

Appendix C
Biological Report



DENISE DUFFY & ASSOCIATES, INC.
PLANNING AND ENVIRONMENTAL CONSULTING

June 2, 2021

David J. Elliot & Associates, Inc.
17800 Cunha Lane
Salinas, California 93907
(831) 663-1418

SUBJECT: Botanical Survey Results for the City of Greenfield Retail and Residential Mixed-Use Project

In accordance with Mitigation Measure 1 from the Biological Resources Memorandum (Bio Memo) for the City of Greenfield Retail and Residential Mixed-Use Project (project), prepared by Denise Duffy & Associates, Inc. (DD&A) in October 2020, DD&A conducted a focused botanical survey of the project site to determine the presence or absence of the following special-status plant species identified within the Biological Memo with the potential to occur within the project site: Lemmon's jewelflower (*Caulanthus lemmonii*) and Monterey spineflower (*Chorizanthe pungens* var. *pungens*). The survey was conducted on May 26 by DD&A Assistant Environmental Scientist Kimiya Ghadiri. Survey methods included walking the entire project site searching for special-status plant species. All plant species encountered were identified to species or to the interspecific taxon necessary to exclude them from being special-status. Plant species were identified in the field using *The Plant of Monterey County: An Illustrated Field Key* (Matthews and Mitchell, 2015).

No Lemmon's jewelflower or Monterey spineflower were identified within the project site during the surveys. No other special-status plant species are expected to occur within the project site, as identified in the Bio Memo, and no additional botanical surveys are required.

If you have any questions, please do not hesitate to contact me at jharwayne@ddaplanning.com or at (831) 373-4341 x25.

Sincerely,

Josh Harwayne
Senior Environmental Scientist/Project Manager
DENISE DUFFY & ASSOCIATES, INC.



DENISE DUFFY & ASSOCIATES, INC.

PLANNING AND ENVIRONMENTAL CONSULTING

June 28, 2022

David J. Elliot & Associates, Inc.
17800 Cunha Lane
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SUBJECT: Biological Resources Memorandum for the City of Greenfield Retail and Residential Mixed-Use Project

Denise Duffy & Associates, Inc. (DD&A) has prepared this memorandum to document the results of a biological assessment for the proposed City of Greenfield (City) Retail and Residential Mixed-Use Project (project or proposed project), located within City limits in Monterey County Parcel 024-151-011-000 (**Attachment A**). The project proposes to convert a vacant lot into a 45,580 square foot mixed-use development of 20 townhouse-style apartments, 16 three-bedroom apartments, four AHC accessible apartments, two commercial spaces, and 101 on-site parking spaces¹.

To inform the project's California Environmental Quality Act (CEQA) review process, DD&A completed a biological assessment of the project site to determine if sensitive biological resources are present or have the potential to occur in the vicinity of the site. This memorandum documents the results of the biological assessment and recommends measures, as necessary, to avoid, minimize, or mitigate potential project impacts to sensitive biological resources.

METHODS

DD&A Assistant Environmental Scientist Liz Camilo conducted a survey of the project site on October 2, 2020 to characterize habitats present within the project site and to identify any special-status plant or wildlife species or suitable habitat for these species within the site. Survey methods included walking the project site to identify general habitat types and potential sensitive habitat types, conducting a focused survey for perennial special-status plant species, and conducting a reconnaissance-level wildlife habitat survey to identify any special-status wildlife species or suitable habitat for those species occurring within the site.

Prior to the field survey, DD&A conducted a desktop literature review to determine the presence or potential presence of special-status species and other sensitive biological resources within the project site. Data sources include:

- Current agency status information from the U.S. Fish and Wildlife (Service) and the California Department of Fish and Wildlife (CDFW) for species listed, proposed for listing, or candidates for

¹ The Biological Resources Memorandum addressed a larger project configuration. The conclusions presented in this report and shown in Section D. Biological Resources, Chapter 3 of the ISMND are not changed with the currently proposed project.

listing as threatened or endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA), and those considered CDFW “species of special concern,” including:

- California Natural Diversity Database (CNDDDB) occurrence reports from the Greenfield, North Chalone Peak, Paraiso Springs, Pinalito Canyon, Reliz Canyon, San Lucas, Soledad, Thompson Canyon, and Topo Valley quadrangles (CDFW, 2020b); and
 - The Service’s Information for Planning and Consultation (IPaC) Resource List for the project site (Service, 2020).
- The California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2020).

From these resources, a list of special-status plant and wildlife species that are known or have the potential to occur in the vicinity of the project site was created (**Attachment B**). This list identifies these species along with their legal status, habitat requirements, and a brief statement of their likelihood to occur within the site.

RESULTS

Natural Communities

The project site is a vacant lot surrounded by farmland, roads, and existing residences. Only one natural community—non-native grassland—occurs within the project site. The site is highly disturbed and appears to be used as a pedestrian transit route. No trees or shrubs are present within the project site; however, several trees are located adjacent to the site within other properties.

Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on CDFW’s *California Natural Communities List* (CDFW, 2020a), those that are occupied by species listed under ESA or are critical habitat in accordance with ESA, and those that are defined as Environmentally Sensitive Habitat Areas (ESHA) under the California Coastal Act (CCA).

As identified above, the project site consists of non-native grassland. Non-native grassland communities are not identified as sensitive on CDFW’s *California Natural Communities List*. No wetland or riparian vegetation is present, and the project is not located within the coastal zone. Therefore, no sensitive habitats are present within or adjacent to the project site.

Special-Status Species

Special-status species are those plants and animals that have been formally listed or are Candidates for listing as Endangered or Threatened under ESA or CESA, are CDFW “species of special concern,” are listed as rare under the California Native Plant Protection Act (CNPPA), are included in the CNPS California Rare Plant Ranks (CRPR) 1A, 1B, 2A, or 2B, or are California Fully Protected Species. In addition, raptors (e.g., eagles, hawks, and owls), migratory birds, and their nests are protected under California Fish and Game Code and the federal Migratory Bird Treaty Act.

Special-Status Wildlife

No special-status wildlife species are known to occur within the project site; however, based on the presence of suitable habitat and known occurrences of these species in the area, the following special-status wildlife species have the potential to occur within the site:

- Salinas pocket mouse (*Perognathus inornatus psammophilus*) — CSC² and
- San Joaquin coachwhip (*Masticophis flagellum ruddocki*) — CSC.

In addition, raptors and other nesting birds have the potential to nest within any of the trees adjacent to the project site. Construction of the project may result in adverse impacts to these species, including harassment or mortality, nest abandonment, and/or habitat loss.

Special-Status Plants

No special-status plant species are known to occur within the project site; however, based on the presence of suitable habitat and known occurrences of these species in the area, the following special-status plant species have the potential to occur within the site:

- Lemmon's jewelflower (*Caulanthus lemmonii*) — 1B and
- Monterey spineflower (*Chorizanthe pungens* var. *pungens*) — FT/1B.

Construction of the project may result in adverse impacts to these species, including loss of individuals and/or loss of habitat.

CONCLUSION

No sensitive habitats are present within or adjacent to the project site. However, several special-status plant and wildlife species have the potential to occur within the site and may be impacted by the project. The following measures are recommended to reduce impacts to special-status species within the project site:

1. A focused botanical survey shall be conducted within the project site during the appropriate blooming period (approximately April or May) to determine the presence or absence of special-status plant species that have the potential to occur within the site. If these species are not identified within the project site, no additional mitigation is required.

If these species are identified within the project site, individuals which are not in the construction footprint shall be fenced or flagged for avoidance. A biological monitor shall supervise the installation of protective fencing and shall monitor the site at least once per week until construction is complete to ensure that protective fencing remains intact. If avoidance of all special-status plants is not possible, a Revegetation Plan shall be prepared by a qualified biologist prior to construction. The plan shall include a detailed description of revegetation areas, plant source material, planting

² Status Definitions: CSC—California Species of Special Concern; 1B—CRPR 1B; FT—Listed as Threatened under ESA.

2. To avoid impacts to nesting birds, construction shall commence prior to the nesting season (February 1 through September 15). If this is not possible, a pre-construction survey for nesting birds shall be conducted by a qualified biologist within 15 days prior to the commencement of construction activities in all areas that may provide suitable nesting habitat within 300 feet of the project boundary. If nesting birds are identified during the pre-construction survey, an appropriate buffer shall be imposed within which no construction activities or disturbance will take place (generally 300 feet in all directions). A qualified biologist shall be on-site during work re-initiation in the vicinity of the nest offset to ensure that the buffer is adequate and that the nest is not stressed and/or abandoned. No work shall proceed in the vicinity of an active nest until such time as all young are fledged, or until after September 15 (when young are assumed fledged).
3. A qualified biologist shall conduct an Employee Education Program for the construction crew prior to construction activities. The qualified biologist shall meet with the construction crew at the onset of construction at the project site to educate the crew on the following: a review of the project boundaries; all special-status species that may be present, their habitat, and proper identification; the specific mitigation measures that will be incorporated into the construction effort; the general provisions and protections afforded by the regulatory agencies; and the proper procedures if a special-status animal is encountered within the project site.
4. A qualified biologist shall be on-site for all vegetation removal and initial ground disturbing activities. After ground disturbing and vegetation removal activities are complete, or earlier if deemed appropriate by the qualified biologist, the biologist shall designate a construction personnel as the construction monitor to oversee on-site compliance with all avoidance and minimization measures. The biologist shall ensure that the construction monitor receives sufficient training in the identification of special-status species. The qualified biologist and the construction monitor shall be authorized to stop work to ensure that avoidance and minimization measures are implemented. The qualified biologist or the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project.
5. If Salinas pocket mouse or San Joaquin coachwhip are detected within the project site before or during construction, they shall be allowed to move out of the site unimpeded and of their own volition. Work shall halt or shall not be initiated until the animal has left the project site.

Permits from regulatory agencies are not anticipated for the project. Please contact me at (831) 373-4341 or at lcamilo@ddaplaning.com if you have any questions about this report.

Sincerely,

Liz Camilo
Assistant Environmental Scientist
DENISE DUFFY & ASSOCIATES, INC.

Attached:
Attachment A. Project Location Map
Attachment B. Special-Status Species Table

REFERENCES

- California Department of Fish and Wildlife (CDFW). 2020a. California Natural Community List. Available online at:
<https://www.wildlife.ca.gov/data/vegcamp/natural-communities#natural%20communities>
- California Department of Fish and Wildlife (CDFW). 2020b. California Natural Diversity Database Rare Find Report. Accessed September 2020.
- California Native Plant Society (CNPS). 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org>.
- U.S. Fish and Wildlife Service (Service). 2020. IPaC Resource List. Available online at <https://ecos.fws.gov/ipac/>. Accessed September 2020.



Attachment B: Special-Status Species Table

Greenfield, North Chalone Peak, Paraiso Springs, Pinalito Canyon, Reliz Canyon, San Lucas, Soledad, Thompson Canyon, and Topo Valley Quadrangles

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
MAMMALS			
<i>Antrozous pallidus</i> Pallid bat	-- / CSC / --	Occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California. Most common in open, dry habitats with rocky areas for roosting. Day roosts include caves, crevices, mines, and occasionally hollow trees and buildings. Seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Similar structures are used for night roosting and will also use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts.	Unlikely No roosting habitat within or adjacent to the project site.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	-- / CSC / --	Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.	Unlikely No roosting habitat within or adjacent to the project site.
<i>Dipodomys venustus elephantinus</i> Big-eared kangaroo rat	-- / CSC / --	Chaparral covered slopes of the southern part of the Gabilan Range, in the vicinity of the Pinnacles. Forages under shrubs and in open burrows for cover and nesting.	Unlikely No suitable habitat within the project site.
<i>Eumops perotis californicus</i> Western mastiff bat	-- / CSC / --	Many open habitats including conifer and deciduous woodlands, coastal scrub, grassland, and chaparral. Roost in crevices in cliff faces, high buildings, trees, and tunnels.	Unlikely No roosting habitat within or adjacent to the project site.
<i>Lasiurus blossevillei</i> Western red bat	-- / CSC / --	Roosting habitat includes trees and sometimes shrubs in forests and woodlands from sea level up through mixed conifer forests. Roost sites are often in edge habitats adjacent to streams, fields, or urban areas. Feeds over a wide variety of habitats, including grasslands, shrublands, open woodlands and forests, and croplands.	Unlikely No roosting habitat within or adjacent to the project site.
<i>Neotoma fuscipes luciana</i> Monterey dusky-footed woodrat	-- / CSC / --	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	Unlikely No suitable habitat within the project site. The CNDDDB does not report any occurrences of this species within the quadrangles reviewed.
<i>Perognathus inornatus psammophilus</i> Salinas pocket mouse	-- / CSC / --	Typically found in grasslands and blue oak savanna, needs friable soils.	Moderate Suitable habitat is present within the project site. The CNDDDB reports two occurrences of this species within the quadrangles reviewed, the nearest located 4.9 miles from the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Taxidea taxus</i> American badger	-- / CSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	Unlikely Suitable habitat is present within the project site. The CNDDDB reports eight occurrences of this species within the quadrangles reviewed, the nearest located 6 miles from the project site. However, the project site is a small are of land surrounded by existing development and agriculture; the minimal acreage of isolated open space available is unlikely to support badgers. In addition, no burrows of sufficient size to support this species were identified during the field survey.
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE / ST / --	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance. Live in annual grasslands or grassy open stages dominated by scattered brush, shrubs, and scrub.	Unlikely Suitable habitat is present within the project site. The CNDDDB reports 20 occurrences of this species within the quadrangles reviewed, the nearest located 2.2 miles from the project site. However, the project site is a small are of land surrounded by existing development and agriculture; the minimal acreage of isolated open space available is unlikely to support kit foxes. In addition, no kit fox dens were identified during the field survey.
BIRDS			
<i>Agelaius tricolor</i> Tricolored blackbird (nesting colony)	-- / ST / --	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	Unlikely No nesting habitat within or adjacent to the project site.
<i>Aquila chrysaetos</i> Golden eagle	-- / CFP / --	Use rolling foot-hills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees.	Unlikely No nesting habitat within or adjacent to the project site.
<i>Athene cunicularia</i> Western burrowing owl (burrow sites & some wintering sites)	-- / CSC / --	Year-round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	Unlikely Suitable habitat is present within the project site. The CNDDDB reports six occurrences of this species within the quadrangles reviewed, the nearest two located 9 miles northwest and southeast of the project site. However, no burrows of sufficient size to support this species were identified during the field survey.
<i>Elanus leucurus</i> White-tailed kite	-- / CFP / --	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	Unlikely No nesting habitat within or adjacent to the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Empidonax traillii extimus</i> Southwestern willow flycatcher	FE / SE / --	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds, and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (<i>Salix sp.</i>), tamarisk (<i>Tamarix ramosissima</i>), or both.	Unlikely No suitable habitat within or adjacent to the project site. The CNDDDB does not report any occurrences of this species within the quadrangles reviewed.
<i>Falco peregrinus anatum</i> American peregrine falcon	-- / CFP / --	Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.	Unlikely No nesting habitat within or adjacent to the project site.
<i>Gymnogyps californianus</i> California condor	FE / SE&CFP / --	Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19-mile commute one way). Nest sites in cliffs, crevices, potholes.	Unlikely No nesting habitat within or adjacent to the project site.
<i>Riparia riparia</i> Bank swallow (nesting)	-- / ST / --	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	Unlikely The CNDDDB includes an occurrence of this species that overlaps with the project site; however, it is a non-specific occurrence and no nesting habitat is present within or adjacent to the project site.
<i>Vireo bellii pusillus</i> Least Bell's Vireo	FE / SE / --	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	Unlikely No nesting habitat within the project site. The CNDDDB does not report any occurrences of this species within the quadrangles reviewed.
REPTILES AND AMPHIBIANS			
<i>Ambystoma californiense</i> California tiger salamander	FT / ST / --	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	Unlikely Suitable upland and dispersal habitat are present within the project site; however, no suitable breeding habitat is present within the site. In addition, the nearest CNDDDB occurrence is reported 10 miles from the project site, beyond the known dispersal range of this species.
<i>Anniella pulchra</i> Northern California legless lizard	-- / CSC / --	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.	Unlikely No suitable habitat within the project site.
<i>Emys marmorata</i> Western pond turtle	-- / CSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	Unlikely No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	-- / CSC / --	Variety of habitats-deserts, scrub land, juniper-grassland, woodland, thorn forest, and farmland. Generally avoid dense vegetation. Ranges from Arbuckle in the Sacramento southward to the Grapevine in the Kern County portion of the San Joaquin Valley and westward into the inner South Coast Ranges. An isolated population also occurs in the Sutter Buttes.	Moderate Suitable habitat is present within the project site. The CNNDDB reports three occurrences of this species within the quadrangles reviewed, the nearest located 3.6 miles from the project site.
<i>Phrynosoma blainvillii</i> Coast horned lizard	-- / CSC / --	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	Unlikely No suitable habitat within the project site.
<i>Rana boylei</i> Foothill yellow-legged frog	-- / SC&CSC / --	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	Unlikely No suitable habitat within the project site.
<i>Rana draytonii</i> California red-legged frog	FT / CSC / --	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	Unlikely Suitable upland and dispersal habitat are present within the project site; however, no suitable breeding habitat is present within the site. In addition, the nearest CNDDDB occurrence is reported 8 miles from the project site, beyond the known dispersal range of this species.
<i>Spea hammondi</i> Western spadefoot	-- / CSC / --	Grasslands with shallow temporary pools are optimal habitats for the western spadefoot. Occur primarily in grassland habitats but can be found in valley and foothill woodlands. Vernal pools are essential for breeding and egg laying.	Unlikely Suitable habitat is present within the project site. However, there are no vernal pools within the project site and the site is surrounded by development, precluding dispersal to the site.
<i>Taricha torosa</i> Coast Range newt	-- / CSC / --	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoirs.	Unlikely Marginally suitable habitat is present within the project site. However, there are no suitable breeding resources within the project site and the site is surrounded by development, precluding dispersal to the site.
FISH			
<i>Lavinia exilicauda harengus</i> Pajaro/Salinas hitch	-- / CSC / --	Found only within the Pajaro and Salinas River systems. Can occupy a wide variety of habitats, however, they are most abundant in lowland areas with large pools or small reservoirs that mimic such conditions. May be found in brackish water conditions within the Salinas River lagoon during the early summer months when the sandbar forms at the mouth of the river.	Not Present No suitable habitat within the project site.
<i>Oncorhynchus mykiss irideus</i> Steelhead (south-central California coast DPS)	FT / -- / --	Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.	Not Present No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
INVERTEBRATES			
<i>Bombus crotchii</i> Crotch bumble bee	-- / SC / --	Occurs in open grassland and scrub at relatively warm and dry sites. Requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late October. Generally nests underground, often in abandoned mammal burrows. Within California this species is known to occur in the Mediterranean, Pacific Coast, Western Desert, as well as Great Valley and adjacent foothill regions.	Low The project site is within the historic range of this species. The CNDDDB reports three occurrences of this species within the quadrangles reviewed, the nearest located 5 miles from the project site. Suitable habitat is present within the project site and small mammal burrows are present within the site that could support nests of this species. However, only a few isolated California poppy (<i>Eschscholzia californica</i>) and black mustard (<i>Brassica nigra</i>) individuals were observed to be blooming during the survey in early October 2020. Therefore, it is likely this site does not provide adequate nectar and pollen throughout the life cycle of this species' colony. No bumble bees were observed during the survey.
<i>Bombus occidentalis</i> Western bumble bee	-- / SC / --	Occurs in open grassy areas, urban parks, urban gardens, chaparral, and meadows. Requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late November. Generally nests underground, often in abandoned mammal burrows. Populations are currently largely restricted to high elevation sites in the Sierra Nevada; however, the historic range includes the northern California coast.	Low The CNDDDB reports one occurrence of this species within the quadrangles reviewed, located more than 17 miles from the project site; however, the project site is within the historic range of this species. Suitable habitat is present within the project site and small mammal burrows are present within the site that could support nests of this species. However, only a few isolated California poppy (<i>Eschscholzia californica</i>) and black mustard (<i>Brassica nigra</i>) individuals were observed to be blooming during the survey in early October 2020 and. Therefore, it is likely this site does not provide adequate nectar and pollen throughout the life cycle of this species' colony. No bumble bees were observed during the survey.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT / -- / --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	Not Present No suitable habitat within the project site.
PLANTS			
<i>Arenaria paludicola</i> Marsh sandwort	FE / SE / 1B	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	Unlikely No suitable habitat within the project site. The project site is outside the known distribution range of this species.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Caulanthus lemmonii</i> Lemmon's jewelflower	-- / -- / 1B	Open, grassy areas on hillside slopes and in fields, canyons, and arroyos. Soils include alkaline soils, shaley clay, sandstone talus, and decomposed serpentine. Predominantly found within valley and foothill grassland and occasionally in pinyon and juniper woodland at elevations of 80 – 12,200 meters. Annual herb in the Brassicaceae family; blooms March-May.	Moderate Marginally suitable habitat is present within the project site. The CNDDDB reports two occurrences of this species within the quadrangles reviewed, the nearest located 4.6 miles from the project site.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	-- / -- / 1B	Valley and foothill grassland on heavy clay, saline, or alkaline soils at elevations of 0-230 meters. Annual herb in the Asteraceae family; blooms May-November.	Not Present Marginally suitable habitat is present within the project site. The CNDDDB reports only one occurrence of this species within the quadrangles reviewed, located 11.8 miles from the project site. Not observed during the October 2020 survey.
<i>Chorizanthe biloba</i> var. <i>immemora</i> Hernandez spineflower	-- / -- / 1B	Chaparral and cismontane woodlands at elevations of 600-800 meters. Perennial herb in the Polygonaceae family; blooms May-September.	Unlikely No suitable habitat within the project site. The project site is outside the known elevation range of this species.
<i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower	FT / -- / 1B	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-July.	Moderate Marginally suitable habitat is present within the project site. The CNDDDB reports three occurrences of this species within the quadrangles reviewed, the nearest located 5.5 miles from the project site.
<i>Clarkia jolonensis</i> Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	Unlikely No suitable habitat within the project site.
<i>Collinsia multicolor</i> San Francisco collinsia	-- / -- / 1B	Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Plantaginaceae family; blooms March-May.	Unlikely No suitable habitat within the project site.
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	-- / -- / 1B	Openings in chaparral, coastal scrub, and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	Not Present No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed during the October 2020 survey.
<i>Delphinium recurvatum</i> Recurved larkspur	-- / -- / 1B	Chenopod scrub, cismontane woodlands, and valley and foothill grasslands on alkaline soils at elevations of 3-750 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	Not Present Marginally suitable habitat is present within the project site. Not observed during the October 2020 survey.
<i>Delphinium umbraculorum</i> Umbrella larkspur	-- / -- / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	Not Present No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed during the October 2020 survey.
<i>Eriogonum butterworthianum</i> Butterworth's buckwheat	-- / SR / 1B	Chaparral and valley and foothill grassland on sandstone at elevations of 585-740 meters. Perennial herb in the Polygonaceae family; blooms June-July.	Not Present Marginally suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species. Not observed during the October 2020 survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Eriogonum heermannii</i> var. <i>occidentale</i> Western Heermann's buckwheat	-- / -- / 1B	Often serpentinite; usually roadsides or alluvium floodplains, rarely clay or shale slopes. Cismontane woodland (openings) at elevations of 102-986 meters. Perennial shrub in the Polygonaceae family; blooms July-October.	Not Present No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed during the October 2020 survey.
<i>Eriogonum nortonii</i> Pinnacles buckwheat	-- / -- / 1B	Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-September.	Unlikely Marginally suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species.
<i>Lagophylla diabolensis</i> Diablo Range hare-leaf	-- / -- / 1B	Cismontane woodland and valley and foothill grassland at elevations of 365-885 meters. Annual herb in the Asteraceae family; blooms April -September.	Unlikely Marginally suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species.
<i>Layia heterotricha</i> Pale-yellow layia	-- / -- / 1B	Cismontane woodlands, coastal scrub, pinyon and juniper woodlands, and valley and foothill grasslands on alkaline or clay soils at elevations of 300-1705 meters. Annual herb in the Asteraceae family blooms March-June.	Unlikely Marginally suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species.
<i>Malacothamnus aboriginum</i> Indian Valley bush-mallow	-- / -- / 1B	Chaparral and cismontane woodland on rocky or granitic soils, often in burned areas, at elevations of 150-1700. Deciduous shrub in the Malvaceae family; blooms April-October.	Not Present No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed during the October 2020 survey.
<i>Malacothamnus davidsonii</i> Davidson's bush-mallow	-- / -- / 1B	Chaparral, coastal scrub, riparian woodland; 185-855 meters. Deciduous shrub. Blooms: June-January.	Not Present No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed during the October 2020 survey.
<i>Plagiobothrys uncinatus</i> Hooked popcornflower	-- / -- / 1B	Chaparral, cismontane woodlands, and valley and foothill grasslands on sandy soils, often following fires, at elevations of 300-760 meters. Annual herb in the Boraginaceae family; blooms April-May.	Unlikely Marginally suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species.
<i>Senecio aphanactis</i> Chaparral ragwort	-- / -- / 2B	Chaparral, cismontane woodland, and coastal scrub, sometimes on alkaline soils, at elevations of 15-800 acres. Annual herb in the Asteraceae family; blooms January-April.	Unlikely No suitable habitat within the project site.
<i>Sidalcea hickmanii</i> ssp. <i>hickmanii</i> Hickman's checkerbloom	-- / -- / 1B	Opening of chaparral at elevations of 335-1200 meters. Perennial herb in the Malvaceae family; blooms May-July.	Not Present No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed during the October 2020 survey.

STATUS DEFINITIONS

Federal

FE	= listed as Endangered under the federal Endangered Species Act
FT	= listed as Threatened under the federal Endangered Species Act
FC	= Candidate for listing under the federal Endangered Species Act
--	= no listing

State

SE	= listed as Endangered under the California Endangered Species Act
ST	= listed as Threatened under the California Endangered Species Act
SC	= Candidate for listing under California Endangered Species Act
SR	= listed as Rare under the California Native Plant Protection Act
CFP	= California Fully Protected Species
CSC	= CDFW Species of Special Concern
--	= no listing

California Native Plant Society

1B	= California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
--	= no listing

POTENTIAL TO OCCUR

Present	= known occurrence of species within the site; presence of suitable habitat conditions; or identified during field surveys
High	= known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of suitable habitat conditions
Moderate	= known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of marginal habitat conditions within the site
Low	= species known to occur in the vicinity from the CNDDDB or other documentation; lack of suitable habitat or poor quality
Unlikely	= species not known to occur in the vicinity from the CNDDDB or other documentation, no suitable habitat is present within the site
Not Present	= species was not identified during surveys