



DEFENSIBLE SPACE ASSISTANCE & COMMUNITY CHIPPING DAY

CALIFORNIA ENVIRONMENTAL COMPLIANCE: ENDANGERED AND THREATENED LIST OF ANIMAL AND PLANT SPECIES

Consider your surroundings! Nesting season for many listed species occurs between March and late July. Many species rely on wet habitats, therefore, do not alter vegetation along seeps, wetlands, marshes, ponds or watercourses.

Come across evidence of a listed species?

1. Stop working in the area
2. Mark the area for reference
3. Contact the Tehama Conservation Fund’s project lead at (530) 727-1280 for guidance. It is illegal to kill, wound, capture, harass, modify or degrade habitat of Endangered and Threatened species.

1 = Federal Endangered	2 = Federal Threatened	3 = California Endangered	4 = California Threatened
5 = California Fully Protected	6 = California Protected		

Endangered = a species is in danger of extinction throughout all or a significant portion of its range
 Threatened = a species is likely to become endangered within the foreseeable future

AMPHIBIANS



California Red-Legged Frog (2) *Haliaeetus Rana draytonii* is highly aquatic with little movement away from streamside habitat during the dry season. Individuals found in interior areas of California tend to hibernate in burrows during winter months as well as for temporary retreat during periods of activity.



Sierra Nevada Yellow-Legged Frog (1,3) *Rana sierrae*, formerly *Rana muscosa* Mountain Yellow-legged Frog is found within a few feet of water and is associated with streams, lakes and ponds in montane riparian, and a variety of other habitats. Breeding begins after ice-melt and can range from April at lower elevations to June and July in higher elevations.

BIRDS



AMERICAN PEREGRINE FALCON (5) The range of the *Falco peregrinus anatum* includes most of California during migrations and in winter. The California breeding range, which has been expanding, now includes the Channel Islands, the coast of southern and central California, inland north coastal mountains, the Klamath Mountains and Cascade Range, and the Sierra Nevada. Nesting sites are typically on ledges of large cliff faces. Nesting and wintering habitats are varied, including wetlands, woodlands, other forested habitats, cities, agricultural areas and coastal habitats.



Bald Eagle (3,5) *Haliaeetus leucocephalus* is listed as a State Endangered and CDFW Fully Protected. This species requires large bodies of water or free flowing rivers with abundant fish. Snags, stoutly limbed or broken-topped trees and large rocks are used as streamside hunting perches. It roosts in dense, sheltered and remote conifer stands containing large old-growth or dominant live trees having open branch work. Nesting occurs most frequently in stands with less than 40% canopy and having some foliage to shade the nest. Stick platform nests are generally built on the largest tree in a stand usually between 50' and 200' above the forest floor just below the crown. Nests are usually located near a permanent water source. The Bald eagle's breeding period is between February and July with peak activity between March and June. Nesting normally does not occur if human disturbance is evident.



Golden Eagle (5) *Aquila chrysaetos* habitat is within Northern California's interior that consists of rolling foothills and mountain areas. The Golden Eagle requires open terrain for hunting; such as grasslands savannahs, as well as early successional stage of forests and shrub land habitats. Cover generally takes the form of secluded cliffs with overhanging ledges as well as large trees used for cover. Nesting sites are normally located on cliffs of all heights and in large trees in open areas. The species uses rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. Breeding occurs from late January through August and peaks between March and July.



Bank Swallow (4) This neotropical migrant is found primarily in riparian and other lowland habitats in California during the spring-fall period. During the summer months the species is restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes. In migration, flocks with other swallows over many open habitats. It is estimated that approximately 75% of the current breeding population in California occurs along banks of the Sacramento and Feather rivers and some of its tributaries in the northern Central Valley. Bank Swallow feed on a wide variety of aerial and terrestrial soft-bodied insects including flies, bees, and beetles predominantly over open riparian areas, but also over brushland, grassland, wetlands, water, and cropland. It uses burrows dug in cliffs and riverbanks for cover. It roosts on

logs, shoreline vegetation, and telephone wires. Predominantly a colonial breeder, Bank Swallow nesting colonies are normally located on vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, and the ocean and contain between 100 and 200 nesting pairs. Feeding occurs over grassland, shrubland, savannah, and open riparian areas during breeding season and over grassland, brushland, wetlands, and cropland during migration. Burrows are 1" to 2.2" wide and up to 54" deep. A small chamber at end of burrow contains the nest. Burrows and nests are lined with grasses, other plant material and feathers. Breeding occurs between early May through July, with peak activity from mid-May to mid-June. Eggs and adults are preyed upon by rats, skunks, house cats, snakes, and some raptors. In California, however, gopher snakes (*Pituophis melanoleucus*) and American kestrels (*Falco sparverius*) are the most common predators. Channelization and stabilization of banks of nesting rivers, and other destruction and disturbance of nesting areas, are major factors causing the marked decline in numbers in recent decades.



Great Grey Owl (3) The traditional range of *Strix nebulosa* is from Plumas County south through the Sierra Nevada range, although individuals have been found in northwestern California and the Warner Mountains. The Great Gray Owl breeds in old growth red fir, mixed conifer or lodge pole pine habitats normally in the vicinity of wet meadows. This owl uses small trees and snags within wet meadows or at their edges. Nesting occurs in broken topped snags 24" in diameter and greater. Peak egg laying period is generally from March through May.



Greater Sandhill Crane (4,5) *Antigone canadensis tabida* is one the largest migrating North American cranes with a wingspan at nearly seven feet wide and height of up to 4 feet tall. It can be found near large freshwater marshes, prairie ponds, marshy tundra during summer and on grainfields or prairies during migration and in winter. Its range in the Pacific Flyway is from Siberia and Alaska to California's Central Valley. Once common breeders throughout the intermountain west, their populations declined drastically as a result of unregulated hunting and habitat loss during settlement of the region. California is special in that it supports the Central Valley population of Greater Sandhill Cranes that winters in suitable agricultural fields and wetlands of the Central Valley and breeds in northeastern California.



Least Bell's Vireo (1,3) *Vireo bellii pusillus* are small birds at only 11.5-12.5 centimeters long (about 4.5 to 5.0 inches). They have short rounded wings and short, straight bills. There is a faint white eye ring. Feathers are mostly gray above and pale below. This is a common protective marking in birds. Seen from below, the bird blends into the clouds. From above, it blends into the landcover. The species historical range included California. Least Bell's vireo is a state and federally endangered migratory songbird. This obligate riparian breeder was once abundant throughout California but declined in the face of widespread habitat destruction and parasitism. For breeding, they require fairly dense riparian shrubbery, preferably where flowing water is present, but they also favor dry watercourses in the desert, bordered by mesquite and Arrow-weed. Willow, wild rose, and other dense vegetation are used for nesting. The birds typically situate their cuplike nests of bark, fine grasses, and horse hair about 1 m (3.3 feet) above the ground. Typically they migrate from Baja California between mid-March and early April to their breeding grounds in California, where they remain until July or August. Females lay 3-5 white eggs, with scattered brown spots and incubate them for about 2 weeks. The nestlings fledge 10-12 days after they hatch but remain in the territory and receive parental care for a month or more.



Northern Spotted Owl (2,4) *Strix occidentalis caurina* do not build their own nest, but instead seek out naturally occurring nest sites such as broken-top trees, large snags, tree cavities, mistletoe brooms, debris accumulations in the ground cover, or nests built by other wildlife (e.g., abandoned raptor nests, squirrel nests). Reproduction often occurs once every other year. Females usually lay one to two eggs in late March through April, but timing can vary by latitude and elevation. Chicks generally leave the nest in late May or in June (at 34-36 days old) and continue to be dependent on their parents into September.



Tricolored Blackbird (4,7) *Agelaius tricolor* is common throughout the Central Valley and breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, along with thickets of willow, blackberry, wild rose, and tall herbs. The species feeds in grassland and cropland habitats. Nesting



Western Yellow-billed Cuckoo (2,3) *Coccyzus americanus occidentalis* appear to require large blocks of riparian habitat for nesting. Along the Sacramento River in California, nesting yellow-billed cuckoos occupied home ranges which included 25 acres (10 hectares) or more of riparian habitat. Another study on the same river found riparian patches with yellow-billed

usually occurs in dense cattails or tules, thickets of willow, blackberry, wild rose, tall herbs and is usually located a few feet over, or near, fresh water and may be hidden on the ground among low vegetation. Breeding usually occurs between mid-April into late July.

cuckoo pairs to average 99 acres (40 hectares). It breeds in large blocks of riparian habitats (particularly woodlands with cottonwoods and willows). Dense understory foliage appears to be an important factor in nest site selection.



White-Tailed Kite (1,3) *Elanus leucurus* is found in a wide variety of open habitats in North America, including open oak grassland, desert grassland, farm country, marshes. Its main requirements seem to be trees for perching and nesting, and open ground with high populations of rodents. It is often seen hovering on rapidly beating wings over open fields, looking for small rodents, its main food source. Nesting sites are in treetops, usually 20-50' above ground, with Live-oak often chosen as a preferred nest site.



Willow Flycatcher (1,3) *Empidonax traillii* breeding habitat often occurs within and adjacent to forested habitats. The species has historically nested throughout much of California where mesic willow thickets are found and has specific habitat requirements, typically consisting of riparian habitat often dominated by willows (*salix* spp), and/or alder (*Alnus* spp), and permanent water, often in the form of low gradient watercourses, ponds, lakes, wet meadows, marshes, and seeps within and adjacent to forested landscapes.

Crustaceans



CONSERVANCY FAIRY SHRIMP (1) *Branchinecta conservation* inhabits rather large, cool-water, vernal pools with moderately turbid water. The pools generally last until June. Female fairy shrimp carry their eggs in a ventral brood sac. The eggs either are dropped to the pool bottom or remain in the brood sac until the mother dies and sinks. When the pool dries out, so do the eggs. They remain in the dry pool bed until rains and other environmental stimuli hatch them. Resting fairy shrimp eggs are known as cysts. They are capable of withstanding heat, cold and prolonged desiccation. When the pools refill, some, but not all, of the cysts may hatch. The cyst bank in the soil may contain cysts from several years of breeding. Hatching can begin within the same week that a pool starts to fill. Average time to maturity is 49 days. In warmer pools, it can be as little as 19.



VERNAL POOL FAIRY SHRIMP (2) *Branchinecta lynchi* is listed as a Federally Threatened species throughout its range. This species inhabits vernal pools or similar ephemeral wetlands and grassed or mud bottomed pools or basalt flow depression pools in unplowed grasslands. Although it occurs most often in vernal pools it also inhabits a variety of natural and artificial seasonal wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools. Regardless of the habitat, the wetlands in which this species is found are normally small and shallow; however, it occasionally inhabits large (479,000 sq ft) and deep (4") habitats. The pools vary in size from over 25 acres to less than 1000 square feet. It occurs at temperatures between 6 and 20 degrees C in soft and poorly buffered waters. Eggs are dropped from the brooding female to the benthos. The eggs hatch when the vernal pools and swales fill with rainwater and the immature stages rapidly develop into adults which have been collected from early December to early May.



VERNAL POOL TADPOLE SHRIMP (1) *Lepidurus packardi* is a large tadpole shrimp listed as federally Endangered and is found in a variety of natural and artificial, seasonally ponded habitat types including: vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities. Like the fairy shrimp, wetland habitat in which this species can be found vary in size from very small to very large and exhibit extremes in depth and volume. Adults are omnivorous, foraging on detritus, vegetation and other aquatic invertebrates when available.

Fish



Chinook Salmon Central Valley spring-run (2,4)
Oncorhynchus tshawytscha pop 7 appears in the Sacramento River and its tributaries from February to July and spawning occurs from late August through early October, with a peak in September. According to the CNDDDB search and National Marine Fishery Service, CV spring-run are not detected within the Project site.



Chinook Salmon Sacramento River winter-run (1,3) *Oncorhynchus tshawytscha* pop 6 includes all naturally spawning populations of SR winter-run Chinook Salmon in the Sacramento River and its tributaries, as well as two conservation programs maintained at Livingston-Stone National Fish Hatchery (LSNFH) owned and operated by U.S. Fish and Wildlife Service (USFWS) (NMFS 2014). SR winter-run Chinook Salmon spawn in the upper mainstem Sacramento River from mid-April through August, peaking in June and July. They require water temperatures between 42.5 and 57.5 degrees Fahrenheit.



CENTRAL VALLEY STEELHEAD (2) *Oncorhynchus mykiss irideus* pop. are winter-run fish, beginning their upstream migrations to fresh water during peak flows between December and February. Returning adults are mostly three to four years old, and typically spawn from February to April. After hatching in spring and absorbing their yolk sac, steelhead fry move into deeper, mid-channel habitats in the late summer and fall. They grow quickly as opportunistic, voracious predators by feeding on aquatic and terrestrial insects, small fish, frogs and other prey. Most juvenile Central Valley steelhead feed and grow in their natal streams for one or two years before migration in late December through the beginning of May, peaking in mid-March. In general, both juveniles and resident adults prefer complex habitat boulders, submerged clay and undercut banks, and large woody debris that provide feeding opportunities, segregation of territories, refuge from high velocities, and cover from predators.

Green Sturgeon (2) *Acipenser medirostris* are a large, very long-lived and late to mature native California species. Sturgeon are migratory, typically spending most of their adult lives in estuaries, the lower reaches of rivers, or the ocean. They migrate upstream in large freshwater rivers to spawn in cool, deep, swift flowing river reaches over gravel and cobble bottoms. Unlike Pacific salmon, sturgeon do not die after spawning and both species are capable of repeated migrations every 2-6 years. Juvenile sturgeon remain in the river for a period of time before migrating to the estuary or bay.

Insects



Valley Elderberry Longhorn Beetle (2) VELB ranges in the Central Valley from Redding to Bakersfield. The species is nearly always found on or close to its host plant, elderberry (*Sambucus* species). Adults are active from March to June, feeding and mating. Females lay their eggs on the bark. Larvae hatch and burrow into the stems. The larval stage may last 2 years, after which the larvae enter the pupal stage and transform into adults. Adults have been observed feeding on the leafy foliage of the elderberry plant. It appears that in order to serve as habitat, the shrubs must have stems that are 1.0 inch or greater in diameter at ground level. Use of the plants by the animal is rarely apparent. Frequently, the only exterior evidence of the shrub's use by the beetle is an exit hole, a small oval, created by the larva just before the pupal stage. The VELB habitat occurs generally below 2,900' in elevation. Habitat occupied by VELB tends to form and exist in riparian corridors and on the level open ground of periodically flooded river and stream terraces and floodplains

Mammals



Fisher West Coast DPS (4) *Pekania pennant* is a specialized forest carnivore that is associated with closed-canopy, late-succession forests throughout its range. Occurrence of this species is not anticipated during implementation of impactful activities as there are no closed-canopy, late-succession forests within the project sites.



Gray Wolf (1,3) *Canis lupus* is listed as "endangered" and protected under the federal Endangered Species Act. Wolves are habitat generalists and have historically lived throughout the northern hemisphere; requiring only ungulate prey and human-caused mortality rates that are not excessive. Ungulates [wild and domestic] are the typical prey of wolves, but wolves also readily scavenge. Beaver are among the smallest important prey, but wolves can utilize smaller mammals, birds, and fish. Territory size is a function of prey density and can

range from 25-1,500 square miles. Both male and female wolves disperse at equal rates and equal distances, sometimes >600 miles. They normally first breed as yearlings, and subsequently, once a year in February. One to 10 pups [normally ~5] are born 63 days later. Pups normally stay with pack until > 1 year old.



Humboldt Marten (3) *Martes americana humboldtensis* is listed as Endangered in its historic range of Del Norte, Humboldt, Mendocino, and Sonoma counties and its possible occurrence was noted in the Tehama County review of the CNDDDB during August 2019. The combination of historic trapping and more recent habitat loss by timber harvest has led to the severe reduction or extirpation of this taxon. The Humboldt marten is associated with coniferous forests and their riparian zones. Physical structure of the forest, including large live and dead trees, coarse woody debris, and a relatively low and closed canopy, appear to be more important for martens than species composition.



Sierra Nevada Red Fox (4) *Vulpes vulpes necator* is found in the Cascades within a variety of habitats including wet meadows, mixed conifers, Ponderosa pine and Lodgepole pine stands, aspen, montane chaparral, montane riparian and montane hardwood-conifer. Most sightings of the species have been above 7000'. The lowest elevations sightings have occurred at approximately 3900'. *V.v. necator* hunts in meadows, fell-fields, grasslands, wetlands, and other open habitats. Dens are developed in dense vegetation and rocky areas along with rock outcrops, hollow logs, stumps, and burrows located in deep, loose soil. Edge areas are utilized extensively. Mating takes place in late winter (January through March). After a gestation period of 52 days, young are born in early spring (March-through May). This fox has a long tail nearly it's body length with white tip; body color varies. The back of its ear is black, whereas, the gray fox has a black tail tip and orange back of ear.

PLANTS

California Rare Plant Rank 1B.1, 1B.2, 1B.3, 2.1, 2.2, 2.3, 3.2, 4.2, 4.3

1B - Plants rare, threatened, or endangered in California and elsewhere

2 - Plants presumed extirpated in California but common elsewhere

3 - Review List: Plants about which more information is needed

4 - Watch List: Plants of limited distribution

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)



ADOBE-LILY (*Fritillaria pluriflora*) 1B.2: Adobe-Lily is a perennial bulb endemic to California and limited to northern portion of the state. It grows in the adobe clay soils of the foothill woodland, chaparral, valley grassland, and low mountains in the area. It produces an erect stem reaching heights between ten and fifty centimeters. It has up to ten thick, long, oval-shaped leaves with wavy margins, most of which are clustered at ground level. Impacts to this species if any will be less than significant as project work will occur in developed areas.

AHART'S DWARF RUSH (*Juncus leiospermus* var. *ahartii*)

1B.2: Ahart's dwarf rush is an annual grasslike herb that is native to California and is endemic to California. It grows in wetlands and vernal pools as well as valley grassland and wetland-riparian areas. If unknown occurrences of such sites are found during project implementation, these and all other aquatic or wet areas will be protected through the establishment of 150' no treatment buffers.



AHART'S PARONYCHIA (*Paronychia ahartii*) 1B.1: Ahart's paronychia is an annual herb, endemic to California, and is known to occur within Tehama, Shasta, and Butte counties in the north-central portion of the State. Ahart's paronychia habitat ranges in elevation from 98' to 1653'. It occurs in cismontane woodlands, valley and foothill grasslands, and vernal pools. According to the California Natural Diversity Database, there are 57 known occurrences of this plant throughout California of which 44 are located within Tehama County. Impacts to this species if any will be less than significant as project work will occur in developed areas.



ANTHONY PEAK LUPINE (*Lupinus antoninus*) 1B.2 : This native perennial herb is endemic to California with a bloom period from May to July. This plant is located outside the targeted work areas along the south and west county borders; therefore, no impact to the species will occur.

BAKERS NAVARRETIA (*Navarretia leucocephala* ssp. *bakeri*) 3, 1B.2: Baker's navarretia is an annual herb that grows in wetlands, meadows, and vernal pools. The leaves are divided into many needlelike lobes. The inflorescence is a head of flowers lined with leaflike bracts. Each tubular flower is up to a centimeter long. The flowers vary in color from white to blue. Two rare California subspecies are federally listed as endangered species in the United States. The plant's blooming period is between April and July.



BIG-SCALE BALSAMROOT (*Gratiola heterosepala*) 1B.2 Big-scale balsamroot is a native California perennial herb that grows on sloped terrain in foothill woodland and valley grassland within purple needle grass grassland, serpentine bunchgrass grassland, and mixed oak.



BOGGS LAKE HEDGE-HYSSOP (*Gratiola heterosepala*) 3, 1B.2 Boggs Lake hedge-hyssop is an annual herb belonging to the figwort family. Its preferred habitat includes vernal pools, reservoir edges, and other muddy clay soils (UCANR, 2001). It is threatened by agriculture, development, vehicles, grazing and trampling (CNPS). The range of Boggs Lake hedge-hyssop includes the interior North Coast Ranges, the central Sierra Nevada foothills, the Sacramento Valley, the Modoc Plateau, and southern Oregon. It is a very small herb with a main stem extending 1 to 4 inches tall. The flower is tubular with five lobes. The upper three are white and separated while the lower two are yellow and fused (UCANR, 2001).



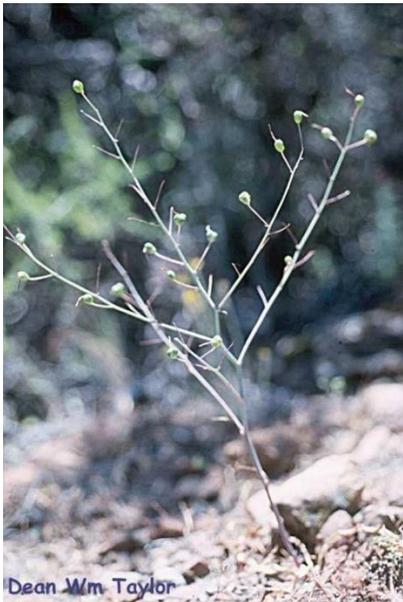
CALLAHAN'S MARIPOSA-LILY (*Calochortus syntrophus*): 1B.1 This member of the lily family is a rare, endemic northern California flowering plant. The Callahan's Mariposa Lilly is found in open, rocky areas with moist or wet soils within oak woodland territory at elevations between 220' and 5,200'. At the present time, this lily is threatened by urbanization, grazing, trampling, road construction, hydrological alterations and water diversions that result in the lowering of the water table as a result it is classified by the CNPS as a rare threatened or endangered plant in California and elsewhere and is seriously threatened in the State.



COLUSA LAYIA (*Layia septentrionalis*): 1B.2 This annual herb is found on loose serpentine or other rocky soils in fields, on grassy slopes or along road cuts within chaparral and cismontane woodland habitats. This species habitat is normally found between 328' to 3,593' in elevation.



COULTER'S GOLDFIELDS (*Lasthenia glabrata* ssp. *Coulteri*):
 1B.1: This native California annual herb blooms from February through June and can be found in the southern portion of the county.

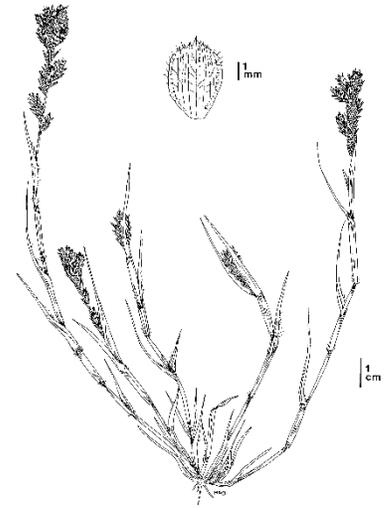


DWARF SOAPROOT (*Chlorogalum pomeridianum* var. *minus*): 1B.2
 This native perennial bulb species is endemic to California with a bloom period between May and August. It is found on grassy road banks, open meadows, and slopes. This species is found in the southwestern reach of the county.

GEYSERS PANICUM (*Panicum acuminatum* var. *thermale*): 1B.2
 This native perennial grass species is endemic to California with a bloom period between June and September.



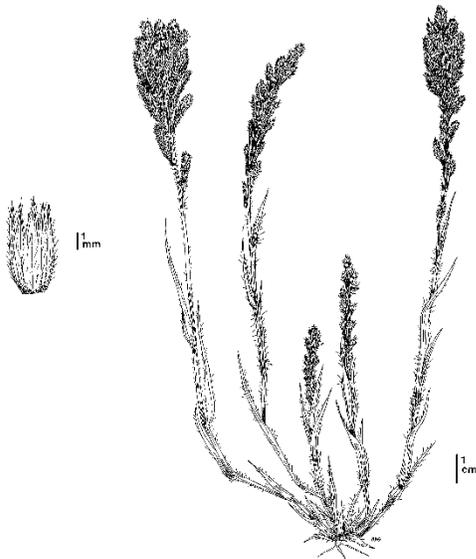
GREENE'S TUCTORIA (*Tuctoria greenei*): 1B.1 This native annual grass species is endemic to California with a bloom period between May and July.



HALL'S RUPERTIA

(*Rupertia hallii*): 1B.2 This native perennial herb species is endemic to California and found in oak woodlands and lower mountain coniferous forests having gentle slopes and woodland openings. The species can sometimes be found within disturbed sites such as roadsides and timber harvest areas.

HAIRY ORCUTT GRASS (*Orcuttia pilosa*): 1B.1 This native annual herb is endemic to California with a bloom time between May and September.

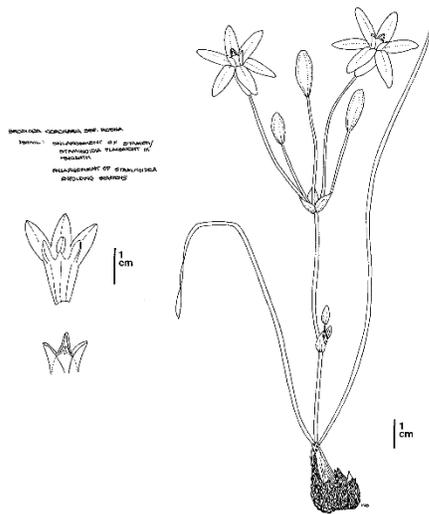




HOOVER'S SPURGE (*Euphorbia hooveri*): 1B.2 This native annual herb is endemic to California.



INDIAN VALLEY BRODIAEA (*Brodiaea Coronaria* ssp. *rosea*): 3.1 This perennial herb grows in grasslands, often on serpentine soils at elevations ranging between 1072' and 4640'.





JEPSON'S MILK-VETCH (*Astragalus rattanii* var. *jepsonianus*): 1B.2 This plant grows as a low annual herb with purple flowers, blooming in April to June. The plants are normally confined to moist areas along creeks and springs.



JEPSON'S HORKELIA (*Horkelia daucifolia* var. *indicta*): 1B.1 This plant is a perennial herb endemic to California and present in Shasta, Siskiyou, and Tehama counties. It is found in quaternary pyroclastic flows, clay, volcanic, vernal mesic, openings and cismontane woodland habitats. Known from fewer than five occurrences; only one occurrence seen recently. It is found at elevations ranging from 787' to 2,200', blooms between April and June and is potentially threatened by development.

No picture available

KLAMATH SEDGE (*Carex klamathensis*): 1B.2 This annual plant's habitat includes fens and other moist and wet habitat, generally on serpentine soils.



LEGENERE (*Legenere limosa*): 1B.1 Legenere is an herbaceous annual that is associated with vernal pools, vernal marshes, lakes, ponds, and sloughs (UCANR, 2001). It is threatened by grazing, road widening, non-native plants and development (CNPS). It occurs in the North Coast Ranges, southern Sacramento Valley, northern San Joaquin Valley, and the San Francisco Bay Area. It flowers with small, white buds in early summer (May or June) (UCANR, 2001).



LONG-STIPED CAMPION (*Silene occidentalis* ssp. *Longistipitata*) 1B.2: This perennial herb species grows in chaparral and conifer forest habitats with a bloom time from June to August.



NILES' HARMONIA (*Harmonia doris-nilesiae*): 1B.1 This plant inhabits openings and rocky areas located within the serpentine belt of western Tehama County at elevations ranging between 2,133' and 4,000'. Individuals of this species have been located within Chaparral and lower elevation conifer forests.



OREGON FIREWEED (*Epilobium oreganum*): 1B.2 This perennial herb is found within the Klamath Range within Siskiyou and Shasta Counties along with that part of the Coast Range of Shasta County. This plant is found in wet and boggy areas located on serpentine soils at elevations ranging between 4,000 and 10,000.



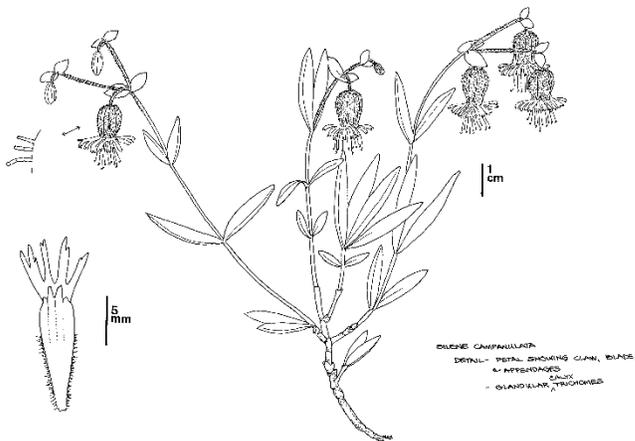
RED BLUFF DWARF RUSH (*Juncus leiospermus* var. *leiospermus*) 1B.1

Red Bluff dwarf rush is a California endemic annual herb that inhabits the edges of vernal pools in valley grasslands, chaparral and foothill woodlands (UCANR, 2001). This species of rush is threatened by development, grazing, vehicles, industrial forestry and agricultural conversion (CNPS). This is an inconspicuous rush usually growing to 3 inches tall, often turning reddish-brown upon maturity (UCANR, 2001).



RED-FLOWERED BIRD'S-FOOT TREFOIL (*Acmispon rubriflorus*):

1B.1 This is a rare native annual herb endemic to California largely due to its disjunct distribution with occurrence in Colusa in Tehama counties. The plant's habitat is grassland and woodland. This is a petite annual herb spreading in a small patch on the ground. Its slender branches are lined with leaves each made up of about 4 hairy lance-shaped leaflets. Solitary magenta flowers appear in the leaf axils, each minute pea-shaped bloom just a few millimeters wide. The fruit is a hairy legume pod which may approach a centimeter in length. Bloom time occurs between April, May, and June.



RED MOUNTAIN CATCHFLY (*Silene campanulata* ssp. *Campanulate*):

Endangered 4.2 This native perennial herb is endemic to California with a broad bloom period from April to July.



SANFORD'S ARROWHEAD (*Sagittaria sanfordii*): 1B.2

Sagittaria sanfordii is an uncommon species of flowering plant in the water plantain family known by the common names valley arrowhead and Sanford's arrowhead. It is endemic to California, where it is known from a few scattered occurrences on the North Coast and in the Central Valley. Many occurrences previously noted in the Central Valley and in southern California have been extirpated as the plant's aquatic habitat has been lost to human activity. *Sagittaria sanfordii* is an aquatic perennial herb up to 130 cm tall, growing from a spherical tuber.



SERPENTINE ROCKCRESS (*Boechera serpicicola*): 1B.2 This perennial herb is native to California with bloom period between March and June. This plant is largely found in the counties west and south.



SHASTA CLARKIA (*Clarkia borealis* ssp. *arida*): 1B.1 Shasta Clarkia inhabits gray pine and black oak woodlands on southerly to westerly slopes. The largest and most robust individuals of this species are normally found on sites having partial shade and very little competing vegetation. The normal elevation range of this plant is between 1600' and 1700'.



SILKY CRYPTANTHA (*Cryptantha crinite*): 1B.2 In addition to alluvial soils of ephemeral creek beds or permanent creek banks on the valley floor, Silky cryptantha is found above 3000' in upland habitats of open gray pine and blue oak woodland, coupled with montane chaparral habitat.



SLENDER ORCUTT GRASS (*Orcuttia tenuis*): 2, 3, 1B.1

Slender Orcutt grass is a California endemic annual herb inhabiting vernal pools and other moist areas with clay soils in valley grasslands, coniferous forests or sagebrush scrub. This annual grass is threatened by agriculture, residential development, grazing, vehicles, recreational activities, logging, fire, trampling, and non-native plants. Slender Orcutt grass is found in the Cascades, Sierra Nevada foothills, inner North Coast Ranges, and Modoc Plateau between 100 and 5,700 feet in elevation).



SNOW MOUNTAIN WILLOWHERB (*Epilobium*

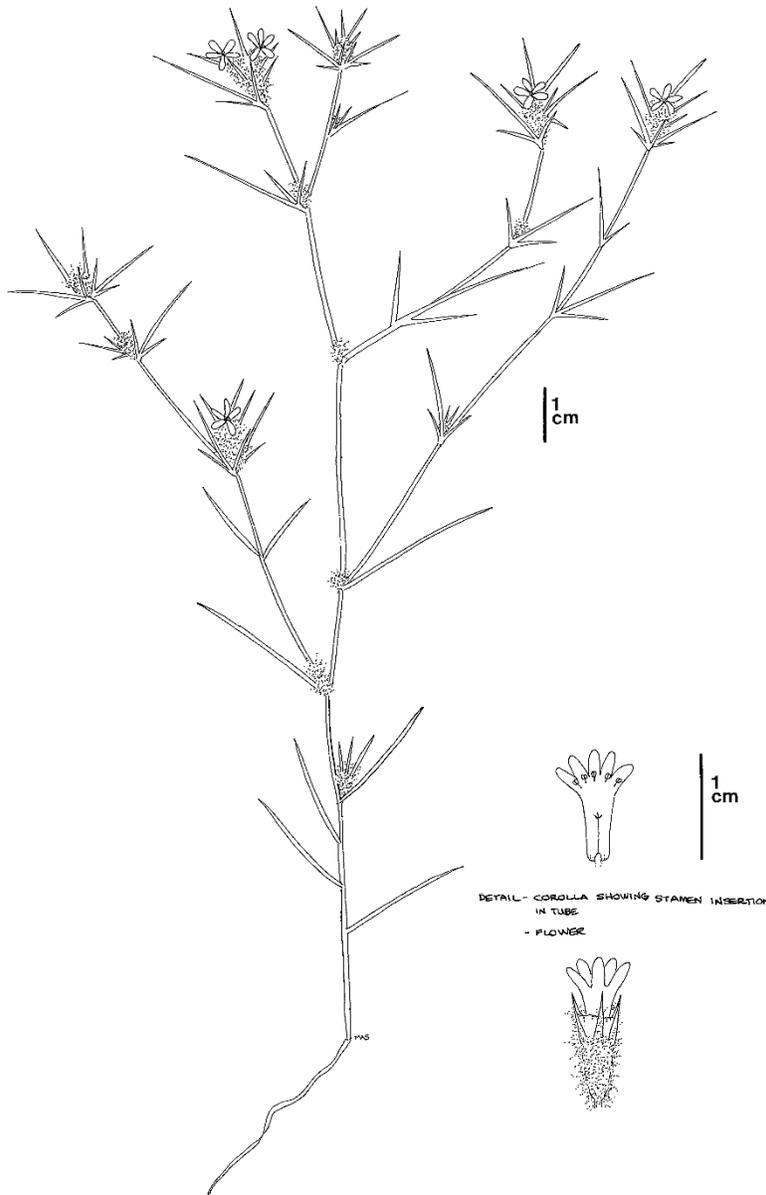
nivium): 1B.2 This native perennial herb is endemic to California with a broad bloom period from June to October. This plant is predominantly found within the neighboring counties to the west.



STEBBINS' HARMONIA (*Harmonia stebbinsii*): 1B.2 This native annual herb is endemic to California with a bloom period between May and June. This plant is predominantly found within the neighboring counties to the west.



TALL ALPINE-ASTER (*Oreostemma elatum*): 1B.2 This perennial herb is native to California with a bloom time between June and August. It is predominantly found in neighboring counties to the east.



TRACY'S ERIASTRUM (*Eriastrum tracyi*): 3.2 Rare. Tracy's eriastrum is closely related to Brandegee's eriastrum (*Eriastrum brandegeae*). Sightings of this plant have occurred near the community of Platina.

WHITE-STEMMED CLARKIA (*Clarkia gracilis* ssp. *albicaulis*): 1B.2 This annual plant grows abundantly in open woodlands and grassy meadows that have been created by wildfire. Bloom time occurs between May and July.





TCF TEHAMA CONSERVATION FUND



Funding for this project is provided by the California Department of Forestry and Fire Protection as part the California Climate Investments (CCI) Program. The Defensible Space and Community Chipping Program is part of California Climate Investments, a statewide program that puts billions of Cap-And-Trade Dollars to work reducing GHG emissions, strengthening the economy, and improving public health and the environment-particularly in disadvantaged communities. The Cap-and-Trade program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investments projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling, and much more. At least 35 percent of these investments are located within and benefiting residents of disadvantaged communities, low-income communities, and low-income households across California. For more CCI information visit: www.caclimateinvestments.ca.gov