Special-status Biological Resources Summary

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Distribution
PLANTS/LICHENS/BRYOPHYTES						
Black-flowered figwort	*Scrophularia atrata*	—	—	1B.2	Perennial herb; coniferous forest, chaparral, coastal dunes, coastal scrub and riparian scrub on sand or diatomaceous shale; 10-500 meters in elevation; blooms March to July.	**Not expected.** No suitable habitat is present as species occurs in coastal hills and dunes. Distribution is from Avila Beach to Point Conception, extending from the coast inland to Orcutt/Lompoc, and the Santa Barbara south coast. Many populations are known from the Casmalia Hills, but not recorded in the Santa Maria Valley.
Blochman's leafy daisy	*Erigeron blochmaniae*	—	—	1B.2	Perennial rhizomatous herb; stabilized coastal dunes and coastal scrub; 3-45 meters in elevation; blooms June to August.	**Not expected.** Although eolian sands are present onsite, the entire study area has been greatly modified by agricultural development. Occurs in dunes and old dune systems from Morro Bay and Los Osos to Vandenberg SFB. Locally recorded along Black Road.
Blushing layia	*Layia erubescens*	—	—	1B.2	Annual herb; coastal dunes and openings in coastal scrub on loose, fine sand of stabilized dunes and sandhills; 10-245 meters in elevation; blooms February to June.	**Not expected.** Although eolian sands are present onsite, the entire study area has been greatly modified by agricultural development. Species occurs from Morro Bay, Nipomo, and western Santa Barbara Co. Historical record from Santa Maria has a vague location and "needs fieldwork".
Dune larkspur	*Delphinium parryi* ssp. *blochmaniae*	—	—	1B.2	Perennial herb; maritime chaparral and coastal dunes on sandy soils; 0-200 meters in elevation; blooms April to June.	**Not expected.** Although eolian sands are present onsite, the entire study area has been greatly modified by agricultural development. Occurs from Indian Knob, Oceano Dunes, Nipomo Mesa to Lompoc. Historic records from Santa Maria are imprecise and "need fieldwork".

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Distribution
Hoover's bent grass	*Agrostis hooveri*	—	—	1B.2	Stoloniferous perennial herb; chaparral, cismontane woodland, and valley and foothill grassland habitats in sandy soils; 60-600 meters in elevation; blooms April to July.	**Not expected.** Although sandy soils are present, the entire site has been greatly disturbed by agriculture that would remove this perennial species. Found in mountainous areas from San Luis Obispo to Lompoc. Not recorded from the Santa Maria Valley, and the closest records are from the Casmalia Hills.
Kellogg's horkelia	*Horkelia cuneata* var. *sericea*	—	—	1B.1	Perennial herb; openings in coniferous forest, maritime chaparral, coastal dunes and coastal scrub on sandy or gravelly soils; 10-200 meters in elevation; blooms April to September.	**Not expected.** Although eolian sands are present onsite, the entire study area has been greatly modified by agricultural development. Species has a wide range from Point Reyes to Point Conception in coastal areas. Recorded locally from the Solomon Hills. Perennial species that would have been seen during the surveys.
La Graciosa thistle	*Cirsium scariosum* var. *loncholepis*	E	T	1B.1	Perennial herb; mesic sites in cismontane woodland, coastal dunes, coastal scrub, brackish marshes and swamps and valley and foothill grassland on sandy soils; 4-220 meters in elevation; blooms May to August.	**Not expected.** Although an agricultural drainage ditch and sandy soils are onsite, this variety is restricted to coastal dunes and extends inland along drainages. Occurs in the dune lakes in Guadalupe Dunes and along the Santa Maria River, although many of these populations have been extirpated. One historical record from south of Orcutt, but the habitat has been lost and the population is considered extirpated.
La Purisima manzanita	*Arctostaphylos purissima*	—	—	1B.1	Perennial evergreen shrub; chaparral and coastal scrub on sandy soils or sandstone; 60-555 meters in elevation; blooms November to May.	**Not expected.** No suitable habitat is present and no manzanita species occur onsite. Species occurs in the western third of Santa Barbara Co.

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Lompoc yerba santa	*Eriodictyon capitatum*	E	R	1B.2	Perennial evergreen shrub; coastal bluff scrub, closed-cone coniferous forest and maritime chaparral on sandy soils; 40-900 meters in elevation; blooms May to September.	**Not expected.** No suitable habitat is present and perennial shrub that would have been eliminated during conversion to agriculture. Species is endemic to SB Co. and is distributed from the western Solomon Hills to Vandenberg AFB and westernmost Santa Ynez Mtns.
San Luis Obispo monardella	*Monardella undulata* ssp. *undulata*	—	—	1B.2	Perennial rhizomatous herb; coastal dunes and coastal scrub on sandy soils; 10-200 meters in elevation; blooms May to September.	**Not expected.** Although eolian sands are present, the entire site has been greatly disturbed by agriculture that would remove this perennial species. Subspecies occurs along the coast in dune habitat from Morro Bay to Point Sal. Recorded from Bradley Village northeast of Orcutt in the CNDDB but there are no records in Calflora from the Santa Maria Valley.
Sand mesa manzanita	*Arctostaphylos rudis*	—	—	1B.2	Perennial shrub; maritime chaparral and coastal scrub habitats on sandy soils; 25-230 meters in elevation; blooms November to February.	**Not expected.** No suitable habitat is present and species is a perennial shrub that would have been seen during the surveys. Species is distributed throughout southeastern SLO Co. to Lompoc. Nearest records are from the Casmalia Hills.
Santa Barbara ceanothus	*Ceanothus impressus* var. *impressus*	—	—	1B.2	Perennial shrub; chaparral on sandy soils; 40-470 meters in elevation; blooms February to April.	**Not expected.** No suitable habitat is present. Variety is reported from Los Osos, Nipomo, Pt. Sal and the Vandenberg SFB area.

**E = Endangered; T = Threatened; R = Rare; '—' = no status; CRPR: Rank 1A - Presumed extirpated in California and either rare or extinct elsewhere; Rank 1B – Rare, threatened or endangered in California and elsewhere; Rank 2A – Presumed extirpated in California, but more common elsewhere; Rank 2B – Rare, threatened, or endangered in California, but more common elsewhere; Rank 3 - Plants needing more information, a review list; Rank 4 – Limited distribution, a watch list. Sources: California Natural Diversity Database (California Department of Fish and Wildlife 2024a); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2024c); Inventory of Rare and Endangered Plants of California (California Native Plant Society 2024); Information on Wild California Plants for Conservation, Education, and Appreciation (Calflora 2024); Jepson eFlora (Jepson Flora Project 2024).*

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
ANIMALS						
INVERTEBRATES						
Crotch bumble bee	*Bombus crotchii*	—	CE	—	Inhabits grasslands and scrub, especially hot and dry areas. It nests and overwinters underground. Food plants include milkweed, lupine, phacelia, sage, clarkia, poppy, and buckwheat as well as agricultural crops.	**Unlikely.** No potential native food plants were seen, although they can feed on the nectar from agricultural crops. Site is within the range of the species, but there are no records in the western half of Santa Barbara County. Recorded in mountainous and inland locations and along the south coast. Frequent plowing would not be suitable for underground nests.
Lompoc grasshopper	*Trimerotropis occulens*	—	—	—	Associated with pale, rocky or gravelly soils, such as weathered Sisquoc shale.	**Not expected.** No potentially suitable soils are present, and distribution is outside of this area. Recorded in the Casmalia Hills and Vandenberg SFB.
Monarch - California overwintering population 1	*Danaus plexippus plexippus*	C	—	—	Adults feed on the nectar of various blooming plants. During breeding can be found in fields, pastures, residential areas, grassland and scrub. Eggs are laid on and caterpillars feed on milkweed. Overwinters in wind-protected tree groves of eucalyptus, Monterey pine and cypress along the coast.	**Potential.** No groves of suitable trees occur in the study area to be used as an overwintering site. However, individuals could occur periodically while flying over the area. No milkweed plants observed onsite or in the area during surveys. Overwintering and autumnal sites are documented from throughout the Santa Maria Valley, but no breeding, foraging or overwintering habitat is present onsite.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	—	—	Grasslands with temporary ponded water. Inhabits small clear-water depressions in rock, vernal pools and swales, as well as anthropogenic habitats such as tire ruts, dozer scrapes and railroad pools. Needs standing water for at least 18 days to complete its lifecycle.	**Unlikely.** No natural vernal pools are present in the study area and species does not occur in flowing water, but could occur in anthropogenic pools. Site is within the southern vernal pool region and natural vernal pools are located on adjacent properties, but conversion to agriculture on the study area has eliminated all suitable habitat. Species has been documented from vernal pools south of the proposed Well 15 site, but no suitable habitat present in project footprint.
FISH						
Arroyo chub	*Gila orcuttii*	—	—	SSC	Native to rivers and streams of the Los Angeles plain, and widely introduced north to San Luis Obispo County. Tolerates wide fluctuations in temperature and dissolved oxygen, and most common in slow-flowing or backwater areas with sand or mud substrate.	**Not expected.** Drainage channel onsite dries periodically and could not support fish, and the site is outside of its native range. Population in the Santa Maria River estuary is introduced.
Steelhead - southern California DPS	*Oncorhynchus mykiss irideus* pop. 10	E	CE	—	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	**Not expected.** No suitable habitat is present on the site as the drainage ditch is shallow, modified, unshaded and dries up, and there are barriers between the site and the ocean. DPS occurs from the Santa Maria River south to San Diego Co. Recorded in the Sisquoc River.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Unarmored threespine stickleback	*Gasterosteus aculeatus williamsoni*	E	E	FP	Slow-moving reaches of streams and rivers with continuous low flow and moderate algal cover or aquatic vegetation but also in headwaters with rapid flows. Lives for one year and breeds February to September. Requires sand or gravel substrates and detritus or aquatic vegetation for reproduction. Historically occurred in major rivers of southern CA. In the central coast, only occurs in San Antonio Creek in Santa Barbara County.	**Not expected.** Drainage ditch in the study area is unsuitable because it dries up. Formerly occurred in tributaries of the Santa Maria River but the population has been extirpated due to introgression with *Gasterosteus aculeatus microcephalus* that were introduced from the Santa Ynez River in 1940 (USFWS 2021e).
AMPHIBIANS/REPTILES						
Blainville's (=coast) horned lizard	*Phrynosoma blainvillii*	—	—	SSC	Arid grasslands, sandy washes, coastal scrub, chaparral, coniferous forest and woodlands with patches of open areas for sunning and bushes for cover. Often with loose sandy soils for burial, but also uses small mammal burrows. Preys on native species of ants and other small invertebrates.	**Unlikely.** Surrounding area is agriculture and open grassland, which is not considered suitable for this species due to lack of shrub cover. Regular cycle of disturbance from agriculture adversely affects potential habitat for this species.
California red-legged frog	*Rana draytonii*	T	—	SSC	Forages and breeds in streams with deep slow-moving pools, stock ponds, reservoirs, springs, lagoons, and marshes; usually with emergent or riparian vegetation but also found at sites lacking vegetation. Uses riparian and various upland habitats in winter and for dispersal.	**Potential.** There is no suitable breeding habitat in the study area but could move through the site while migrating between aquatic sites nearby and may use the agricultural ditch temporarily. Ponded water if present in the agricultural ditch is too shallow to support breeding adults. There is no cover for upland refugia in the ag fields and site is not suitable. There are numerous records within 5 miles and three within 1-mile plus other potentially suitable ponds nearby, so potential for individuals moving across the site cannot be ruled out.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
California tiger salamander - Santa Barbara County DPS	*Ambystoma californiense* population 2	E	T	WL	Grassland, low foothill oak savanna and edges of mixed woodland. Breeds in rain pools, vernal pools and temporary ponds. During dry season is fossorial and uses rodent burrows in upland habitat.	**Potential.** While no suitable upland or breeding habitat is present in the study area, the western end of the agricultural ditch onsite has been identified by the USFWS as SAMA 11, a potential breeding pond. Based on field surveys, this site has low quality habitat due to ongoing agricultural and flood control activities. Not expected to use agricultural areas for estivation because frequent plowing removes burrows, but suitable upland habitat is present offsite to the south within the species' migratory distance. Site is located within the dispersal distance of several known and potential breeding ponds and there are no barriers to movement. Suitable dispersal habitat is present.
Northern California legless lizard	*Anniella pulchra*	—	—	SSC	Beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, oak woodland, and stream terraces with riparian vegetation. Fossorial species requires moist, loose soils or leaf litter with plant cover or surface objects (rocks, boards, logs, etc.). Can occur in residential areas.	**Unlikely.** Suitable sandy soils are present, but regular tilling removes suitable habitat. In addition, there is limited plant cover and the entire study area has been tilled, disked and planted to strawberries. Has been recorded at several locations surrounding the site, but is unlikely to occur within the project footprint.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Southwestern (=western) pond turtle	*Actinemys pallida* (=*Emys marmorata*)	PT	—	SSC	Ponds, lakes, rivers, streams, marshes, brackish lagoons, and irrigation ditches with a mosaic of vegetation and open areas for basking. Uses upland areas for nesting and in winter, including woodland, forest, grassland, chaparral, and grasslands.	**Potential.** Agricultural ditch onsite has low quality aquatic habitat, but could be used periodically by turtles moving between other sites since potentially suitable ponds are located within their known dispersal distance. Documented within 1 mile from the site, but very limited records in the CNDDB in the vicinity. No suitable upland habitat for nesting is present onsite but could move through the agricultural fields.
Western spadefoot - northern DPS	*Spea hammondii*	PT	—	SSC	Grassland, open woodland/savanna, coastal scrub, and chaparral habitats where it primarily occupies underground burrows that it digs in a variety of soils but often associated with sand. Breeds in vernal pools, ephemeral ponds, stock ponds and streams that dry to isolated pools which lack aquatic vertebrate predators. Species occurs in the Central Valley, Salinas Valley through eastern SLO Co., and southern CA coastal areas.	**Potential.** Vernal pool species known to occur in the ephemeral ponds to the south of the study area. Not expected to use agricultural areas for estivation because of frequent plowing, but suitable upland habitat is present within the species' migratory distance. Site is located within the dispersal distance of several known and potential breeding ponds and there are no barriers to movement. Could move onto the site from nearby grasslands, but unlikely to breed or take refuge due to the ongoing farming activities.
BIRDS						
American peregrine falcon	*Falco peregrinus anatum*	BCC	—	FP (nesting)	Various open habitats, coastal areas, inland wetlands, and desert mountains. Feeds mainly on birds, but also eats bats, fish, rodents and insects. Nests on high cliffs, dunes or mounds near water from coastal areas north of Santa Barbara. Also uses buildings, cavities in trees or snags or old raptor nests. Occurs in this area year-round and migrants occur along the coast.	**Potential.** The open habitat onsite and in the surrounding area is suitable for foraging but no cliffs are present in the vicinity for nesting. Has been recorded in eBird throughout the Santa Maria Valley.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Black-crowned night-heron	*Nycticorax nycticorax*	—	—	— (nesting colony)	Salt and freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, canals, reservoirs, and wet fields where they feed on terrestrial and aquatic animals. Colonial nesting, can have >10 nests per tree, and lasting >50 years at the same location. Nests are on islands or over water. Occurs in this area year-round.	**Potential.** Could forage onsite in the agricultural ditch but no nesting habitat is present. Recorded in eBird in the surrounding area.
Burrowing owl	*Athene cunicularia*	BCC	—	SSC (burrow sites & some wintering sites)	Open treeless areas with low sparse vegetation such as grasslands, deserts, pastures, agricultural fields, airports, and artificial embankments where they prey on small vertebrates and various invertebrates. Nests in burrows created by other animals with nearby lookouts such as fence posts or shrubs. Formerly occurred year-round in this area, but now restricted to winter.	**Potential.** No burrows are present in the study area and species has become very rare in this region. There are two records in the CNDDB near Betteravia, and several observations there in eBird, but these are from at least 15 years ago. There is one observation from 2019 in eBird from the southeastern end of the Airport. Very low probability to move through the site during the winter.
California gull	*Larus californicus*	BCC	—	WL (nesting colonies)	Sandy beaches, mudflats, rocky intertidal, pelagic areas of marine and estuarine habitats, fresh and saline emergent wetlands, alkali and freshwater lakes, rivers, agricultural areas, pastures, landfills, and open lawns in urban areas. Omnivore on living organisms, and feeds on garbage and carrion. Nesting is on islands in alkali or freshwater lakes, and salt ponds in undisturbed areas. Occurs along the coast within the county year-round but do not breed in this area.	**Potential.** Could forage onsite but there is no suitable nesting habitat and does not breed in this area. Has been documented in eBird throughout the surrounding urban areas.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
California horned lark	*Eremophila alpestris actia*	—	—	WL	Areas with sparse vegetation or bare ground in prairies, deserts, tundra, beaches, dunes, airports, plowed fields and heavily grazed pastures where they eat seeds and insects. Nesting is on bare ground. Occurs year-round in this area.	**Potential.** Could forage onsite and nest in grasslands to the south of the study area. Has been recorded in eBird at many locations near the site.
Ferruginous hawk	*Buteo regalis*	BCC	—	WL (wintering)	Open country such as grasslands, sagebrush, saltbush shrubland, and edges of pinyon-juniper forest where they prey on small mammals. Nests on lone trees, cliffs, utility poles, and shrubs from ground-level to 65-feet high. Occurs in this area during winter.	**Potential.** Could forage onsite but does not nest in this area. Has been recorded at numerous locations surrounding the site in eBird.
Golden eagle	*Aquila chrysaetos*	BCC	—	FP, WL (nesting & wintering)	Uncommon resident of mountainous and valley-foothill areas. Foraging typically occurs in open terrain where they prey on small mammals. Nesting usually occurs on cliff ledges, and less commonly in large trees or on structures such as electrical towers. Occurs in this area year-round.	**Potential.** Could forage onsite but no nesting habitat is present. Has been recorded surrounding the site in eBird.
Great blue heron	*Ardea herodias*	—	—	— (nesting colony)	Freshwater and saltwater marshes, also foraging in grasslands and agricultural fields. Nesting colonies are near lakes, ponds and wetlands bordered by forests. Nests are placed mainly in trees, but may also nest on the ground, in bushes or artificial structures. Occurs year-round in this area.	**Potential.** Individuals could forage in the agricultural ditch and fields but there is no nesting habitat. There are numerous records in eBird from surrounding the site.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Great egret	*Ardea alba*	—	—	— (nesting colony)	Forages in marshes, swamps, streams, rivers, ponds, lakes, lagoons, tidal flats, canals, ditches, flooded fields, and sometimes in upland where they prey on fish, amphibians, reptiles, crustaceans, and invertebrates. Roosts communally in trees. Nesting colonies are on lakes, ponds, marshes, and estuaries, but does not nest in this area. Occurs in this area during non-breeding season.	**Potential.** Could forage onsite in the agricultural ditch and fields but does not nest in this area and there are no trees for communal roost sites. There are numerous records in eBird from surrounding the site.
Lawrence's goldfinch	*Carduelis lawrencei*	BCC	—	— (nesting)	Nests in oak woodland, chaparral, weedy fields, coastal scrub, pine-juniper woodland, riparian, suburban and rural residential areas near a water source. Outside of breeding season, uses same habitats as in the nesting season plus desert arroyos, river floodplains, mesquite, roadsides, agricultural areas, orchards and parks. Migratory and occurs in this area during the breeding season.	**Potential.** Suitable foraging habitat is present along the agricultural ditch and they could occur during migration. Unlikely to nest due to absence of trees or shrubs. Numerous records are in eBird from the general vicinity.
Loggerhead shrike	*Lanius ludovicianus*	BCC	—	SSC (nesting)	Open country with low vegetation and well-spaced shrubs or trees such as coastal scrub, grasslands, agricultural fields, pastures, riparian areas, desert scrub, savannas, prairies, golf courses, and along roadsides where they prey on insects, amphibians, reptiles and small mammals. Nests in trees, shrubs, or brush piles. Occurs in this area year-round.	**Potential.** Suitable foraging habitat is present onsite but there are no trees or shrubs for nesting. There are numerous observations in eBird from near the study area.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Long-billed curlew	*Numenius americanus*	BCC	—	WL (nesting)	Grassland, cropland, alkali lakes, tidal mudflats, wetlands, estuaries, beaches and flooded fields. Occurs in the San Joaquin Valley in winter and individuals may remain during summer that do not breed; in the central coast during winter; does not breed in this area.	**Potential.** Suitable foraging habitat is present but species does not nest in this area. There are numerous observations in eBird from surrounding the study area.
Merlin	*Falco columbarius*	—	—	WL (wintering)	Coastlines, open grasslands, savannas, woodlands, lakes, wetlands, and montane conifer forests where they prey on small birds, small mammals and insects. Nests in existing corvid or hawk nest but does not nest in California. Occurs in this area during winter.	**Potential.** Suitable foraging habitat is present in the study area but does not nest in this region. There are numerous observations in eBird from the general area.
Northern harrier	*Circus cyaneus*	—	—	SSC (nesting)	Large areas of wetlands and grasslands with low vegetation where they prey on small mammals, amphibians, reptiles and birds. Nesting is in marshes, grazed meadows, and desert shrubland where they nest on the ground in a dense clump of vegetation such as willows, grasses, sedge, bulrushes or cattails. Occurs year-round in this area.	**Potential.** Could forage over the site but no prey base observed and no nesting habitat present. Recorded in eBird from the surrounding area.
Prairie falcon	*Falco mexicanus*	BCC	—	WL (nesting)	Grasslands, desert shrubland, tundra, coastal scrub, feedlots, and agricultural fields where they feed on small mammals, insects and birds. Nests on high cliff ledges and steep bluffs overlooking open areas. Occurs year-round in inland areas of this region, rarely on the coast.	**Potential.** Could forage onsite but there is no nesting habitat. Has been recorded at a few areas surrounding the site in eBird.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Sharp-shinned hawk	*Accipiter striatus*	—	—	WL (nesting)	Forages along the edges of dense mixed woodlands, brushy pastures and shorelines where they prey on birds. Roosts in tall forests. Nests are in dense coniferous and riparian forests in the Coast, Transverse and Peninsular ranges, northwestern CA, Cascades and Sierra Nevada; however, breeding in the state is uncommon. Some individuals migrate to CA and mountain populations migrate to lower elevations for the winter.	**Potential.** Could forage onsite but there is no nesting habitat. Has been recorded throughout the Santa Maria Valley in eBird.
Snowy egret	*Egretta thula*	—	—	— (nesting colony)	Lagoons, freshwater wetlands, ponds, temporary pools, and wet fields where they prey on aquatic animals and insects. Nesting colonies are in dense vegetation of islands and marshes. Occurs in this area year-round.	**Potential.** Could forage onsite but no suitable habitat to support nesting. Has been recorded surrounding the site in eBird.
Tricolored blackbird	*Agelaius tricolor*	BCC	T	SSC (nesting colony)	Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots. Nests colonially in freshwater marshes with tules or cattails, or in other dense thickets of willow, thistle, blackberry, or wild rose in close proximity to open water. Occurs year-round in this area.	**Potential.** Suitable foraging habitat is present onsite but no suitable habitat for nesting is present. Has been recorded at many locations nearby.
White-tailed kite	*Elanus leucurus*	—	—	FP (nesting)	Savannas, open woodlands (oak or pine), riparian forest, marshes, desert grasslands, and fields where they prey on small mammals, birds, lizards, and insects. Nests and roosts in the edges of forests or in tall isolated trees. Occurs in this area year-round.	**Potential.** Could forage onsite but there are no trees for nesting or roosting. Has been recorded in eBird at numerous locations in the surrounding area.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	—	—	SSC (nesting)	Wetlands, prairies, mountain meadows, agricultural fields. Nests are in emergent wetland vegetation on the borders of lakes and ponds east of the Cascade Range, east of the Sierra Nevada, Central Valley, Imperial and Colorado River valleys, and limited areas of the eastern Coast Ranges. Migrates south for winter. Migrants occur along the coast outside of the breeding season.	**Potential.** Could forage onsite but does not nest in this area. There are several observations reported from Santa Maria Airport lands in eBird.
MAMMALS						
American badger	*Taxidea taxus*	—	—	SSC	Open grasslands, fields, scrubland edges and woodland habitats. They burrow into dry loose soils for shelter and feed on a variety of small mammals such as California ground squirrel and pocket gopher. Young are born in dens in March and April.	**Unlikely.** Although the open habitat in the surrounding area is potentially suitable for movement, species has declined substantially in the region and all records nearby are from before the early 1990s. No dens or potential prey were seen during the surveys, and agricultural fields would only be suitable for movement. Low probability to pass through the site. Area is on the edge of urban development and there are limited patches of suitable grassland habitat that could support prey.
Fringed myotis	*Myotis thysanodes*	—	—	—	High elevation coniferous forest, oak woodland, mixed deciduous forest and pinyon-juniper woodland. Roosts in caves, buildings, mines and cavities of large trees. Their year-round range is all of California except the Central Valley and deserts.	**Unlikely.** No suitable forest habitat is present at or nearby the study area, and no roosting habitat occurs. Although their year-round range includes all of Santa Barbara County (CDFW 2023e), there are no records in the CNDDB in the county.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Hoary bat	*Lasiurus cinereus*	—	—	—	All types of forests and woodland with medium- to large-sized trees and dense foliage. Roosts in dense foliage of large trees. Winters along the coast and in southern CA or hibernates in cold climates. Females move inland and to northern CA during the summer and have maternity roosts in dense foliage while the males remain along the coast.	**Unlikely.** No suitable forest habitat is present at or nearby the study area, and no roosting habitat occurs. Their year-round range includes all of Santa Barbara County (CDFW 2023e) and has been recorded on Vandenberg SFB.
Pallid bat	*Antrozous pallidus*	—	—	SSC	Open dry habitats including deserts, grasslands, shrublands, woodlands, and forests. Roosts in rock outcrops, caves, crevasses, mines, hollow trees, and buildings that moderate temperature. Night roosts on porches and open buildings. The entire state of CA except the highest elevations in the Sierra Nevada are within the species' year-round range.	**Potential.** Could forage over the site but no roosting habitat is present in the study area. Has been recorded throughout Vandenberg SFB and near Garey.
Silver-haired bat	*Lasionycteris noctivagans*	—	—	—	In summer, occurs in coastal and montane coniferous forest, valley foothill woodland, pinyon-juniper woodland, and foothill and montane riparian habitats. Feeds over streams, ponds and brushy areas. Roosts in hollow trees, snags, buildings, rock crevices, caves, dense foliage and under bark. Does not occur in the central coast year-long but migratory individuals may periodically occur.	**Potential.** Although no suitable forest or woodland habitat is present, could forage periodically over the agricultural ditch. Acoustic records are from Vandenberg SFB but no records of roosting were in the vicinity.
Townsend's big-eared bat	*Corynorhinus townsendii*	—	—	SSC	Prefers mesic habitats and forages along riparian habitats. Roosts in caves, cliffs, mines, tunnels, abandoned buildings and bridges. The year-round range of the species is considered to be all of California except high elevations in the Sierra Nevada.	**Potential.** Could forage onsite, but no structures for roosting are present. There are numerous records from Vandenberg SFB and the Santa Ynez Mountains.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Western red bat	*Lasiurus frantzii* (=*blossevillii*)	—	—	SSC	Grasslands, riparian forest, shrublands, open woodlands, and orchards. Roosts in forests and woodlands in trees or occasionally shrubs. Roost sites are in the foliage of riparian trees or in urban areas. Occurs throughout the state in summer, and in winter in coastal areas south of San Francisco.	**Potential.** Could forage onsite, but no trees for roosting are present. There are numerous records from Vandenberg SFB.
Yuma myotis	*Myotis yumanensis*	—	—	—	Open forests and woodlands and forages over water sources such as ponds, streams, and stock tanks. Roosts in buildings, mines, caves, crevices and under bridges; night roosts in more open areas such as under tree bark or tree cavities. Occurs in this region yearlong.	**Not expected.** No suitable forest habitat is present at or nearby the study area, and no roosting habitat occurs. There were no records in the CNDDB, but their year-round range includes all of Santa Barbara County (CDFW 2023e).

**E = Endangered; T = Threatened; C = Candidate; PE = Proposed Endangered; PT = Proposed Threatened; BCC = Birds of Conservation Concern; SSC = Species of Special Concern; FP = Fully Protected; WL = Watch List; '—' = no status; California Natural Diversity Database (California Department of Fish and Wildlife 2024a); Special Animals List (California Department of Fish and Wildlife 2024b); California Wildlife Habitat Relationships System (CDFW 2024e); A Guide to the Amphibians and Reptiles of California (California Herps 2024); eBird (The Cornell Lab of Ornithology 2024a); All About Birds (The Cornell Lab of Ornithology 2024b); Guide to North American Birds (Audubon 2024); Birds of Conservation Concern (USFWS 2021).*

DESIGNATED CRITICAL HABITAT	
California Red-legged Frog	**Absent.** Unit STB-2 San Antonio Terrace includes the Casmalia Hills to the southwest of Highway 1. It is located at least 1.8 miles south of the study area.
California Tiger Salamander	**Present.** The study area is located near the edge of Unit 1 Western Santa Maria/Orcutt.
La Graciosa Thistle	**Absent.** Unit 2 Santa Maria River-Orcutt Creek is located along the lower 5 miles of the Santa Maria River and along the length of Orcutt Creek. It is located at least 0.7 mile west of the study area.
Lompoc Yerba Santa	**Absent.** The Solomon Hills Unit is to the southeast of Orcutt at least 4.5 miles from the study area.

Sources: Threatened and Endangered Species Active Critical Habitat Report (United States Fish and Wildlife Service [USFWS] 2024b); USFWS 2004, 2009, 2010b, .

SENSITIVE NATURAL COMMUNITIES	
Central Coast Arroyo Willow Riparian Forest — State Rarity Rank S3.2	**Absent.** Dense closed-canopy forest characterized by arroyo willow (*Salix lasiolepis*) and/or Pacific willow (*S. lasiandra*). Occurs on moist to saturated sandy or gravelly soil in floodplains, low-gradient stream reaches and dune slack ponds. No willows are present in the study area.
Central Coast Riparian Scrub — State Rarity Rank S3	**Absent.** A dense, shrubby streamside thicket dominated by any of several species of willows (*Salix* spp.) and has coyote brush (*Baccharis pilularis*) as a secondary component. Occurs on sand or gravel bars along rivers and streams with ground water close to the surface. Also occurs around dune slack ponds. No willows are present in the study area.
Central Dune Scrub — State Rarity Rank S2.2	**Absent.** Restricted to coastal strip on stabilized backdunes. It is composed of low-growing scattered shrubs, subshrubs and herbs and is indicated by the presence of mock heather (*Ericameria ericoides*), dune bush lupine (*Lupinus chamissonis*), and beach sagewort (*Artemisia pycnocephala*). Site is located away from the coastline and no shrubs are present.
Central (Lucian) Coastal Scrub — State Rarity Rank S3.3	**Absent.** Characterized by dense shrubs dominated by coyote brush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), seaside wild buckwheat (*Eriogonum latifolium*), mock heather (*Ericameria ericoides*), saw-toothed goldenbush (*Hazardia squarrosa*), and dune lupine (*Lupinus chamissonis*). It occurs on the ocean side of the Santa Lucia Range from Monterey and Point Conception on exposed, often south-facing slopes with shallow soils. All areas onsite have been disturbed by agriculture and no shrubs are present.
Central Maritime Chaparral — State Rarity Rank S2.2	**Absent.** Occurs on well-drained, sandy soils within the summer fog zone. Composed of sclerophyll shrubs dominated by one or more species of manzanita (*Arctostaphylos* spp.). Other species typically include coyote brush (*Baccharis pilularis*), chamise (*Adenostoma fasciculatum*), coast live oak (*Quercus agrifolia*), orange bush monkeyflower (*Diplacus aurantiacus*) and several species of ceanothus (*Ceanothus* spp.). All areas onsite have been disturbed by agriculture and no shrubs are present.
Coastal and Valley Freshwater Marsh — State Rarity Rank S2.1	**Absent.** Occurs in permanently flooded sites with freshwater and lacking significant flow, dominated by perennial, emergent vegetation such as bulrushes (*Scirpus* sp. and *Schoenoplectus* sp.) and cattails (*Typha* sp.). The ditch within the study area is regularly maintained by agricultural operations and all vegetation removed on a periodic basis.
Freshwater Seep — State Rarity Rank S3.2	**Absent.** Occurs in permanently moist or wet soil that seeps from surfacing groundwater or water table, usually within grassland or meadow communities. Composed of mainly perennial herbs, especially sedges (*Carex* spp.) and rushes (*Juncus* spp.). No seeps are present onsite.

SENSITIVE NATURAL COMMUNITIES	
Southern Vernal Pool — State Rarity Rank SNR	**Absent.** Seasonally wet depressions often underlain by hardpan or claypan soils that may have a hummocky topography with mounds intervening between the depressions. They fill after winter rains and dry completely after the rains have ceased. Herbaceous community is comprised of herbs and grasses adapted to seasonal inundation and growing in rings as pools dry. Occurs from southwestern San Luis Obispo County through the western half of Santa Barbara County into southwestern Ventura County, western Riverside and San Diego. Site is located in the region where southern vernal pools occur. Vernal pool complexes are present in the grasslands to the south of the proposed Well 15 site near Dutard Road. No topographic depressions supporting seasonal ponded water with the association of vernal pool and wetland plants were observed in the study area.
Vernal Marsh — State Rarity Rank S2	**Absent.** Vegetated by low, annual herbs such as sedges (*Carex* spp.) and rushes (*Juncus* spp.). Has marshy conditions or standing water following winter rains but is reduced or completely dry by summer. Often found at the transition between Coastal and Valley Freshwater Marsh and drier upland areas. The site is an actively maintained farm field with no native vegetation present.

Sources: Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986); California Natural Diversity Database (California Department of Fish and Wildlife 2024a); California Sensitive Natural Communities (California Department of Fish and Wildlife 2024d).