitas Creek within Samuel P. Taylor Park (Serpa 2013). While the shrimp can navigate small gradient changes, steep man-made dams, culverts, or artificial concrete channels block their natural range expansion. They are poor swimmers. Barriers separate local gene pools and prevent the recolonization of upstream habitats, isolating the populations into vulnerable genetic "islands".
Reptiles and Amphibians			
Northwestern pond turtle <i>Actinemys marmorata</i>	PT/--SSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable	Present. CNDDB record within the study area, south of Nicasio Reservoir along Nicasio Creek (#59, CDFW 2026).

Common Name Scientific Name	Status	Habitat	Potential to Occur
		upland habitat for egg-laying. Nest sites most often characterized as having gentle slopes (<15%) with little vegetation or sandy banks.	Exposed freshwater emergent wetland adjacent to the riparian community in the northern portion of the study area could provide nesting habitat for this species.
California tiger salamander – Sonoma DPS <i>Ambystoma californiense</i>	FE/ST	Vernal or temporary pools in annual grasslands, or open stages of woodlands. Typically, adults use mammal burrows for aestivation in non-breeding season.	Not Present. Vernal and temporary pools and upland burrows complexes not present within the study area. No CNDDDB occurrences of this species within 5 mi. of the study area.
California giant salamander <i>Dicamptodon ensatus</i>	--/--/SSC	Found in humid coastal forests, especially in Douglas-fir, redwood, red fir, montane and valley-foothill riparian habitats. They live in or near cool, rocky streams, and occasionally lakes and ponds.	High. Perennial streams in the study area provide suitable habitat. One CNDDDB record from Nicasio Creek in 1948 (prior to reservoir construction). Additional CNDDDB records within 5 miles south and west.
Foothill yellow-legged frog – North Coast DPS <i>Rana boylei</i>	--/--/SSC	Partly-shaded, usually perennial, 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.	Present. Recorded in Nicasio and Halleck Creeks upstream of the study area. Additional CNDDDB records in nearby streams within 5 miles.
California red-legged frog <i>Rana draytonii</i>	FT/--/SSC	Streams, freshwater pools, and ponds with overhanging vegetation. Also found in woods adjacent to streams. Requires permanent or ephemeral water sources such as reservoirs and slow moving streams and needs pools of >0.5 meters depth for breeding.	Moderate. Species could inhabit Nicasio Creek and tributaries in southern study area. Presence of predatory fish species in reservoir may be threat to species occurrence in study area near confluence with reservoir. No CNDDDB records within the Nicasio Creek watershed upstream of the dam, but species is present in drainages east and west of reservoir, upper Halleck Creek, and Lagunitas and Olema Creeks downstream. Critical Habitat 2 miles west and north of the study area.
Red-bellied newt <i>Taricha rivularis</i>	--/--/SSC	Found in rivers and streams in coastal woodlands and redwood forests. Hide in vegetation and under stones during the day.	Low. Suitable habitat is present in riparian areas of the study area; however, the study area is outside the known range of this species.
Birds			
Burrowing owl <i>Athene cunicularia</i>	--/CE/SSC	Open grasslands and shrublands where perches and existing rodent burrows are available.	Low. Study area does not have suitable open grassland or burrows. One CNDDDB record within 5 miles southeast of study area near Big Rock.
White-tailed kite <i>Elanus leucurus</i>	--/--/CFP	Nests in shrubs and trees next to grasslands, forages over grasslands and agricultural lands.	Moderate. Suitable nesting habitat present in trees in the study area, with nearby grassland for foraging.
Bald eagle <i>Haliaeetus leucocephalus</i>	FD/SE/CFP	Nests near large bodies of water such as lakes, rivers, and coasts where they feed on fish and carrion and select nest sites in tall trees or on cliffs.	Low. Study area lacks conifers, typically used as nest sites. July 2025 iNaturalist occurrence of pair perched in conifer overlooking Nicasio Reservoir is 0.90 mile away from study area. No known nest sites within 660-feet of the study area. USFWS recommends nest buffers of 660 feet from construction activities. It may merely forage over the Nicasio Reservoir waters.

Common Name Scientific Name	Status	Habitat	Potential to Occur
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	--/--/SSC	Nests in dense vegetation, San Pablo Bay tidal salt marsh.	Not Present. Suitable marsh nesting habitat is not present. Only marsh-nesting subspecies is protected.
Osprey <i>Pandion haliaetus</i>	--/--/WL	Found near waters where fish are plentiful; builds large stick nests in trees, power poles, or platforms.	Low. Although species' observed foraging over reservoir on multiple occasions in recent years; nest sites of the species not documented within the vicinity of the study area. Kent Lake colony, over 4.5 mile south, in decline from 2017-2022.
Yellow warbler <i>Setophaga petechia</i>	--/--/SSC	Breeds in wet, deciduous thickets, especially willows.	Low. Species documented in 1975 in Olema marsh, approximately 5 miles west of study area. Species not documented in iNaturalist in the region.
Northern spotted owl <i>Strix occidentalis caurina</i>	FT/ST	Nests in dense primary or second growth coniferous forest; forages primarily for rodents.	Low. Coast redwood or Douglas-fir habitat not present in the study area. Nearest nest site is downstream of dam in north-facing slope forest. Several CNDDDB records within 5 miles of study area.
Mammals			
Pallid bat <i>Antrozous pallidus</i>	--/--/SSC/WBWG High	Most common in open, dry habitats with rocky areas for roosting. Roosts in buildings, caves, or cracks in rocks. Forages primarily on the ground.	Low. Suitable rock or cave habitat for roosting is lacking in the study area; may forage over reservoir or feeder streams. Numerous CNDDDB records within 5 miles west of the study area.
Point Reyes mountain beaver <i>Aplodontia rufa phaea</i>	--/--/SSC	Forested areas at sea level to timberline peaks, second-growth trees and shrubs near water. Requires deep soils to construct burrows.	Not Present. This species is found almost exclusively within Point Reyes National Seashore.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--/--/SSC/WBWG High	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting in coastal lowlands, cultivated valleys and nearby hills characterized by mixed vegetation throughout California below 3,300 meters.	Low. Lack of caves and mines likely precludes species presence. May forage over Nicasio Creek or reservoir and feeder streams. Nearest CNDDDB occurrence is documented in 1994 in valley grassland in Tocaloma, approximately 3 miles west of study area.
Hoary bat <i>Lasiurus cinereus</i>	--/--/WBWG Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Low. Only historical occurrences within the five USGS 7.5 minute quads.
Western red bat <i>Lasiurus frantzii</i>	--/--/SSC/WBWG High	Roosts primarily in trees, less often in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas. Preferred roost sites are protected from above, open below, and located above dark ground-cover. Such sites minimize water loss. Roosts may be from 0.6-13 m (2-40 ft) above ground level. Associated with intact riparian habitat (particularly willows, cottonwoods, and sycamores).	Moderate. Suitable riparian and edge habitat is present along Nicasio. Nearest CNDDDB occurrence is Olema Creek near Bear Valley Road in 2003. 2023 and 2025 dead occurrences in iNaturalist located less than 5 miles north and northeast of study area on a roadside near Pt. Reye/Petaluma Rd. and in grassland around Stafford Lake.

Common Name Scientific Name	Status	Habitat	Potential to Occur
American badger <i>Taxidea taxus</i>	--/--/SSC	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, and preys on burrowing rodents.	Low. Dry grasslands not present in study area.

Notes: USGS 7.5 minute quads San Geronimo, Inverness, Novato, Petaluma, Bolinas.

KEY TO STATUS CODES:

Federal

Candidate = FC

Delisted = FD

Endangered = FE

None = -

Proposed Endangered = FPE

Proposed Threatened = FPT

Threatened = FT

State

Candidate Endangered = CCE

Candidate Threatened = CCT

Delisted = CD

Endangered = CE

Fully Protected = CFP

None = -

Rare = CR

Threatened = CT

Western Bat Working Group (WBWG)

Low = Most of the existing data support stable populations of the species, and that the potential for major changes in status in the near future is considered unlikely. While there may be localized concerns, the overall status of the species is believed to be secure.

Medium = A level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.

High = Highest priority for funding, planning, and conservation actions

Sources: USFWS 2026; CDFW 2026

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