

APPENDIX B
SPECIAL-STATUS SPECIES TABLE

Table B-1
Special-Status Plant and Wildlife Species in the Regional Vicinity of the Project Site
Greenzone LLC, Merced County, California

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Plants				
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	-/- 1B.2/-	This annual plant occurs in alkaline habitat, in playas, valley and foothill grassland (adobe clay), and vernal pools. It flowers from March to June and the elevation range is between 3 and 196 feet.	No	Habitat to support this species does not occur on the Project site. Vernal pools, playas, and grasslands do not occur on the site. The soil on-site is slightly alkaline Delhi loamy fine sand and Delhi sand. This species grows in adobe clay. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	-/- 1B.2/-	Annual herb; blooms April to October; occurs on saline or alkaline soils in chenopod scrub, meadows and seeps, and valley and foothill grassland (also sandy soils in this habitat); elevation ~0 to 1,840 feet; documented on foothills, lower mountains, and Central Valley floor; threatened by trampling.	No	Suitable habitat to support this species does not occur on the Project site. The site has slightly alkaline sandy soil and potentially suitable grassland habitat to support this species but is regularly disked and disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Atriplex depressa</i> brittlescale	-/- 1B.2/-	Annual herb; blooms April to October; occurs on alkaline and clay soils in chenopod scrub, meadows and seeps, playas, vernal pools, and valley and foothill grassland; elevation ~ 1 to 1050 feet; threatened by development, grazing, and trampling; documented on Central Valley floor, foothills, and lower mountains.	No	Habitat to support this species does not occur on the Project site. The soil on-site is Delhi loamy fine sand and Delhi sand which are not suitable substrates for this species to grow. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Atriplex minuscula</i> lesser saltscale	-/- 1B.1/-	Annual herb; blooms May to October; occurs on alkaline and sandy soils in chenopod scrub, playas, and valley and	No	The site has slightly alkaline sandy soil and potentially suitable grassland habitat to support this

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		foothill grassland; elevation ~50 to 655 feet; threatened by agriculture and solar energy development; documented primarily on Central Valley floor with some lower foothill occurrences.		species but is regularly disked and disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Atriplex persistens</i> vernal pool smallscale	-/- 1B.2/-	Annual herb; blooms June and August – October; restricted to alkaline vernal pools on the floor of the San Joaquin Valley and is endemic to California; elevation ~ 30 to 375 feet; threatened by agriculture and flood control activities; documented primarily on Central Valley floor.	No	Habitat to support this species does not occur on the Project site. There are no vernal pools on-site and the site is regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Atriplex subtilis</i> subtle orache	-/- 1B.2/-	Annual herb; blooms June, August, September, and possibly October; occurs on alkaline soils in valley and foothill grassland; elevation ~130 to 330 feet; threatened by agriculture and possibly solar energy development; documented primarily on Central Valley floor.	No	The site has slightly alkaline soil and potentially suitable grassland habitat to support this species but is regularly disked and disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Calycadenia hooveri</i> Hoover's calycadenia	-/- 1B.3/-	Annual herb; blooms July – September; occurs on rocky soils in cismontane woodland and valley and foothill grassland; elevation ~ 215-985 feet; threatened by development; documented primarily in eastern foothills of Central Valley.	No	This species prefers rocky soil in cismontane woodland and grassland and is sensitive to disturbance. The site has sandy soil and has fallowed cropland habitat that is regularly disked and disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Castilleja campestris</i> var. <i>succulenta</i> succulent owl's-clover	FT/SE 1B.2/-	Annual herb (hemiparasitic); blooms April – May, sometimes as early as March; occurs vernal pools, swales and some seasonal wetlands, often on acidic soils; elevation ~165-2,460 feet; threatened by urban and agricultural	No	This species prefers wet habitats. Vernal pool, swales, and seasonal wetland habitat to support this species does not occur on the Project sit. Delhi soil is slightly alkaline, and this species prefers acidic soils.

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		development, flood control, grazing, and trampling; documented primarily on eastern Central Valley floor and foothills from Fresno County north.		There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Eryngium racemosum</i> Delta button-celery	-/SE 1B.1/-	This species occurs in riparian scrub, clay soils on sparsely vegetated margins of seasonally flooded flood plains. It flowers from June to September, and it ranges in elevation from 15 to 75 feet.	No	This species prefers riparian areas typically in floodplains. There is no riparian scrub habitat to support this species does not occur on the Project site. The site has slightly alkaline sandy soil and the site is regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Euphorbia hooveri</i> Hoover's spurge	FT/- 1B.2/-	Annual herb; blooms July to September, sometimes into October; occurs in vernal pool habitats from ~80 feet to 820 feet; several scattered occurrences throughout the Central Valley, mostly on the valley floor or surrounding foothills; threatened by grazing, agriculture, and non-native plants.	No	This species occurs in vernal pool habitats and is sensitive to disturbance. Habitat to support this species does not occur on the Project site as there are no vernal pools on-site and the site is regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Extriplex joaquinana</i> San Joaquin spearscale	-/ 1B.2/-	Annual herb; blooms April to September, occurs in alkali playa, chenopod scrub, meadow and seep, and valley and foothill grassland habitats from ~0 feet to 2625 feet; often found in seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> .	No	Habitat to support this species does not occur on the Project site. There are no alkali wetlands or alkali sink scrub on-site and the site is regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	-/ 1B.1/-	This species is found in coastal marshes and swamps, and playas and vernal pools in the interior of California. It flowers between February	No	Habitat to support this species does not occur on the Project site. There are no vernal pools, playas, or swamps present. There are no

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<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	-/- 1B.2/-	and June, and it ranges in elevation from 0 to 4,002 feet. This species is found in valley and foothill grasslands on alkaline flats. It flowers between March and May, and it ranges in elevation from 0 to 656 feet.	No	recorded occurrences for the species within 10-miles of the Project site. This species prefers grasslands. The Project site consists of fallow cropland dominated by ruderal species the site is regularly disked and is highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Monardella leucocephala</i> Merced monardella	-/- 1A/-	This annual herb is found in valley and foothill grasslands on sandy, mesic soil. It flowers between May and August, and it ranges in elevation from 115 to 328 feet.	No	This species prefers sandy mesic soil. Although the Project site has sandy, soil and the southern portion of the Project site has fallowed cropland dominated by ruderal species, the site soil is not mesic and is regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	-/- 1B.1/-	This annual herb is found in coastal scrub, meadows and seeps, valley and foothill grassland on alkaline soils, and in vernal pools. It flowers between April and July, and it ranges in elevation from 0 to 3,970 feet.	No	Habitat to support this species does not occur on the Project site. This species preferential habitat: coastal scrub, meadows, seeps, and grasslands, do not occur on the site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Neostapfia colusana</i> Colusa grass	FT/SE 1B.1/-	Annual herb; blooms from May-August; occurs in vernal pools, usually larger pools and on adobe soils; elevation ~16 to 650 feet; threatened by agriculture, development, overgrazing, hydrologic alterations, non-native plants, and habitat loss/fragmentation; documented	No	Habitat to support this species does not occur on the Project site. The soil on-site is not suitable for this species and there are no vernal pools on-site. There are no recorded occurrences for the species within 10-miles of the Project site.

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<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	FT/SE 1B.1/-	primarily on Central Valley floor from Merced County northward. Annual herb; blooms April to September; occurs in vernal pools; elevation ~32-2,500 feet; threatened by agricultural, development, overgrazing, channelization, and non-native plants; documented primarily on eastern Central Valley floor and foothills from Visalia north.	No	Vernal pool habitat to support this species does not occur on the Project site. This species is sensitive to disturbance and the site is regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Orcuttia Pilosa</i> hairy Orcutt grass	FE/SE 1B.1/-	Annual herb; blooms May to September; occurs in vernal pools; often in acidic and saline-alkaline soils; elevation ~150 to 655 feet; threatened by agriculture, urbanization, overgrazing, non-native plants, and trampling; only known from a few locations on the Central Valley floor and lower foothills in Madera, Merced, and Stanislaus counties, and the very northern portion of the valley in Butte, Glenn, and Tehama counties.	No	The species preferential vernal pool habitat does not occur on-site and the site is regularly disked and highly disturbed. This species is sensitive to disturbance. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Pseudobahia bahiifolia</i> Hartweg's golden sunburst	FE/SE 1B.1/-	Annual herb; blooms March-April; occurs on clay soils in cismontane woodland and valley and foothill grasslands often in acidic conditions; elevation ~45 to 500 feet; threatened by development, agricultural, overgrazing, and trampling; many occurrences very small; documented primarily in Sierra Nevada foothills and valley floor margins from Fresno County north.	No	The soil on-site is slightly alkaline Delhi loamy fine sand and Delhi sand which are not suitable substrates for this species to grow. This species also prefers undisturbed woodland and grassland habitat that is absent from the highly disturbed site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Puccinellia simplex</i> California alkali grass	-/- 1B.2/-	Annual herb; blooms March-May; occurs in vernal moist, alkaline conditions in chenopod scrub,	No	This species prefers wet or moist conditions. There is not sufficient moisture on-site to support this

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		meadows and seeps, valley and foothill grassland, and vernal pools, usually on sinks, flats, and lake margins; elevation ~6 to 3,050 feet; threatened by hydrological alterations, urbanization, agricultural conversion, development, and habitat fragmentation/disturbance; scattered documented occurrence throughout Central Valley, coast ranges, and Mohave desert.		species and the grasslands on the site are regularly disked and highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	-/ 1B.2/-	Perennial rhizomatous herb (emergent); blooms May-October, sometimes into November; occurs in assorted shallow freshwater marshes and swamps, and slow-moving waterways, in sandy loam and clay soils; elevation ~0 to 2,130 feet; threatened by grazing, development, recreational activities, non-native plants, road widening, and channel alteration/maintenance; documented primarily throughout Central Valley on valley floor and surrounding foothills.	No	Habitat to support this species does not occur on the Project site. This species prefers undisturbed wet areas and there is not sufficient moisture on-site to support this species as there are no freshwater marshes, swamps, and slow moving waterways (the canal on-site is concrete lined making it insufficient for the growth of this species near water). The site is also highly disturbed. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Sidalcea keckii</i> Keck's checker-mallow	FE/ 1B.1/-	Annual herb; blooms April-May, sometimes June; occurs on serpentinite and clay soils in cismontane woodland and valley and foothill grassland; elevation ~246 to 2,132 feet; known from only three occurrences in Fresno and Merced counties (other occurrences are unconfirmed).	No	Woodland and grassland habitats are absent from the site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Tuctoria greenei</i> Greene's tuctoria	FE/SR 1B.1/-	Annual herb; blooms May-July, sometimes September; occurs in small	No	Habitat to support this species does not occur on the Project site. This

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		or shallow vernal pools, primarily on Anita clay and Tuscan loam soils; elevation ~100 to 3510 feet; threatened by agriculture, urbanization, overgrazing, and habitat fragmentation; documented on Central Valley floor and surrounding foothills; many occurrences presumed extirpated.		species preferential vernal pool habitat does not occur on-site. This species is also sensitive to disturbance and the site is highly disturbed by agriculture There are no recorded occurrences for the species within 10-miles of the Project site.
Invertebrates				
<i>Bombus crotchii</i> Crotch bumble bee	-/SC -/-	This bee occurs in relatively warm and dry sites, including the inner Coast Range of California and the margins of the Mojave Desert. It can be found in open grassland and scrub habitats. Nesting occurs underground. This species is classified as a short-tongued species, whose food plants include <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , and <i>Salvia</i> .	No	Suitable foraging habitat for this species does not occur on the Project site. This species prefers <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , and <i>Salvia</i> plant species all of which are absent from the project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Branchinecta conservatio</i> conservancy fairy shrimp	FE/- -/-	Found in large, cool-water vernal pools with moderately turbid water that generally last until June; shrimp are generally present in vernal pools from early November to early April; average time to maturity is 49 days, but can be as little as 19 days in warmer pools; eggs laid in spring and persist through dry season as cysts; endemic to the Central Valley and surrounding foothills and mountains; only eight (8) known populations; threatened by habitat loss, degradation, and fragmentation, and interference with vernal pool hydrology.	No	Suitable vernal pool habitat does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.

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<i>Branchinecta longiantenna</i> longhorn fairy shrimp	FE/- -/-	This fairy shrimp species occurs in and is endemic to the eastern margin of the central coast mountains. It is found seasonally in astatic grassland vernal pools and inhabits small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales.	No	Suitable vernal pool habitat does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT/- -/-	Occur a variety of vernal pool habitats that range from small, clear pools to large, turbid and alkaline pools; more common in pools less than 0.05 acre, typically as part of larger vernal pool complexes; adults active from early December to early May; pools must hold water for at least 18 days, the minimum to complete the life cycle if temperatures are optimal; eggs laid in spring and persist through dry season as cysts; current California distribution includes the Central Valley and coast ranges; threatened by habitat loss, degradation, and fragmentation, and interference with vernal pool hydrology.	No	Suitable vernal pool habitat does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	-/- -/-	Found in small, warmer, short-lived vernal pools and grass-bottomed swales less than 663 square feet; can reach maturity in as few as eight (8) days and complete multiple hatchings in a single rainy season; eggs laid in spring and persist through dry season as cysts; endemic to small portion of the Central Valley in Southeastern Sacramento, Southern Sierra Foothill, San Joaquin and Solano-Colusa Vernal	No	Suitable vernal pool habitat does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.

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		Pool Regions; range may be larger as this species was only recently described; potential threatened by habitat loss, degradation, and fragmentation, and interference with vernal pool hydrology.		
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT/- -/-	Closely associated with elderberry shrubs (<i>Sambucus</i> sp.) for food and reproduction; usually along rivers and streams; eggs laid on bark, and larvae hatch and burrow into the stems; adults eat elderberry leaves and flowers; stem diameter must be minimum one inch; exit holes in stems are most common methods for identification; ranges from southern Shasta County to Fresno County.	No	Suitable elderberry shrubs for foraging and reproduction do not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	FE/- -/-	Occur in wide variety of ephemeral wetland habitats from 6.5 square feet to 88 acres in size; majority of occurrences found on High Terrace landforms and Redding and Corning soils; minimum 25 days to mature; average age to reproduction is 54 days; predators of vernal pool fairy shrimp; eggs laid in spring and persist through dry season as cysts; current distribution is in Central Valley and San Francisco Bay area; threatened by habitat loss, degradation, and fragmentation, and interference with vernal pool hydrology.	No	Suitable vernal pool habitat does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Lindieriella occidentalis</i> California linderiella	-/- -/-	Most widely distributed fairy shrimp in California; found in vernal pools from 10.8 square feet to 13 acres supported by most land forms, geologic	No	Suitable vernal pool habitat does not occur on the Project site. There are no recorded occurrences for the

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		formations, and soil types; vernal pool types may include swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities; minimum 31 days to maturity with average 43 days to reproduce; eggs laid in spring and persist through dry season as cysts; current distribution is from Central Valley and coast ranges; threatened by habitat loss, degradation, and fragmentation, and interference with vernal pool hydrology.		species within 10-miles of the Project site.
<i>Lytta molesta</i> molestan blister beetle	-/- -/-	Often found on flowers of native plant species; may be associated with dried vernal pools; adults are herbivorous, with many species feeding mostly on flowers, but some feed on foliage; distribution not well understood but known from Central Valley from Contra Costa County to Tulare and Kern Counties.	No	There is no suitable foraging habitat for this species on the Project site. This species prefers feeding on native plant species and has been known to be associated with vernal pool habitat. The vegetation on the site includes ruderal species and orchard trees and there is no vernal pool habitat for this species on-site. There are no recorded occurrences for the species within 10-miles of the Project site.
Fish <i>Hypomesus transpacificus</i> delta smelt	FT/SE -/-	Only six isolated, documented populations: Friant-Kern Canal and lower reaches of Merced River, Kaweah River, Kings River, San Joaquin River, as well as Kings River above Pine Flat Reservoir and San Joaquin River between Millerton reservoir and Redinger Dam; possible 7th in the Sacramento River watershed; prefer silty backwaters of large rivers in	No	There is no suitable riverine habitat on-site and this species only has six known documented populations in large rivers. There are no recorded occurrences for the species within 10-miles of the Project site.

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		foothill regions; coarse gravel-rubble substrate required for spawning; threatened by dams, agricultural impacts on canals, urbanization, instream mining, and non-native species.		
<i>Mylopharodon conocephalus</i> hardhead	-/- -/SSC	Found in small to large streams in low- to mid-elevation in relatively undisturbed habitats; also in lakes or reservoirs; found in clear, cool, deep streams with a slow but present flow; bottom feeders that focus on invertebrates and aquatic plant material from stream substrates; spawning typically on gravel and rocky substrates; widely distributed: Sacramento-San Joaquin and Russian River drainages, Pit River in Modoc County to Kern River; in San Joaquin drainage can be found in tributary streams but rarely in valley reaches of the river; absent from Cosumnes River.	No	This species has only been known to occur in large streams in relatively undisturbed habitats. There is no sufficient stream habitat for this species on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Oncorhynchus mykiss</i> <i>irideus</i> pop. 11 steelhead-Central Valley DPS	-/- -/-	Anadromous fish species, living in salt water but spawning in fresh water; spawn from December through April; spawn in small, cool streams and tributaries in gravel substrates; seven inch-minimum depth to support migration; ocean and spawning habitats must be connected.	No	Habitat to support this species does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
Amphibians				
<i>Ambystoma californiense</i> California tiger salamander	-/- -/WL	Occurs in ephemeral pools or ponds that mimic them, and that remain inundated for 12 weeks or more; can occupy artificial ponds (ranch stock ponds) if ponds are allowed to go dry	No	Suitable pond habitat to support this species does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.

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<i>Rana draytonii</i> California red-legged frog	FT/- -/-	<p>in the summer; requires nearby upland habitat containing small mammal burrows or crevices that provide refugia; restricted to grasslands and low foothills; lives underground most of the year.</p> <p>Occurs primarily in and near ponds in forests, woodlands, grasslands, coastal scrub, and stream sides with plant cover; mostly in lower elevations; breeding habitat may be permanent or ephemeral; estivates in animal burrows or other moist refuges when ephemeral habitat is dry; endemic to California and northern Baja California; found throughout coastal California from Mendocino County south; inland distribution includes northern Sacramento Valley and foothills of Sierra Nevada south to Tulare County (possibly Kern County); elevation from sea level to 5,000 feet.</p>	No	Suitable habitat to support this species does not occur on the Project site. Although there is an irrigation canal that runs through the site, it is cement-lined and there is little to no vegetation to provide cover for this species. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Spea hammondi</i> western spadefoot	-/- -/-SSC	<p>Species relies on vernal pools for breeding where predators cannot become established; open areas with sand or gravelly soils in a variety of habitats: grasslands, coastal scrub, woodlands, chaparral, sandy washes, lowland river floodplains, alkali flats, foothills, and mountains; endemic to California and northern Baja California; distribution from Redding south throughout Central Valley and foothills, throughout South Coast Ranges into coastal southern California to Transverse mountains and</p>	No	The Project site contains sandy soil however suitable vernal pool habitat does not occur on the Project site to support breeding. There are no recorded occurrences for the species within 10-miles of the Project site.

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		Peninsular mountains; elevation from sea level to 4,500 feet.		
Reptiles				
<i>Actinemys [=Emys] marmorata</i> western pond turtle	-/- -/SSC	Highly aquatic and diurnally active; found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with vegetation and rocky/muddy bottoms; wide variety of habitats; need basking areas near water (logs, rocks, vegetation mats, banks); may enter brackish water and even seawater; digs nest on land near water; range from north of San Francisco Bay area south, including Central Valley.	Yes	The canal that runs through the site is cement lined and does not provide suitable breeding or basking habitat however there is low potential that this species could use the canal as a movement corridor. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Anniella pulchra pulchra</i> silvery legless lizard	-/- -/SSC	This species occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	No	Habitat to support this species does not occur on the Project site. The concrete lining of the canal restricts moisture from the canal water flow from entering the soil. There is no beach dune, chaparral, pine-oak woodland, desert scrub, sandy wash habitat or stream terraces with sycamores, cottonwoods, or oaks for this species. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Gambelia silus [=sila]</i> blunt-nosed leopard lizard	FE/SE -/-	Occurs in semiarid habitats within the southern Central Valley and Cuyama Valley; habitats typically are flat and have large open areas with scattered shrubs for refuge; uses small mammal burrows for shelter; spends most of year underground, surfacing in spring/early summer to breed and eat; hatchlings surface in fall to eat; may interbreed with long-nosed leopard	No	Suitable habitat to support this species does not occur on the Project site. This species historically prefers alkali and desert scrub habitats which are absent from the site. There are no recorded occurrences for the species within 10-miles of the Project site.

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		lizard in Cuyama Valley; threatened by habitat loss/fragmentation and drought; elevation from 100-2,400 feet.		
<i>Phrynosoma blainvillii</i> Blainville's [=coast] horned lizard	-/- -/SSC	Prefers sandy/loose soils in grassland, forests, woodlands, and open chaparral; often found along sand washes and dirt roads with scattered shrubs for refuge; specialized in consuming ants; distribution includes coastal California from Baja California north to the Bay Area, southeastern desert regions, southern Central Valley flats and foothills and surrounding mounts on drier, warmer slopes; threatened by habitat loss/fragmentation and spread of invasive ant species displacing native prey; elevation from sea level to 8,000 feet.	No	Although the soil on-site is loose Delhi loamy fine sand and Delhi sand which provide potential habitat for this species, this species prefers valley foothill hardwood, conifer and riparian habitats, as well as pine-cypress, juniper and annual grassland habitats. These are absent from the site. The ruderal vegetation to the south of the site is dense and subject to regular disking and the likelihood of this species presence is low.
<i>Thamnophis gigas</i> giant gartersnake	FT/ST -/-	Highly aquatic snake found in marshes and sloughs, drainage canals, and irrigation ditches; prefers vegetation close to water for basking; does not venture more than 200 feet from aquatic habitat; elevation from sea level to 400 feet; endemic to California; currently ranges from Glenn County to southern edge of San Francisco Bay Delta, and from Merced County to northern Fresno County.	No	Suitable habitat to support this species does not occur on the Project site. Marshes, sloughs, and irrigation ditches do not occur on-site. There is a canal that runs through the site however it is concrete lined without suitable basking vegetation near the water. There are no recorded occurrences for the species within 10-miles of the Project site.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	-/ST -/-	Colonial breeder that prefers freshwater, emergent wetlands with tall, dense cattails or tules, but also thickets of willow, blackberry, wild	No	Emergent wetland habitat to support this species does not occur on the Project site. There are no

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		rose, and tall herbs; breeding colonies are minimum ~50 pairs; forages in pastures, grain fields, and similar habitats near breeding areas.		recorded occurrences for the species within 10-miles of the Project site.
<i>Aquila chrysaetos</i> golden eagle	-/- -/-	Occurs in broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower and upper montane coniferous forests, pinon & juniper woodlands, valley & foothill grassland; prefers rolling foothills, mountain areas, sage-juniper flats, and desert for foraging; nests in cliff-walled canyons and isolated large trees in open areas; elevational range from sea level to 11,500 feet; may desert nest early in incubation phase if disturbed by humans.	No	Habitat to support this species does not occur on the Project site which includes broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower and upper montane coniferous forests, pinon & juniper woodlands, valley & foothill grassland. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Ardea alba</i> Great egret	-/- -/S	This species occurs in freshwater, brackish, and marine wetlands. The great egret eats mainly small fish but also eats amphibians, reptiles, birds, small mammals and invertebrates. Nests are built up to 100 feet off the ground, often over water, usually in or near the top of a shrub or tree.	No	Habitat to support this species does not occur on the Project site which includes freshwater, brackish, and marine wetlands. The canal also provides an insufficiently suitable food source for this species. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Ardea herodias</i> great blue heron	-/- -/S	Occurs in shallow estuaries, fresh and saline emergent wetlands, rivers, streams, lake and marine shores, croplands, pastures, and mountains above foothills; primary prey is small fish, but will consume rodents, amphibians, snakes, lizards, invertebrates, and birds; usually nests in colonies in tops of secluded large	No	Suitable nesting habitat to support this species does not occur on the Project site. There are no secluded large snags or trees appropriate for nesting on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.

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<i>Athene cunicularia</i> Western burrowing owl	-/- -/SSC	snags or live trees; fairly common year-round throughout most of California. Occupies variety of open, semi-arid to arid habitats throughout central and southern California, including desert regions; prefers open habitats with few shrubs or trees; most active around sunrise and sunset; utilizes burrows constructed by mammals year-round for shelter and nesting; well documented in urban areas where patches of undeveloped areas are present (e.g., canals, airports, drainage basins), and in areas of dense agricultural development where, particularly where canals provide burrow habitat; forages primarily for rodents and insects within several miles of burrow, usually in open grassy habitats if available; has been observed hunting bats and insects around parking lot lights; threats include development resulting in habitat loss/fragmentation.	Yes	There is potential for foraging and nesting on the Project site. Potential burrows in open fields are present on-site, but this species is known only to be winter migrant in the area. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Buteo regalis</i> ferruginous hawk	-/- -/WL	Does not breed in California; found in open grasslands in Central Valley, Coast Ranges, and Modoc Plateau; preys upon small mammals.	No	This species prefers open grasslands which are absent from the Project site. The site contains fallow cropland and fallow orchard. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Buteo swainsoni</i> Swainson's hawk	-/ST -/-	Occurs in grassland, desert and agricultural landscapes in the Central Valley and Antelope Valley; hawks may be resident or migrant; breeds in	Yes	There are potential nesting substrates (i.e. power poles and tall trees) within 0.5 miles of the Project site for this species. There are no

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		stands with few trees in juniper-sage flats, riparian areas, and oak savannah; also observed breeding in large eucalyptus trees along freeways and in trees over rural residences surrounded by agriculture; may nest on ground if no suitable trees are available; nests are platform of sticks, bark, and fresh leaves at or near top of trees; breeds from late March to late August; forages in grassland, open scrub, and grain fields, primarily for rodents.		recorded occurrences for the species within 10-miles of the Project site.
<i>Charadrius montanus</i> mountain plover	-/- -/SSC	Does not breed in California; winter resident from September-March; occurs in grasslands, open sagebrush, and plowed fields throughout central and southern California, except desert regions; feeds on large insects, especially grasshoppers.	No	The project site is west of the species typical range. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Haliaeetus leucocephalus</i> bald eagle	-/SE -/FP	Permanent resident; occurs in forested habitats near water; restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity counties; other scattered breeding occurrences throughout California; not found in high Sierra Nevada; common winter migrant near inland waters in southern California; feeds primarily on fish by swooping from hunting perches; will wade into shallow water to pursue fish; will pursue displaced small mammals in flooded fields; scavenges dead fish and other animals; nests in large, old-growth, or dominant live tree with open branchwork near open water;	No	Suitable nesting and foraging habitat for this species does not occur on the Project site. This species prefers aquatic regions with a prey base of fish and small mammals displaced by flooded fields. It also nests in old growth or large trees with open branchwork near open waters. There are no recorded occurrences for the species within 10-miles of the Project site.

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		nests most often in stands with less than 40% canopy, usually in largest tree in stand.		
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE -/-	This species occurs in riparian habitat during breeding season and prefers early successional habitat. It typically occurs in woodlands along watercourses, include cottonwood-willow forests, oak woodlands, and mule fat scrub.	No	Suitable nesting and foraging habitat for this species does not occur on the Project site. This species prefers woodlands along watercourses, include cottonwood-willow forests, oak woodlands, and mule fat scrub all of which are absent from the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
Mammals				
<i>Antrozous pallidus</i> pallid bat	-/- -/SSC	Occurs throughout California in wide variety of habitats: grasslands, shrublands, woodlands, forests up through mixed conifer; most common in open, dry habitats with rocky areas for roosting; yearlong resident; feeds mainly on insects and arachnids on the ground or by gleaning; day roosts in caves, crevices, mines, and occasionally hollow trees and buildings, including bridges; night roosts in more open sites; maternity colonies form early April with young flying by July or August; needs water; very sensitive to disturbance of roosting sites.	Yes	This species has been known to occasionally use hollow trees and bridges for day roosting however this is uncommon and the species prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Dipodomys heermanni dixonii</i> Merced kangaroo rat	-/- -/-	Subspecies occurring on the east side of the San Joaquin Valley (Lower Sonoran Zone) in open, sandy or dusty grassland habitats; recorded at Snelling, near Merced Falls, and below Lagrange, in Merced and Stanislaus counties.	No	Suitable open sandy or dusty grassland habitat for this species does not occur on the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.

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<i>Dipodomys nitratoides exilis</i> Fresno kangaroo rat	FE/SE -/-	Occurs on alkali open grassland on bare alkaline clay-based soils; nocturnal species; burrows with tunnels approximately 12 to 15 inches below ground; threatened by predation and disease; historically occurred on the valley floor in Kings, Fresno, Madera, and Merced counties, but may be extirpated.	No	Suitable burrowing soil for this species is not present on the Project site. The soil is sandy and this species prefers burrowing in open grassland on bare clay-based soils. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Eumops perotis californicus</i> western mastiff bat	-/ -SSC	Occurs in open, semi-arid to arid habitats throughout southeastern San Joaquin Valley and Coast Ranges from Monterey County southward; also in urban areas; feeds on insects captured in flight; roosts in cliff faces, high buildings, trees, and tunnels; nursery roosts most often in tight rock crevices or crevices in buildings; maternity season begins in March with young flying on their own by September.	Yes	Suitable tree roosting habitat occurs on the Project site in the deciduous orchard in the north section of the site however maternity roosts occur in tight crevices which are absent from the site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Lasiurus blossevillii</i> western red bat	-/ -SSC	Locally common in areas from Shasta County to Mexican border, west of the Sierra Nevada/Cascade crests; migrates between summer and winter ranges; roosts in forests and woodlands from sea level up through mixed conifer forests; not in deserts; feeds on insects over grasslands, shrublands, open woodlands and forests, and croplands; roosts primarily in trees on edge habitats near streams, fields, or urban areas, less often in shrubs; requires water; maternity season from late May through early July; usually does not	Yes	Suitable potential habitat for this species occurs on the Project site. The almond orchard to the north and the fallow cropland to the south of the site provide potential foraging habitat. The canal that runs through the Project site provides a potential water source for this species. There are no recorded occurrences for the species within 10-miles of the Project site.

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<i>Lasiurus cinereus</i> hoary bat	-/- -/-	roost with other bats; rabies is common in this species. Can be found anywhere in California from sea level to 13,200 feet; winters on coast and in southern California; breeds inland and north of winter range; bear young in woodlands and forests; feeds primarily on moths; roosts in dense foliage of medium-large trees; requires water; prefer open habits or habitat mosaics; maternity season from mid-May through early July; forages with other bat species; high incidence of rabies.	Yes	There are orchard trees on the Project site which maintained would provide poor roosting habitat but the orchard is not maintained posing a low possibility of species presence. There is a water source and there is open habitat along the southern portion of the Project site. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Myotis yumanensis</i> Yuma myotis	-/- -/-	Common throughout California except desert regions; wide variety of habitats from sea level to 11,000 feet; prefers open forests and woodlands with sources of water; forages for small fly insects over water sources; roosts in buildings, mines, caves, or crevices, occasionally in swallow nests and under bridges; large maternity colonies; maternity season from late May through June, sometimes August.	Yes	There is a bridge that occurs along the northeast section of the site which may provide potential roosting habitat for this species. There are no recorded occurrences for the species within 10-miles of the Project site.
<i>Taxidea taxus</i> American badger	-/- -/-SSC	Occurs mostly in open, drier stages of shrub, forest, and herbaceous habitats, with friable soils; feeds mostly on fossorial rodents; digs burrows for cover and reproduction; can dig new den each night; litters born mostly in March and April; somewhat tolerant of human activities, but avoids cultivated agricultural habitats.	Yes	The Project site has historically been used for agricultural purposes. The site is highly disturbed and the southern section has been regularly disturbed. There were burrows greater than 4 inches in diameter observed in the northern section, however, that could provide potential suitable habitat. There are no recorded occurrences for the

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<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE/ST -/-	Endemic to the Central Valley; found primarily in San Joaquin Valley, Carrizo Plain, Salinas Valley, Cuyama Valley, and other small valleys in western foothills; occurs in arid to semi-arid grasslands, open shrublands, savannahs, and grazed lands with loose-textured soils; highly adaptable and documented in urban developed areas; uses burrows year-round for shelter, escape from predators, and rearing young; will use man-made structures, such as pipes, for denning; feeds primarily on small mammals, but will also consume birds, reptiles, insects, and scavenge for human food; intensively-maintained agricultural areas avoided; threatened by habitat loss and fragmentation, vehicle strikes, and disease; current mange outbreak in urban population in Bakersfield and in nearby natural areas.	Yes	species within 10-miles of the Project site. Suitable denning habitat for this species potentially occurs on the north section of the Project site where burrows were observed greater than 4 inches in diameter. There are no recorded occurrences for the species within 10-miles of the Project site.
<u>CRPR (California Rare Plant Rank):</u>			FE	Federally Endangered
1A	Presumed Extinct in California		FT	Federally Threatened
1B	Rare, Threatened, or Endangered in California and elsewhere		FC	Federal Candidate Species
2A	Plants presumed extirpated in California, but more common elsewhere		FS	Federally Sensitive
2B	Plants Rare, Threatened, or Endangered in California, but more common elsewhere		SE	State Endangered
<u>CRPR Threat Code Extension:</u>			ST	State Threatened
.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)		SC	State Candidate
			SS	State Sensitive
.2	Fairly endangered in California (20-80% occurrences threatened)		SSC	State Species of Special Concern
.3	Not very endangered in California (<20% of occurrences threatened)		SFP	State Fully Protected
			SR	State Rare
			WL	Watch List