

## **APPENDIX C**

### **DATABASE QUERY RESULTS FOR SPECIAL-STATUS SPECIES AND SENSITIVE NATURAL COMMUNITIES**

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Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<b>Vascular plants</b>									
<i>Abronia maritima</i>	Red sand-verbena	-/-/4.2	CNPS	Nyctaginaceae	perennial herb	February– November	0–330	Coastal dunes	No; potential habitat not present.
<i>Acanthomintha ilicifolia</i>	San Diego thorn- mint	FT/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Lamiaceae	annual herb	April–June	30–3,150	Clay soils in openings of chaparral, coastal scrub, and valley and foothill grassland; vernal pools	Yes; potentially suitable habitat present.
<i>Acmispon prostratus</i>	Nuttall's acmispon	-/-/1B.1	CNPS, CNDDDB	Fabaceae	annual herb	March–June (sometimes July)	0–35	Coastal dunes, sandy soils in coastal scrub	Yes; potentially suitable habitat present.
<i>Adolphia californica</i>	California adolphia	-/-/2B.1	CNPS, CNDDDB	Rhamnaceae	perennial deciduous shrub	December– May	30–2,430	Clay soils in chaparral, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Agave shawii</i> var. <i>shawii</i>	Shaw's agave	-/-/2B.1	CNPS, CNDDDB, MSCP	Agavaceae	perennial leaf succulent	September– May	5–395	Coastal bluff scrub, coastal scrub, maritime succulent scrub	Yes; potentially suitable habitat present.
<i>Ambrosia chenopodiifolia</i>	San Diego bur- sage	-/-/2B.1	CNPS, CNDDDB	Asteraceae	perennial shrub	April–June	180–510	Coastal scrub	Yes; potentially suitable habitat present.
<i>Ambrosia monogyra</i>	Singlewhorl burrobrush	-/-/2B.2	CNPS, CNDDDB	Asteraceae	perennial shrub	August– November	30–1,640	Sandy soils in chaparral and Sonoran Desert scrub	Yes; this species is documented adjacent to Alternatives 1 and 2 (CDFW 2022).
<i>Ambrosia pumila</i>	San Diego ambrosia	FE/-/1B.1	CNPS, CNDDDB, USFWS, MSCP	Asteraceae	perennial rhizomatous herb	April–October	65–1,360	Sandy loam or clay, sometimes alkaline soils and often disturbed areas of chaparral, coastal scrub, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Aphanisma blitoides</i>	Aphanisma	-/-/1B.2	CNPS, CNDDDB, MSCP	Chenopodiaceae	annual herb	February–June	0–1,000	Sandy or gravelly areas of coastal bluff scrub, coastal dunes, coastal scrub	Yes; potentially suitable habitat present.
<i>Arctostaphylos glandulosa</i> subsp. <i>crassifolia</i>	Del Mar manzanita	FE/-/1B.1	USFWS, MSCP	Ericaceae	perennial evergreen shrub	December– June	0–1,200	Sandy soils in maritime chaparral	No; potential habitat not present.

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<i>Arctostaphylos otayensis</i>	Otay manzanita	-/-/1B.2	CNPS, CNDDDB, MSCP	Ericaceae	perennial evergreen shrub	January–April	900– 5,575	Chaparral and cismontane woodland	No; species is not within elevation range of either Alternative.
<i>Artemisia palmeri</i>	San Diego sagewort	-/-/4.2	CNPS, CNDDDB	Asteraceae	perennial deciduous shrub	(sometimes February) May– September	45–3,000	Sandy or mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland	Yes; potentially suitable habitat present.
<i>Asplenium vespertinum</i>	Western spleenwort	-/-/4.2	CNPS	Aspleniaceae	perennial rhizomatous herb	February–June	590– 3,280	Rocky areas of chaparral, cismontane woodland, or coastal scrub	No; species is not within elevation range of either Alternative.
<i>Astragalus deanei</i>	Dean's milk-vetch	-/-/1B.1	CNPS, CNDDDB	Fabaceae	perennial herb	February–May	245– 2,280	Chaparral, cismontane woodland, coastal scrub, riparian forest	No; species is not within elevation range of either Alternative.
<i>Astragalus tener</i> var. <i>titi</i>	Coastal dunes milk-vetch	FE/CE/1B.1	CNPS, CNDDDB, MSCP	Fabaceae	annual herb	March–May	0–165	Sandy soils in coastal bluff scrub; coastal dunes, or often vernal mesic areas of coastal prairie	No; potential habitat not present.
<i>Atriplex coulteri</i>	Coulter's saltbush	-/-/1B.2	CNPS, CNDDDB	Chenopodiaceae	perennial herb	March– October	5–1,510	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Atriplex pacifica</i>	South Coast saltscale	-/-/1B.2	CNPS, CNDDDB	Chenopodiaceae	annual herb	March– October	0–460	Coastal bluff scrub, coastal dunes, coastal scrub, playas	Yes; potentially suitable habitat present.
<i>Baccharis vanessae</i>	Encinitas Baccharis	FT/CE/1B.1	USFWS, MSCP	Asteraceae	perennial deciduous shrub	August, October, November	195– 2,360	Maritime chaparral, cismontane woodland	No; species is not within elevation range of either Alternative.
<i>Berberis nevinii</i>	Nevin's barberry	FE/CE/1B.1	MSCP	Berberidaceae	perennial evergreen shrub	February, March–June	230– 2,705	Chaparral, cismontane woodland, coastal scrub, and riparian scrub	No; species is not within elevation range of either Alternative.
<i>Bergerocactus emoryi</i>	Golden-spined cereus	-/-/2B.2	CNPS, CNDDDB	Cactaceae	perennial stem succulent	May–June	5–1,295	Sandy soils in closed-cone coniferous forest, chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Bloomeria clevelandii</i>	San Diego goldenstar	-/-/1B.1	CNPS, CNDDDB, MSCP	Themidaceae	perennial bulbiferous herb	April–May	160– 1,525	Clay soils in chaparral, coastal scrub, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.

Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<i>Brodiaea filifolia</i>	Thread-leaved Brodiaea	FE/CE/1B.1	USFWS, MSCP	Themidaceae	perennial bulbiferous herb	March–June	82–3,675	Openings in chaparral; cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	–/–/1B.1	CNPS, CNDDDB, MSCP	Themidaceae	perennial bulbiferous herb	May–July	95–5,550	Mesic or clay soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Calandrinia breweri</i>	Brewer's calandrinia	–/–/4.2	CNPS	Montiaceae	annual herb	(sometimes January) March–June	30–4,005	Sandy or loamy soils, or disturbed sites and burn areas in chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Calochortus dunnii</i>	Dunn's mariposa lily	–/CR/1B.2	CNPS, CNDDDB, MSCP	Liliaceae	perennial bulbiferous herb	(sometimes February) April–June	605– 6,005	Gabbroic or metavolcanic and rocky areas of closed-cone coniferous forest, chaparral, valley and foothill grassland	No; species is not within elevation range of either Alternative.
<i>Camissoniopsis lewisii</i>	Lewis' evening- primrose	–/–/3	CNPS	Onagraceae	annual herb	March–May (sometimes June)	0–985	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Ceanothus cyaneus</i>	Lakeside ceanothus	–/–/1B.2	CNPS, CNDDDB, MSCP	Rhamnaceae	perennial evergreen shrub	April–June	770– 2,475	Closed-cone coniferous forest and chaparral	No; species is not within elevation range of either Alternative.
<i>Ceanothus otayensis</i>	Otay Mountain ceanothus	–/–/1B.2	CNPS, CNDDDB	Rhamnaceae	perennial evergreen shrub	January–April	1,965– 3,610	Metavolcanic or gabbroic areas of chaparral	No; species is not within elevation range of either Alternative.
<i>Ceanothus verrucosus</i>	Wart-stemmed ceanothus	–/–/2B.2	CNPS, CNDDDB, MSCP	Rhamnaceae	perennial evergreen shrub	December– May	0–1,245	Chaparral	No; potential habitat not present.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	–/–/1B.1	CNPS, CNDDDB	Asteraceae	annual herb	January– August	0–330	Sandy soils in coastal bluff scrub; coastal dunes	No; potential habitat not present.
<i>Chamaebatia australis</i>	Southern mountain misery	–/–/4.2	CNPS	Rosaceae	perennial evergreen shrub	November– May	980– 3,345	Gabbroic or metavolcanic areas of chaparral	No; species is not within elevation range of either Alternative.

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<i>Chloropyron maritimum</i> subsp. <i>maritimum</i>	Salt marsh bird's- beak	FE/CE/1B.2	CNPS, CNDDDB, MSCP	Orobanchaceae	annual herb (hemiparasitic)	May–October (sometimes November)	0–100	Coastal dunes, coastal salt marshes and swamps	No; potential habitat not present.
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	FE/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Polygonaceae	annual herb	March–May	5–410	Sandy openings in closed-cone coniferous forest, maritime chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Long-spined spineflower	–/–/1B.2	CNPS, CNDDDB	Polygonaceae	annual herb	April–July	95–5,020	Clay soils in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Cistanthe maritima</i>	Seaside cistanthe	–/–/4.2	CNPS	Montiaceae	annual herb	late February– early August	15–985	Sandy soils in coastal bluff scrub, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Clarkia delicata</i>	Delicate clarkia	–/–/1B.2	CNPS, CNDDDB	Onagraceae	annual herb	April–June	770– 3,280	Gabbroic areas of chaparral, cismontane woodland	No; species is not within elevation range of either Alternative.
<i>Clinopodium chandleri</i>	San Miguel savory	–/–/1B.2	CNPS, CNDDDB, MSCP	Lamiaceae	perennial shrub	March–July	390– 3,525	Rocky, gabbroic or metavolcanic areas of chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland	No; species is not within elevation range of either Alternative.
<i>Comarostaphylis diversifolia</i> subsp. <i>diversifolia</i>	Summer holly	–/–/1B.2	CNPS, CNDDDB	Ericaceae	perennial evergreen shrub	April–June	95–2,590	Chaparral and cismontane woodland	No; potential habitat not present.
<i>Convolvulus simulans</i>	Small-flowered morning-glory	–/–/4.2	CNPS	Convolvulaceae	annual herb	March–July	95–2,430	Clay soils or serpentinite seeps in openings in chaparral, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	San Diego sand aster	–/–/1B.1	CNPS, CNDDDB	Asteraceae	perennial herb	June– September	5–375	Coastal bluff scrub, chaparral, coastal scrub	Yes; this species is documented within Alternatives 1 and 2 (CDFW 2022).
<i>Cylindropuntia californica</i> var. <i>californica</i>	Snake cholla	–/–/1B.1	CNPS, CNDDDB, MSCP	Cactaceae	perennial succulent	April–May	95–490	Chaparral, coastal scrub	Yes; potentially suitable habitat present.

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<i>Deinandra conjugens</i>	Otay tarplant	FT/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Asteraceae	annual herb	(sometimes April) May– June	80–985	Clay soils in coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Deinandra floribunda</i>	Tecate tarplant	–/–/1B.2	CNPS, CNDDDB, MSCP	Asteraceae	annual herb	August– October	225– 4,005	Chaparral, coastal scrub	No; species is not within elevation range of either Alternative.
<i>Deinandra paniculata</i>	Paniculate tarplant	–/–/4.2	CNPS	Asteraceae	annual herb	(sometimes March) April– November (sometimes December)	80–3,085	Vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Dichondra occidentalis</i>	Western dichondra	–/–/4.2	CNPS	Convolvulaceae	perennial rhizomatous herb	(sometimes January) March–July	160– 1,640	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Dicranostegia orcuttiana</i>	Orcutt's bird's- beak	–/–/2B.1	CNPS, CNDDDB, MSCP	Orobanchaceae	annual herb (hemiparasitic)	(sometimes March) April– July (sometimes September)	30–1,150	Coastal scrub	Yes; potentially suitable habitat present.
<i>Diplacus clevelandii</i>	Cleveland's bush monkeyflower	–/–/4.2	CNPS	Phrymaceae	perennial rhizomatous herb	April–July	1,475– 6,560	Rocky, gabbroic soils in openings and disturbed areas of chaparral, cismontane woodland, and lower montane coniferous forest	No; species is not within elevation range of either Alternative.
<i>Dudleya attenuata</i> subsp. <i>attenuata</i>	Orcutt's dudleya	–/–/2B.1	CNPS, CNDDDB	Crassulaceae	perennial herb	May–July	5–165	Rocky or gravelly soils in coastal bluff scrub, chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Dudleya blochmaniae</i> subsp. <i>blochmaniae</i>	Blochman's dudleya	–/–/1B.1	CNPS, CNDDDB	Crassulaceae	perennial herb	April–June	15–1,475	Rocky, often clay or serpentinite soils in coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.

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<i>Dudleya brevifolia</i>	Short-leaved dudleya	-/CE/1B.1	MSCP	Crassulaceae	perennial herb	April–May	100–820	Maritime openings in chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Dudleya variegata</i>	Variegated dudleya	-/-/1B.2	CNPS, CNDDDB, MSCP	Crassulaceae	perennial herb	April–June	5–1,905	Clay soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Dudleya viscida</i>	Sticky dudleya	-/-/1B.2	CNPS, CNDDDB, MSCP	Crassulaceae	perennial herb	May–June	30–1,805	Rocky soils in coastal bluff scrub, chaparral, cismontane woodland, coastal scrub	Yes; potentially suitable habitat present.
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	-/-/1B.1	CNPS, CNDDDB	Asteraceae	perennial evergreen shrub	(sometimes July) September–November	95–1,970	Mesic soils in chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Apiaceae	annual / perennial herb	April–June	65–2,035	Mesic soils in coastal scrub, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Erysimum ammophilum</i>	Sand-loving wallflower	-/-/1B.2	CNPS, CNDDDB	Brassicaceae	perennial herb	February–June	0–195	Sandy soils in openings in maritime chaparral, coastal dunes, coastal scrub	Yes; potentially suitable habitat present.
<i>Erythranthe diffusa</i>	Palomar monkeyflower	-/-/4.3	CNPS	Phrymaceae	annual herb	April–June	4,005–6,005	Gravelly or sandy soils in chaparral and lower montane coniferous forest	No; species is not within elevation range of either Alternative.
<i>Euphorbia misera</i>	Cliff spurge	-/-/2B.2	CNPS, CNDDDB	Euphorbiaceae	perennial shrub	December–August (sometimes October)	30–1,640	Rocky soils in coastal bluff scrub, coastal scrub, Mojavean Desert scrub	Yes; potentially suitable habitat present.
<i>Ferocactus viridescens</i>	San Diego barrel cactus	-/-/2B.1	CNPS, CNDDDB, MSCP	Cactaceae	perennial succulent	May–June	5–1,475	Chaparral, coastal scrub, valley and foothill grassland, vernal pools	Yes; this species is documented adjacent to Alternatives 1 and 2 (CDFW 2022).
<i>Frankenia palmeri</i>	Palmer's frankenia	-/-/2B.1	CNPS, CNDDDB	Frankeniaceae	perennial herb	May–July	0–35	Coastal dunes, coastal salt marshes and swamps, playas	No; potential habitat not present.



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<i>Fremontodendron mexicanum</i>	Mexican flannelbush	FE/CR/1B.1	CNPS, CNDDDB, USFWS, MSCP	Malvaceae	perennial evergreen shrub	March–June	30–2,350	Gabbroic, metavolcanic, or serpentinite soils in closed-cone coniferous forest, chaparral, cismontane woodland	No; potential habitat not present.
<i>Galium proliferum</i>	Desert bedstraw	–/–/2B.2	CNPS, CNDDDB	Rubiaceae	annual herb	March–June	3,900–5,350	Rocky and limestone carbonate soils in Joshua tree woodland, Mojavean Desert scrub, pinyon and juniper woodland	No; species is not within elevation range of either Alternative.
<i>Grindelia hallii</i>	San Diego gumplant	–/–/1B.2	CNPS, CNDDDB	Asteraceae	perennial herb	May–October	605–5,725	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland	No; species is not within elevation range of either Alternative.
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	–/–/4.2	CNPS, CNDDDB	Boraginaceae	annual herb	March–May	65–3,135	Clay soils; open grassy areas within chaparral, coastal scrub; valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Hesperovax caulescens</i>	Hogwallow starfish	–/–/4.2	CNPS	Asteraceae	annual herb	March–June	0–1,655	Usually in alkaline soils of valley and foothill grasslands and vernal pools	Yes; potentially suitable habitat present.
<i>Hesperocyparis forbesii</i>	Tecate cypress	–/–/1B.1	CNPS, CNDDDB, MSCP	Cupressaceae	perennial evergreen tree	N/A	260–4,920	Clay, gabbroic or metavolcanic areas of closed-cone coniferous forest, chaparral	No; species is not within elevation range of either Alternative.
<i>Heterotheca sessiliflora</i> subsp. <i>sessiliflora</i>	Beach goldenaster	–/–/1B.1	CNPS, CNDDDB	Asteraceae	perennial herb	March–December	0–4,020	Coastal chaparral, coastal dunes, coastal scrub	Yes; this species is documented within Alternative 2 and adjacent to Alternative 1 (CDFW 2022).
<i>Holocarpha virgata</i> subsp. <i>elongata</i>	Graceful tarplant	–/–/4.2	CNPS	Asteraceae	annual herb	May–November	195–3,610	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland	No; species is not within elevation range of either Alternative.
<i>Hordeum intercedens</i>	Vernal barley	–/–/3.2	CNPS	Poaceae	annual herb	March–June	15–3,280	Coastal dunes, coastal scrub, saline flats and depressions in valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Hosackia crassifolia</i> var. <i>otayensis</i>	Otay Mountain lotus	–/–/1B.1	CNPS	Fabaceae	perennial herb	May–August	1,245–3,295	Metavolcanic, often in disturbed areas of chaparral	No; species is not within elevation range of either Alternative.

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<i>Isocoma menziesii</i> var. <i>decumbens</i>	Decumbent goldenbush	-/-/1B.2	CNPS, CNDDDB	Asteraceae	perennial shrub	April– November	30–445	Chaparral; sandy, often in disturbed areas coastal scrub	Yes; potentially suitable habitat present.
<i>Iva hayesiana</i>	San Diego marsh- elder	-/-/2B.2	CNPS, CNDDDB	Asteraceae	perennial herb	April–October	30–1,640	Marshes and swamps, playas	Yes; this species is documented within Alternative 2 and adjacent to Alternative 1 (CDFW 2022).
<i>Juglans californica</i>	Southern California black walnut	-/-/4.2	CNPS	Juglandaceae	perennial deciduous tree	March–August	165– 2,955	Chaparral, cismontane woodland, coastal scrub, and riparian woodland	Yes; potentially suitable habitat present.
<i>Juncus acutus</i> subsp. <i>leopoldii</i>	Southwestern spiny rush	-/-/4.2	CNPS	Juncaceae	perennial rhizomatous herb	(sometimes March) May– June	5–2,955	Mesic soils in coastal dunes, meadows and alkaline seeps, coastal salt marshes and swamps	No; potential habitat not present.
<i>Lasthenia glabrata</i> subsp. <i>coulteri</i>	Coulter's goldfields	-/-/1B.1	CNPS, CNDDDB	Asteraceae	annual herb	February–June	0–4,005	Coastal salt marshes and swamps, playas, vernal pools	Yes; potentially suitable habitat present.
<i>Lathyrus splendens</i>	Pride-of-California	-/-/4.3	CNPS	Fabaceae	perennial herb	March–June	655– 5,005	Chaparral	No; species is not within elevation range of either Alternative.
<i>Lepechinia ganderi</i>	Gander's pitcher sage	-/-/1B.3	CNPS, CNDDDB, MSCP	Lamiaceae	perennial shrub	June–July	1,000– 3,295	Gabbroic or metavolcanic areas of closed- cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland	No; species is not within elevation range of either Alternative.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	-/-/4.3	CNPS, CNDDDB	Brassicaceae	annual herb	January–July	0–2,905	Chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Leptosyne maritima</i>	Sea dahlia	-/-/2B.2	CNPS, CNDDDB	Asteraceae	perennial herb	March–May	15–490	Coastal bluff scrub, coastal scrub	Yes; potentially suitable habitat present.
<i>Lilium humboldtii</i> subsp. <i>ocellatum</i>	Ocellated Humboldt lily	-/-/4.2	CNPS	Liliaceae	perennial bulbiferous herb	March–July (sometimes August)	95–5,905	Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland	Yes; potentially suitable habitat present.

Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<i>Lycium californicum</i>	California box-thorn	-/-/4.2	CNPS	Solanaceae	perennial shrub	(sometimes December) March, June, July, August	15–490	Coastal bluff scrub, coastal scrub	Yes; potentially suitable habitat present.
<i>Microseris douglasii</i> subsp. <i>platycarpa</i>	Small-flowered microseris	-/-/4.2	CNPS	Asteraceae	annual herb	March–May	45–3,510	Clay soils in cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.
<i>Monardella hypoleuca</i> subsp. <i>lanata</i>	Felt-leaved monardella	-/-/1B.2	CNPS, CNDDDB, MSCP	Lamiaceae	perennial rhizomatous herb	June–August	980–5,165	Chaparral, cismontane woodland	No; species is not within elevation range of either Alternative.
<i>Monardella stoneana</i>	Jennifer's monardella	-/-/1B.2	CNPS, CNDDDB	Lamiaceae	perennial herb	June–September	30–2,590	Usually in rocky intermittent streambeds in closed-cone coniferous forest, chaparral, coastal scrub, riparian scrub	Yes; potentially suitable habitat present.
<i>Monardella viminea</i>	Willowy monardella	FE/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Lamiaceae	perennial herb	June–August	160–740	Alluvial ephemeral washes in chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland	Yes; potentially suitable habitat present.
<i>Mucronea californica</i>	California spineflower	-/-/4.2	CNPS	Polygonaceae	annual herb	March–July (sometimes August)	0–4,595	Sandy soils in chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Myosurus minimus</i> subsp. <i>apus</i>	Little mousetail	-/-/3.1	CNPS, CNDDDB, MSCP	Ranunculaceae	annual herb	March–June	65–2,100	Valley and foothill grassland, alkaline vernal pools	Yes; potentially suitable habitat present.
<i>Nama stenocarpa</i>	Mud nama	-/-/2B.2	CNPS, CNDDDB	Namaceae	annual / perennial herb	January–July	15–1,640	Marshes and swamps on lake margins or riverbanks	Yes; potentially suitable habitat present.
<i>Navarretia fossalis</i>	Spreading navarretia	FT/-/1B.1	CNPS, CNDDDB, USFWS, MSCP	Polemoniaceae	annual herb	April–June	95–2,150	Chenopod scrub, shallow freshwater marshes and swamps, playas, vernal pools	Yes; potentially suitable habitat present.
<i>Navarretia prostrata</i>	Prostrate vernal pool navarretia	-/-/1B.1	CNPS, CNDDDB	Polemoniaceae	annual herb	April–July	5–3,970	Mesic soils in coastal scrub, meadows and seeps; alkaline soils in valley and foothill grassland, vernal pools	Yes; potentially suitable habitat present.

Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coast woolly-heads	-/-/1B.2	CNPS, CNDDDB	Polygonaceae	annual herb	April–September	0–330	Coastal dunes	No; potential habitat not present.
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	Slender cottonheads	-/-/2B.2	CNPS, CNDDDB	Polygonaceae	annual herb	(sometimes March) April–May	160–1,310	Coastal dunes, desert dunes, Sonoran Desert scrub	Yes; documented within Alternatives 1 and 2 (CDFW 2022).
<i>Nolina interrata</i>	Dehesa bear-grass	-/CE/1B.1	MSCP	Ruscaceae	perennial herb	June–July	605–2,505	Gabbroic, metavolcanic, and serpentinite soils in chaparral	No; species is not within elevation range of either Alternative.
<i>Ophioglossum californicum</i>	California adder's-tongue	-/-/4.2	CNPS	Ophioglossaceae	perennial rhizomatous herb	(sometimes December) January–June	195–1,720	Mesic soils in chaparral, valley and foothill grassland, margins of vernal pools	No; species is not within elevation range of either Alternative.
<i>Orcuttia californica</i>	California Orcutt grass	FE/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Poaceae	annual herb	April–August	45–2,165	Vernal pools	Yes; potentially suitable habitat present.
<i>Ornithostaphylos oppositifolia</i>	Baja California birdbush	-/CE/2B.1	CNPS, CNDDDB	Ericaceae	perennial evergreen shrub	January–April	180–2,625	Chaparral	No; potential habitat not present.
<i>Orobanche parishii</i> subsp. <i>brachyloba</i>	Short-lobed broomrape	-/-/4.2	CNPS, CNDDDB	Orobanchaceae	perennial herb (parasitic)	April–October	5–1,000	Sandy soils in coastal bluff scrub, coastal dunes, coastal scrub	Yes; potentially suitable habitat present.
<i>Packera ganderi</i>	Gander's butterweed	-/CR/1B.2	MSCP	Asteraceae	perennial herb	April–June	1,310–3,935	Burned areas and gabbroic outcrops of chaparral	No; species is not within elevation range of either Alternative.
<i>Pentachaeta aurea</i> subsp. <i>aurea</i>	Golden-rayed pentachaeta	-/-/4.2	CNPS	Asteraceae	annual herb	March–July	260–6,070	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland	No; species is not within elevation range of either Alternative.
<i>Phacelia stellaris</i>	Brand's star phacelia	-/-/1B.1	CNPS, CNDDDB	Hydrophyllaceae	annual herb	March–June	0–1,310	Coastal dunes, coastal scrub	Yes; potentially suitable habitat present.

Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<i>Pickeringia montana</i> var. <i>tomentosa</i>	Woolly chaparral-pea	-/-/4.3	CNPS	Fabaceae	evergreen shrub	May–August	0–5,575	Gabbroic, granitic, or clay soils in chaparral	No; potential habitat not present.
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	Torrey pine	-/-/1B.2	CNPS, MSCP	Pinaceae	perennial evergreen tree	N/A	100–525	Chaparral and closed-cone coniferous forest	No; potential habitat not present.
<i>Piperia cooperi</i>	Chaparral rein orchid	-/-/4.2	CNPS	Orchidaceae	perennial herb	March–June	45–5,200	Chaparral, cismontane woodland, valley and foothill grassland	No; potential habitat not present.
<i>Pogogyne abramsii</i>	San Diego mesa mint	FE/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Lamiaceae	annual herb	March–July	295–655	Vernal pools	No; species is not within elevation range of either Alternative.
<i>Pogogyne nudiuscula</i>	Otay Mesa mint	FE/CE/1B.1	CNPS, CNDDDB, USFWS, MSCP	Lamiaceae	annual herb	May–July	295–820	Vernal pools	No; species is not within elevation range of either Alternative.
<i>Quercus dumosa</i>	Nuttall's scrub oak	-/-/1B.1	CNPS, CNDDDB	Fagaceae	perennial evergreen shrub	February–April (sometimes May–August)	45–1,310	Sandy, clay loam soils in closed-cone coniferous forest, chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Quercus engelmannii</i>	Engelmann oak	-/-/4.2	CNPS	Fagaceae	perennial deciduous tree	March–June	160–4,265	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland	No; potential habitat not present.
<i>Ribes viburnifolium</i>	Santa Catalina Island currant	-/-/1B.2	CNPS, CNDDDB	Grossulariaceae	perennial evergreen shrub	February–April	95–1,150	Chaparral, cismontane woodland	No; potential habitat not present.
<i>Romneya coulteri</i>	Coulter's matilija poppy	-/-/4.2	CNPS	Papaveraceae	perennial rhizomatous herb	March–July (sometimes August)	65–3,935	Chaparral, coastal scrub, often in burned areas	Yes; potentially suitable habitat present.
<i>Rosa minutifolia</i>	Small-leaved rose	-/CE/2B.1	CNPS, CNDDDB, MSCP	Rosaceae	perennial deciduous shrub	January–June	490–525	Chaparral, coastal scrub	No; species is not within elevation range of either Alternative.
<i>Salvia munzii</i>	Munz's sage	-/-/2B.2	CNPS, CNDDDB	Lamiaceae	perennial evergreen shrub	February–April	375–3,495	Chaparral, coastal scrub	No; species is not within elevation range of either Alternative.

Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<i>Selaginella cinerascens</i>	Ashy spike-moss	-/-/4.1	CNPS	Selaginellaceae	perennial rhizomatous herb	N/A	65–2,100	Chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Senecio aphanactis</i>	Chaparral ragwort	-/-/2B.2	CNPS, CNDDDB	Asteraceae	annual herb	January–April (sometimes May)	45–2,625	Chaparral, cismontane woodland, coastal scrub	Yes; potentially suitable habitat present.
<i>Sphaerocarpos drewiae</i>	Bottle liverwort	-/-/1B.1	CNPS, CNDDDB	Sphaerocarpaceae	ephemeral liverwort	N/A	295– 1,970	On soil in openings in chaparral, coastal scrub	Yes; this species is documented within Alternatives 1 and 2 (CDFW 2022).
<i>Stemodia durantifolia</i>	Purple stemodia	-/-/2B.1	CNPS, CNDDDB	Plantaginaceae	perennial herb	(sometimes January) April, June, August, September, October, December	590–985	Mesic, sandy soils in Sonoran Desert scrub	No; species is not within elevation range of either Alternative.
<i>Stipa diegoensis</i>	San Diego County needle grass	-/-/4.2	CNPS	Poaceae	perennial herb	February–June	30–2,625	Rocky, often mesic soils in chaparral, coastal scrub	Yes; potentially suitable habitat present.
<i>Streptanthus bernardinus</i>	Laguna Mountains jewelflower	-/-/4.3	CNPS, CNDDDB	Brassicaceae	perennial herb	May–August	2,195– 8,200	Chaparral, lower montane coniferous forest	No; species is not within elevation range of either Alternative.
<i>Stylocline citroleum</i>	Oil neststraw	-/-/1B.1	CNPS, CNDDDB	Asteraceae	annual herb	March–April	160– 1,310	Clay soils in chenopod scrub, coastal scrub, valley and foothill grassland	Yes; potentially suitable habitat present.
<i>Suaeda esteroa</i>	Estuary seablite	-/-/1B.2	CNPS, CNDDDB	Chenopodiaceae	perennial herb	(sometimes May) July– October (sometimes January)	0–15	Coastal salt marshes and swamps	No; potential habitat not present.
<i>Suaeda taxifolia</i>	Woolly seablite	-/-/4.2	CNPS	Chenopodiaceae	perennial evergreen shrub	January– December	0–165	Coastal bluff scrub, coastal dunes, marshes and swamps	No; potential habitat not present.

Table C-1. Database Query Results for Special-status Plant Species

Scientific Name	Common Name	Status <sup>a</sup> Federal/ State/CRPR	Query Sources	Family	Life Form	Blooming Period <sup>b</sup>	Elev. Range <sup>b</sup> (feet)	Habitat Associations <sup>b</sup>	Potential Habitat Within Alternative 1 or 2?
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	-/-/1B.2	CNPS, CNDDDB, MSCP	Picrodendraceae	perennial deciduous shrub	April–May	540–3,280	Chaparral, coastal scrub	No; species is not within elevation range of either Alternative.
<i>Viguiera laciniata</i>	San Diego County viguiera	-/-/4.3	CNPS	Asteraceae	perennial shrub	February–June (sometimes August)	195–2,460	Chaparral, coastal scrub	Yes; species is documented adjacent to Alternatives 1 and 2 (Stillwater Sciences 2021).
<b>Non-vascular plants</b>									
<i>Geothallus tuberosus</i>	Campbell's liverwort	-/-/1B.1	CNPS, CNDDDB	Sphaerocarpaceae	ephemeral liverwort	N/A	30–1,970	Mesic soils in coastal scrub, vernal pools	Yes; potentially suitable habitat present.
<i>Mobergia calculiformis</i>	Light gray lichen	-/-/3	CNPS, CNDDDB	Physciaceae	crustose lichen (saxicolous)	N/A	30–35	Potentially occurs on rocks in coastal scrub	Yes; potentially suitable habitat present.
<i>Tortula californica</i>	California screw-moss	-/-/1B.2	CNPS, CNDDDB	Pottiaceae	moss	N/A	30–4,790	On sandy soils in chenopod scrub, valley and foothill grassland	Yes; potentially suitable habitat present.

a – Status: **Federal:** FE = Federally listed as endangered, FT = Federally listed as threatened, – = No federal status; **State:** CE = California State listed as endangered, CT = California State listed as threatened, CR = California State listed as rare, – = No state status; **CRPR (California Rare Plant Rank) List Ranks:** List 1B = Plants rare, threatened, or endangered in California and elsewhere, List 2B = Plants rare, threatened, or endangered in California, but more common elsewhere, List 3 = More information needed about this plant, a review list, List 4 = Plants of limited distribution, a watch list; **CRPR Threat Ranks:** 0.1 = Seriously threatened in California (high degree/immediacy of threat), 0.2 = Fairly threatened in California (moderate degree/immediacy of threat), 0.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known)

b – CNPS (2020) unless otherwise cited

Table C-2. CNDDDB Query Results for Sensitive Natural Communities

Natural Community (Holland 1986)	Rank <sup>a</sup> (Global/State)	Habitat Description <sup>b</sup>
Southern Interior Cypress Forest	G2/S2.1	A dense, fire-maintained, low forest dominated by either <i>Cupressus nevadensis</i> , <i>C. forbesii</i> , or <i>C. stephensonii</i> . Many stands are even-aged due to fire history.
San Diego Mesa Claypan Vernal Pool	G2/S2.1	Similar to Northern Claypan Vernal Pools, but less saline/alkaline. Soils are finer textured and greyer than San Diego Mesa Hardpan Vernal Pools and lack an iron cemented hardpan.
Southern Coastal Salt Marsh	G2/S2.1	Similar to Northern Coastal Salt Marsh but with a longer growing season and a greater abundance of suffrutescent species. Associated species include <i>Atriplex watsonii</i> , <i>Batis maritima</i> , <i>Lycium californicum</i> , <i>Monanthochloe littoralis</i> , <i>Suaeda californica</i> , and <i>Salicornia subterminalis</i> . <i>Frankenia</i> , <i>Suaeda</i> , and/or <i>Salicornia subterminalis</i> often occur along the upper edges of the marshes; <i>Salicornia bigelovii</i> , <i>S. virginica</i> and <i>Batis maritima</i> at middle elevations; and <i>Spartina</i> closest to open water.
Southern Riparian Scrub	G3/S3.2	None provided.
Southern Willow Scrub	G3/S2.1	Dense, broadleafed, winter-deciduous riparian thickets dominated by <i>Salix</i> spp.; associates include <i>Populus fremontii</i> and <i>Platanus racemosa</i> with sparse understory. Soils are sandy or fine gravelly alluvium. Requires repeated flooding to prevent succession.
Maritime Succulent Scrub	G2/S1.1	A low, open scrub dominated by drought deciduous, subligneous, malacophyllous shrubs with very little understory. Occurs on thin rocky or sandy soils, often on steep slopes of coastal headlands and bluffs.

a – Rank: **Global Rank:** G2 = Imperiled, G3 = Vulnerable; **State Rank:** S1 = Critically imperiled, S2 = Imperiled, S3 = Vulnerable; **Additional Threat Ranks:** 0.1 = Very threatened, 0.2 = Threatened

b – Holland (1986)



Table C-3. Database Query Results for Special-status Fish Species

Common Name Scientific Name	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur in the Tijuana River Watershed
Pacific lamprey <i>Entosphenus tridentatus</i>	N/A	–/SSC	Coastal rivers and stream with access to the ocean	Spawning in gravel riffles with fast moving currents and rearing in soft sand or mud	Not documented. Moderate potential to occur; limited by habitat availability and barriers.
North American green sturgeon: southern Distinct Population Segment (DPS) <i>Acipenser medirostris</i>	NMFS	FT/SSC	San Francisco, San Pablo, Suisun, and Humboldt bays; Sacramento-San Joaquin Delta, Sacramento and Klamath rivers	Spawns in pools of large freshwater river mainstems with cool water and cobble, clean sand, or bedrock	Not documented. No potential to occur in the Tijuana River because habitat and water conditions are not suitable for the species. Low potential to occur in marine waters.
Steelhead, Southern California DPS <i>Oncorhynchus mykiss</i> <sup>b</sup>	CNDDB, NMFS	FE/–	Federal listing refers to populations from the Santa Maria River in San Luis Obispo County south to the U.S.-Mexico border	Flowing waters, riffles and pools in streams and rivers that connect with the ocean and have high dissolved oxygen	Not documented. Moderate potential to occur; limited by habitat availability, water conditions and barriers, and predatory non-native species.
Coastal rainbow trout <i>Oncorhynchus mykiss</i> <sup>b</sup>	CNDDB	FE (below barriers only)/–	Western slopes of the Sierra Nevada in waters draining to the Pacific Ocean. Below barriers are considered steelhead in Southern California	Flowing waters, riffles and pools in streams and rivers that connect with the ocean and have high dissolved oxygen	Rare or extirpated from much of watershed but observed recently or have potential to occur in tributaries.
Tidewater goby <i>Eucyclogobius newberryi</i>	CNDDB, USFWS	FE/SSC	San Diego County north to the mouth of the Smith River in Del Norte County	Coastal lagoons and uppermost zone of brackish large estuaries consisting of fairly still but not stagnant water and high oxygen levels; prefer sandy substrate for spawning, but can be found on silt, mud, or rocky substrates; can occur in water up to 4.6 m in lagoons and within a wide range of salinities (0–42 ppt)	Not documented. Low potential to occur; too far from suitable coastal habitats and fish barriers that preclude movement upstream to project areas.
Unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	CNDDB	FE/SE	Federal listing refers to Upper Santa Clara River, Bouquet Creek and Soledad Canyon Creek	Cool (<75.2°F [24°C]), clear water with abundant vegetation	Not documented. Moderate potential to occur.

a – Status Codes: **Federal:** FE = Listed as endangered under the federal Endangered Species Act; **State:** SE = Listed as Endangered under the California Endangered Species Act, SSC = CDFW Species of Special Concern

b – Note that *O. mykiss* are separated into two groups, coastal rainbow trout and steelhead, based on life history differences, management implications, and the focus of this document.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name Scientific Name	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
<b>Invertebrates</b>					
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i>	CNDDDB, USFWS, MSCP	FE/–	Southern California coastal mesa system in Orange and San Diego counties	Occupies coastal vernal pool complexes and similar ephemeral wetland types	Low; documented occurrence near Oneonta Slough (in designated critical habitat), approximately 2.5 miles north of Smuggler’s Gulch (from 2008 and an undated observation) (SDMMP 2010, CDFW 2022); known to occupy vernal pool complexes in the TRNERR (IDEALS-AGEISS 2016); suitable coastal vernal pool habitat is not suspected to be present in the project areas.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	CNDDDB, USFWS, MSCP	FE/–	Santa Barbara to San Diego; critical habitat designated in Ventura County, Orange County, and San Diego County	Occupies vernal pools, ponds, and other ephemeral pools or pool complexes	Low; multiple documented occurrences between 2002 and 2017 in the canyon complexes of Otay Mesa (Moody Canyon, Dillon Canyon, and Spring Canyon), indicating a possible population within 2 miles of the project areas, but separated by urban development and highways (CDFW 2022); suitable coastal vernal pool habitat is not suspected to be present in the project areas.
Crotch’s bumble bee <i>Bombus crotchii</i>	CNDDDB	–/SCE	Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California	Inhabits open grassland and scrub habitats; nests are often located underground in abandoned rodent burrows, or above ground in tufts of grass, rock piles, or tree cavities	Low; documented occurrence from 2017 near Tijuana River National Estuarine Research Reserve, approximately 2 miles from Smuggler’s Gulch (CDFW 2022); potentially suitable scrub and grassland habitat present in Smuggler’s Gulch.
Monarch butterfly (Western North American ACU) <i>Danaus plexippus</i>	USFWS	FC	Coastal California	Coastal California groves of blue gum eucalyptus ( <i>Eucalyptus globulus</i> ), Monterey pine ( <i>Pinus radiata</i> ), and Monterey cypress ( <i>Cupressus macrocarpa</i> ); milkweed ( <i>Asclepias</i> spp.) is a host plant required for species’ breeding	None/Low; no suitable overwintering groves in the project areas.
Hermes copper butterfly <i>Lycaena Hermes</i>	CNDDDB	FPT/–	From the vicinity of Fallbrook in northern San Diego County south to near Santo Tomás in Baja California, Mexico	Host plants include spiny redberry ( <i>Rhamnus crocea</i> ) in coastal sage scrub and chaparral vegetation; primary nectar source is California buckwheat ( <i>Eriogonum fasciculatum</i> )	Low; project areas outside of species’ known range; documented occurrences from 2004 and 2006 near Sweetwater Reservoir, approximately 10 miles from project areas (CDFW 2022).
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	CNDDDB, USFWS	FE/–	Coastal slopes of southern California, from Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties	Grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub; primary host plants are native species of plantain	Low/Moderate; documented occurrence from 2018 and 2020 in the Nelson Sloan Quarry Property between the ITP and Smuggler’s Gulch (Dudek 2021); additional occurrences have been documented in 2001 near Otay Valley Regional Park, approximately 6 miles from project areas (CDFW 2022); suitable habitat on the mesa slopes near Smuggler’s Gulch.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
<b>Amphibians</b>					
Western spadefoot <i>Spea hammondi</i>	CNDDDB	Status Review <sup>b/</sup> SSC	Near Redding, south throughout the Central Valley and nearby foothills; Coast Ranges south of Monterey Bay; and coastal southern California south of the Transverse Mountains and west of the Peninsular Mountains	Areas with sparse vegetation and/or short grasses in sandy or gravelly soils; primarily in washes, river floodplains, alluvial fans, playas, alkali flats, among grasslands, chaparral, or pine-oak woodlands; breeds in ephemeral rain pools with no predators	Low; historical occurrences documented approximately 1 mile from project areas, most recent occurrence from 2004 was documented less than 1 mile from Smuggler's Gulch (CDFW 2022); No suitable habitat identified in the project areas.
Arroyo toad <i>Bufo californicus</i>	CNDDDB, USFWS, MSCP	FE/SSC	San Luis Obispo County to Baja California	Washes, arroyos, sandy riverbanks, riparian areas with willows, sycamores, oaks, cottonwoods; needs exposed sandy streambanks with stable terraces for burrowing, with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding	Low; documented occurrences near Sweetwater Reservoir (in 2003), and Sweetwater River downstream of Loveland Reservoir (in 2001 and 2005), over 10 miles from the Action Area (CDFW 2022).
California red-legged frog <i>Rana draytonii</i>	MSCP	FT/SSC	Largely restricted to coastal drainages on the central coast from Mendocino County to Baja California; in the Sierra foothills south to Tulare and possibly Kern counties	Breeds in still or slow-moving water with emergent and overhanging vegetation, including wetlands, wet meadows, ponds, lakes, and low-gradient, slow moving stream reaches with permanent pools; uses adjacent uplands for dispersal and summer retreat	None; no suitable habitat in project areas; species' is presumed extirpated from southern California coastal historical range (Nafis 2022).
<b>Reptiles</b>					
Western pond turtle <i>Actinemys marmorata</i>	MSCP	-/SSC	From the Oregon border along the coast ranges to the Mexican border, and west of the crest of the Cascades and Sierras	Permanent, slow-moving fresh or brackish water with available basking sites and adjacent open habitats or forest for nesting	Low; marginally suitable habitat in project areas, most likely to use gravel burrow pits and ponded areas outside of the project areas.
Coast horned lizard <i>Phrynosoma blainvillii</i>	CNDDDB, MSCP	-/SSC	West of deserts and Cascade-Sierran highlands, as far north as Shasta Reservoir	Open areas with sandy soil and/or patches of loose soil and low/scattered vegetation in scrublands, grasslands, conifer forests, and woodlands; frequently found near ant hills	Moderate; documented research grade sightings near Yogurt Canyon (iNaturalist 2022); suitable habitat is present in all project areas.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Southern California legless lizard <i>Anniella stebbinsi</i>	CNDDDB	–/SSC	Throughout Southern California south of Transverse Ranges	Frequents sparsely vegetated beaches, chaparral, pine-oak woodland, and streamside growth of sycamores, cottonwoods, and oaks; occasionally enters desert scrub; requires loose soil habitats for burrowing	Moderate; documented occurrences within 1 mile of project areas along Tijuana River from 2012, 2014, 2016, and 2017 (CDFW 2022); potential habitat within Smuggler’s Gulch and Tijuana River Basin.
California glossy snake <i>Arizona elegans occidentalis</i>	CNDDDB	–/SSC	Inland areas South of San Francisco Bay to Santa Barbara, where distribution extends along coastal regions to Baja California, Mexico	Most common in desert habitats, prefers scrub and grassland with loose or sandy soils	Low; historical occurrences documented within 1 mile of project areas east of the Tijuana River and in Border Field State Park from 1916 and 1999, respectively (CDFW 2022); marginally suitable habitat in Smuggler’s Gulch.
Coastal whiptail <i>Aspidoscelis tigris stejnegeri</i>	CNDDDB	–/SSC	Along coastal ranges from Ventura County to Baja California, Mexico	Habitat generalists found in desert, woodland, and riparian communities	None; documented occurrence near the California/Mexico International Border, approximately 8 miles east of Tijuana River Basin area (dated in the early 2000’s) (CDFW 2022); no suitable habitat in project areas.
Baja California coachwhip <i>Masticophis fuliginosus</i>	CNDDDB	–/SSC	Along the border of Southern California and Mexico, though mostly occurs in Baja California, Mexico	Occupies a variety of habitats, including desert, prairie, scrubland, juniper-grassland, woodland, thornforest, and farmland; usually avoids dense vegetation	Moderate; research grade community observations documented in 2020 near Tijuana River Valley Regional Park (iNaturalist 2022); suitable coastal scrub, sage scrub, and succulent scrub habitats available in project areas.
Two-striped garter snake <i>Thamnophis hammondi</i>	CNDDDB	–/SSC	Along the coast of California from Salinas, Monterey County to Baja California, Mexico	In or near permanent fresh water, often along streams with rocky beds and riparian vegetation	Low; documented occurrence from 2004 near Tijuana River, less than 2 miles Smuggler’s Gulch (CDFW 2022); marginally suitable habitat along Tijuana River and in Tijuana River Basin due to urban runoff and brackish water.
Red diamond rattlesnake <i>Crotalus ruber</i>	CNDDDB	–/SSC	Southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California	Arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas; on the desert slopes of the mountains, it ranges into rocky desert flats	None; documented occurrence from 2006 west of Rock Mountain, approximately 5 miles from project areas (CDFW 2022); no suitable habitat in project areas.
Coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	CNDDDB	–/SSC	From the northern Carrizo Plains in San Luis Obispo County, south through the coastal zone, south and west of the deserts, into coastal northern Baja California	Coastal chaparral, desert scrub, washes, sandy flats and rocky areas	None; documented occurrence from 2004 near O’Neal Canyon, approximately 10 miles east of Tijuana River Basin (CDFW 2022); no suitable habitat in project areas.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
<b>Birds</b>					
California brown pelican <i>Pelecanus occidentalis</i>	CNDDDB, MSCP	FD/SD, SFP	Nests in the Gulf of California and along the coast to West Anacapa and Santa Barbara Islands; non-nesting range along entire California coast	Nests on low rocky or brushy slopes of undisturbed islands; rarely seen inland or far out at sea; roost habitat includes islands, offshore rocks, beaches, mudflats, wharfs, piers, breakwaters, and jetties	High; <sup>c</sup> documented occurrences from 2015 and 2018 in Smuggler's Gulch and Tijuana River project areas, respectively (eBird 2022).
California condor <i>Gymnogyps californianus</i>	USFWS	FE/SE	The Coast ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi mountains., and southern Sierra Nevada	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude; deep canyons containing clefts in the rocky walls provide nesting sites; forages up to 100 miles from roost/nest	None; outside of species' range.
Bald eagle <i>Haliaeetus leucocephalus</i>	MSCP	FD, BGEPA/SE, SFP	Permanent resident and uncommon winter migrant, found nesting primarily in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity counties	Large bodies of water or rivers with abundant fish, uses snags or other perches; nests in advanced-successional conifer forest near open water	Low; <sup>c</sup> documented foraging in 2019 near Tijuana River project areas (eBird 2022); no suitable nesting habitat and marginally suitable foraging habitat in project areas.
Northern harrier <i>Circus cyaneus</i>	CNDDDB, MSCP	-/SSC	Year-round resident; scattered throughout California; in the northwest, nests largely within coastal lowlands from Del Norte County south to Bodega Head in Sonoma County, inland to Napa County	Nests, forages, and roosts in wetlands or along rivers or lakes, but also in grasslands, meadows, or grain fields	High; recent documented occurrences throughout all project areas (eBird 2022); documented occurrence from 2004 less than 1 mile from Smuggler's Gulch (CDFW 2022); suitable foraging and roosting habitat present in project areas; no suitable nesting habitat in project areas.
White-tailed kite <i>Elanus leucurus</i>	Parsons 2005	-/SFP	Year-round resident; found in nearly all lowlands of California west of the Sierra Nevada mountains and the southeast deserts	Lowland grasslands and wetlands with open areas; nests in trees near open foraging areas	High; documented occurrences in project areas (2019–2020) and throughout the Tijuana River Estuary (eBird 2022); observations in the ITP and SBWRP parcels in 2004 (Parsons 2005) and during the April 2021 site visit by Stillwater Sciences.
Swainson's hawk <i>Buteo swainsoni</i>	CNDDDB, MSCP	-/ST	Summer resident; breeds in lower Sacramento and San Joaquin valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields	Low/Moderate <sup>c</sup> (rare migrant); documented flyovers from 2019 and 2021 approximately 1 mile from Smuggler's Gulch and Tijuana River project areas (eBird 2022); project areas may be visited by rare migrants during pre-breeding migration in the late winter and spring, project areas are outside of breeding range.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Golden eagle <i>Aquila chrysaetos</i>	MSCP	BGEPA/–	Uncommon permanent resident and migrant throughout California, except center of Central Valley	Open woodlands and oak savannahs, grasslands, chaparral, sagebrush flats; nests on steep cliffs or medium to tall trees	Low; <sup>c</sup> documented foraging near Tijuana River project areas in 2016 (eBird 2022); no suitable nesting habitat and marginally suitable foraging habitat in project areas.
American peregrine falcon <i>Falco peregrinus anatum</i>	CNDDDB, MSCP	FD/SD, SFP	Most of California during migrations and in winter; nests primarily in the Coast Ranges, northern Sierra Nevada Mountains, and other mountainous areas of northern California	Wetlands, woodlands, cities, agricultural lands, and coastal areas with cliffs (and rarely broken-top, predominant trees) for nesting; often forages near water	Moderate; <sup>c</sup> documented flyovers in Smuggler’s Gulch and Tijuana River project areas in 2021 (eBird 2022); suitable foraging habitat, including wetlands, agricultural lands, and marshes present in project areas; outside of breeding range.
Yellow rail <i>Coturnicops noveboracensis</i>	CNDDDB	–/SSC	Extremely rare	Marshes	None; outside of species’ range.
California black rail <i>Laterallus jamaicensis coturniculus</i>	CNDDDB	–/ST, SFP	Northern San Francisco Bay area (primarily San Pablo Bay, Suisun Bay, and Sacramento-San Joaquin Delta) south to San Diego (California/ Mexico border)	Large tidally influenced marshes with saline to brackish water, typically with a high proportion of pickleweed ( <i>Salicornia virginica</i> ); also can be associated with bulrush ( <i>Schoenoplectus</i> spp.), cattail ( <i>Typha</i> spp.), or rushes ( <i>Juncus</i> spp.); peripheral vegetation at and above mean high higher water necessary to protect nesting birds during extremely high tides	Low; documented historical occurrence from 1966 in downstream end of Tijuana River (CDFW 2022).
Light-footed Ridgway’s rail <i>Rallus obsoletus levipes</i>	CNDDDB, USFWS	FE/SE, SFP	Coastal Santa Barbara to Baja California	Coastal salt marshes with tall dense California cordgrass, wrack deposits, and available high marsh zones to provide refugia during high tides	Moderate; nests in the Tijuana River Estuary, potentially the second largest population in the U.S. (CA DPR, USFWS, and NOAA, 2010); suitable nesting habitat downstream of project areas.
Western snowy plover <i>Charadrius nivosus nivosus</i>	CNDDDB, USFWS, MSCP	FT/SSC	Nests in locations along the California coast, including the Eel River in Humboldt County; nests in the interior of the state in the Central Valley, Klamath Basin, Modoc Plateau, and Great Basin, Mojave, and Colorado deserts; winters primarily along coast	Barren to sparsely vegetated beaches, barrier beaches, salt-evaporation pond levees, and shores of alkali lakes; also nests on gravel bars in rivers with wide flood plains; needs sandy, gravelly, or friable soils for nesting	Low; <sup>c</sup> nesting documented in 2006 near the Tijuana River mouth area and surrounding dunes (CA DPR, USFWS, and NOAA, 2010); no suitable nesting habitat in project areas.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Mountain plover <i>Charadrius montanus</i>	MSCP	–/SSC	Winter visitor; found in the Central Valley south of Yuba County, along the coast in parts of San Luis Obispo, Santa Barbara, Ventura, and San Diego counties; parts of Imperial, Riverside, Kern, and Los Angeles counties	Occupies open plains or rolling hills with short grasses or very sparse vegetation; nearby bodies of water are not needed; may use newly plowed or sprouting grain fields	Moderate; <sup>c</sup> documented occurrences in 2020 in the sod fields near Tijuana River project areas (eBird 2022); species does not breed in area, winter migrant only.
California least tern <i>Sternula antillarum browni</i>	CNDDDB, USFWS, MSCP	FE/SE, SFP	Pacific coast from San Francisco to Baja California	Sparsely vegetated coastal beaches and estuaries near shallow waters, above high tide line	Low; <sup>c</sup> eBird sightings from 2021 and 2019 near Goat Canyon (approximately 1 mile from Smuggler’s Gulch), and downstream of Tijuana River project areas, respectively (eBird 2022); nesting has been documented in 2006 on the beaches of the Tijuana River Estuary (CA DPR, USFWS, and NOAA, 2010); no suitable nesting habitat in the project areas.
Western yellow-billed cuckoo <i>Coccyzus americanus</i>	CNDDDB	FT/SE	Breeds in limited portions of the Sacramento River and the South Fork Kern River; small populations may nest in Butte, Yuba, Sutter, San Bernardino, Riverside, Inyo, Los Angeles, and Imperial counties	Summer resident of valley foothill and desert riparian habitats; nests in open woodland with clearings and low, dense, scrubby vegetation	None; documented occurrence from 2015 near Lower Otay Reservoir, approximately 8 miles from Tijuana River Basin (CDFW 2021); outside of species’ known range.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	CNDDDB, MSCP	–/SSC	Year-round resident throughout much of the state; Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast	Level, open, dry, heavily grazed, or low-stature grassland or desert vegetation with available burrows	Low; documented occurrences from 2013 near Tijuana River (in the sod farms east of Dairy Mart Road), historical occurrences (1978–1985) within 1 mile of Smuggler’s Gulch (eBird 2022); potential population exists along Oneonta Slough with occurrences documented in 2018–2021 (eBird 2022); no suitable nesting habitat in the project areas.
Coastal cactus wren <i>Campylorhynchus brunneicapillus sandiegensis</i>	CNDDDB, MSCP	–/SSC	From extreme northwestern Baja California north through the coastal lowlands of San Diego County and apparently into southern Orange County	Thickets of chollas ( <i>Opuntia prolifera</i> ) or prickly-pear cacti ( <i>O. littoralis</i> , <i>O. oricola</i> ), and coastal sage scrub tall enough to support and protect the birds’ nests	None; historical occurrences from 1983 and 1985 near Wruck Canyon, approximately 2 miles east of Tijuana River Basin (CDFW 2022); potentially suitable coastal sage scrub habitat in Smuggler’s Gulch, Goat Canyon, and Tijuana River Basin, but no occurrences near project areas in 20 years.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	CNDDDB, USFWS, MSCP	FE/SE	In lowland southern California, breeds on the San Luis Rey River, San Diego County; on Camp Pendleton; and on the Santa Ynez River, Santa Barbara County <sup>c</sup>	Riparian habitat, commonly wider than 10 meters; nesting occurs in native willow ( <i>Salix</i> spp), nonnative tamarisk ( <i>Tamarix</i> spp.), and other riparian vegetation stands 4–7 meters high	High; <sup>c</sup> documented sightings along the Tijuana River 2018–2021 (eBird 2022); observed near Dairy Mart Road during the April 2021 site visit by Stillwater Sciences; suitable foraging habitat upstream of Dairy Mart Road; project areas are outside of species' breeding range.
Least Bell's vireo <i>Vireo bellii pusillus</i>	CNDDDB, USFWS, MSCP	FE/SE	Summer resident; breeds in scattered locations around southern California	Nests in dense vegetative cover of riparian areas; often nests in willow or mulefat; forages in dense, stratified canopy	High; nesting individuals documented along Tijuana River and Smuggler's Gulch (CDFW 2022, eBird 2022, CA DPR, USFWS, and NOAA, 2010); observed in Smuggler's Gulch and downstream areas of Tijuana River (near Sunset Road, the Gravel/Duck Ponds, and along the Sunset trail to Tijuana River) during the April 2021 site visit by Stillwater Sciences; designated critical habitat in the project areas near Tijuana River and Dairy Mart Road.
Coastal California gnatcatcher <i>Poliptila californica californica</i>	CNDDDB, USFWS	FT/SSC	Permanent resident of Southern California	Low, coastal sage scrub in arid washes, on mesas, and on slopes	High; documented occurrences from 2021 in Smuggler's Gulch (eBird 2022); additional occurrences from 2020 within 1 mile of the Action Area, and throughout access roads to Tijuana River National Estuarine Research Reserve (Monument Road) (eBird 2022).
Yellow warbler <i>Setophaga petechia</i>	CNDDDB	–/SSC	Summer resident; nests in most of California, except most of the Central Valley, high Sierras, and Mojave and Colorado deserts	Open canopy, deciduous riparian woodland close to water, along streams or wet meadows	High; documented occurrences from 2020 in Smuggler's Gulch and Tijuana River Basin (eBird 2022); observed near Hollister Street (north of Dairy Mart Road) during the April 2021 site visit by Stillwater Sciences; suitable riparian habitat in Tijuana River north of Dairy Mart Road; marginally suitable riparian habitat in Smuggler's Gulch.
Yellow-breasted chat <i>Icteria virens</i>	CNDDDB	–/SSC	Uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada	Early successional riparian habitats with a dense shrub layer and an open canopy	High; documented occurrences from 2020 in Smuggler's Gulch and throughout Tijuana River National Estuarine Research Reserve (eBird 2022); multiple observations north of Dairy Mart Road (Dairy Mart Ponds, Hollister Street, and Sunset Road) during the April 2021 site visit by Stillwater Sciences; suitable riparian habitat in Tijuana River north of Dairy Mart Road and Smuggler's Gulch.



Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Belding's savannah sparrow <i>Passerculus sandwichensis beldingi</i>	CNDDDB, MSCP	–/SE	From Santa Barbara south through San Diego County	Inhabits coastal salt marshes; nests in pickleweed ( <i>Salicornia</i> ) on and about margins of tidal flats	Moderate; documented occurrences from 2017 in Tijuana River upstream of Dairy Mart Road (eBird 2022); nesting has been documented in the Oneonta Lagoon (north of Tijuana River), and in the southern edges of the wetlands of the Tijuana River Estuary (CA DPR, USFWS, and NOAA, 2010); suitable foraging habitat in Tijuana River; no suitable nesting habitat in the project areas.
Large-billed savannah sparrow <i>Passerculus sandwichensis rostratus</i>	MSCP	–/SSC	Post-breeding dispersants regularly reach southeastern (Salton Sea) and south-coastal California, generally from July through February	Inhabits coastal salt marshes; breeds in salt marshes and alkaline sumps	Low <sup>c</sup> (rare migrant); documented occurrences in the Tijuana River Estuary from 2018 and 2019 (eBird 2022); marginally suitable habitat in project areas; considered a rare migrant to San Diego area and breeds in northeastern Baja California and northwestern Sonora (Wheelwright and Rising 2020).
Tricolored blackbird <i>Agelaius tricolor</i>	CNDDDB, MSCP	–/ST, SSC	Permanent resident, but makes extensive migrations both in breeding season and winter; common locally throughout Central Valley and in coastal areas from Sonoma County south	Feeds in grasslands and agriculture fields; nesting habitat components include open accessible water, a protected nesting substrate (including flooded or thorny vegetation), and a suitable nearby foraging space with adequate insect prey	Moderate; documented in 2014 near Tijuana River Valley Park (CDFW 2022); sightings from 2014–2020 throughout the Tijuana River National Estuarine Research Reserve (eBird 2022).
<b>Mammals</b>					
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	CNDDDB	–/SSC	Found throughout southern and southeastern California	Rocky areas within several habitats, including Joshua tree, pinyon-juniper, chaparral, sagebrush, and desert habitats	Low; documented occurrence from 2003 near Dennery Canyon and Otay River, approximately 3 miles from the Tijuana River (CDFW 2022); may occur in sagebrush habitat in Smuggler's Gulch but not expected.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax</i>	CNDDDB	–/SSC	Eastern portion of Los Angeles County, southwestern San Bernardino county, western Riverside county, Orange and San Diego counties	Occurs mainly in arid coastal and desert borders; sandy herbaceous areas with rocks or coarse gravel within chaparral, coastal scrub, and grassland communities	Moderate; documented near Nolf airport and Tijuana River in 2002, approximately 2 miles from Smuggler's Gulch (CDFW 2022).

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	CNDDDB, USFWS	FE/SSC	Southern coast from Marina del Rey and El Segundo in Los Angeles County, south to the Mexican border in San Diego County; only three small wild populations presumed to remain, one in Dana Point Headlands (Orange County) and two in Marine Corps Base Camp Pendleton (Northern San Diego County); one reintroduced population in Laguna Coast Wilderness Park (Laguna Beach)	Fine-grain, sandy, or gravelly substrates in the immediate vicinity of the Pacific Ocean	None; species presumed extirpated (CDFW 2022).
San Diego black-tailed jackrabbit <i>Lepus californicus ssp. bennettii</i>	CNDDDB	-/SSC	Coastal sage belt along the base of the San Gabriel Mountains from Cajon Wash west to San Gabriel Canyon; Los Padres National Forest southward and west of the peninsular range into northwestern Baja California	Open or sparse grasslands, coastal scrub, and agricultural fields; not typically found in high grass or dense brush	Moderate; observations throughout the Tijuana River National Estuarine Research Area (2018–2020), near Smuggler’s Gulch (WRA 2018, iNaturalist 2021); documented inhabiting the southern portion of the Tijuana River Estuary (CA DPR, USFWS, and NOAA, 2010); suitable coastal scrub habitat present in Smuggler’s Gulch.
Mexican long-tongued bat <i>Choeronycteris mexicana</i>	CNDDDB	-/SSC	Rarely found in southern California, most common in Mexico	Desert, montane, riparian, and pinyon-juniper habitats; roosts in desert canyons, deep caves, mines, rock crevices, or abandoned buildings (in urban environments)	Low; documented occurrence from 2002 near Silver Strand State Beach in Coronado, approximately 6 miles from the project areas (CDFW 2022); marginally suitable roosting habitat on structures in project areas; however, buildings are actively used.
Big free-tailed bat <i>Nyctinomops macrotis</i>	CNDDDB	-/SSC	Low-lying arid areas in southern California	High cliffs or rocky outcrops for roosting sites	None; documented occurrence from 2002 near Point Loma (Cabrillo National Monument), over 10 miles from the project areas (CDFW 2022); no suitable roosting habitat in project areas.
Western mastiff bat <i>Eumops perotis californicus</i>	CNDDDB	-/SSC	Found mostly in southern half of California	Primarily a cliff-dwelling species though may be found in crevices in large boulders and buildings	None; historical occurrences documented in Point Loma, Coronado, and near Otay Valley Regional Park, dated from 1989–1995 (one occurrence has no recorded date), between 3 and 10 miles from the project areas (CDFW 2022); no roosting habitat in project areas.
Western red bat <i>Lasiurus blossevillii</i>	CNDDDB	-/SSC	Near the Pacific Coast, Central Valley, and the Sierra Nevada	Riparian forests, woodlands near streams, fields, and orchards	Low; documented occurrence from 2003 near Otay River and Lower Otay Reservoir, over 8 miles from the project areas (CDFW 2022); riparian habitat downstream of Tijuana River project areas.

Table C-4. Database Query Results for Special-status Wildlife Species in the Project Areas

Common Name <i>Scientific Name</i>	Query Sources	Status <sup>a</sup> Federal/ State	Distribution in California	Habitat Associations	Likelihood to Occur and Nearest Documented Occurrences to Project Areas
Western yellow bat <i>Lasiurus xanthinus</i>	CNDDDB	–/SSC	Los Angeles and San Bernardino counties south to Baja Mexico	Roosts in trees within desert wash, valley foothill riparian, desert riparian, palm oasis	None; historical occurrence documented in 1985 near Balboa Park, over 13 miles from the project areas (CDFW 2022); no suitable roosting habitat in project areas.
Townsend's western big-eared bat <i>Corynorhinus townsendii</i>	CNDDDB	–/SSC	Throughout California, found in all but subalpine and alpine habitats, details of distribution not well known	Most abundant in mesic habitats, also found in oak woodlands, desert, vegetated drainages, caves or cave-like structures (including basal hollows in large trees, mines, tunnels, and buildings)	None; documented occurrence from 2002 along Sweetwater River, upstream of Sweetwater Reservoir, over 12 miles from the project areas (CDFW 2022); no suitable roosting habitat in project areas.
Pallid bat <i>Antrozous pallidus</i>	CNDDDB	–/SSC	Throughout California except for elevations greater than 3,000 m in the Sierra Nevada	Roosts in rock crevices, tree hollows, mines, caves, and a variety of vacant and occupied buildings; feeds in a variety of open woodland habitats	Low; historical occurrences documented in 1946 near Imperial Beach, less than 4 miles from the project areas (CDFW 2022); no recent occurrences documented within 10 miles of the project areas; marginally suitable roosting habitat on structures in project areas; however, buildings are actively used.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	CNDDDB	–/SSC	Riverside, San Diego, and Imperial counties	Roosts in rock crevices, caverns, or buildings in proximity to pinyon pine and juniper woodlands, desert scrub, desert riparian, desert wash, and palm oasis habitats	None; documented occurrence from 2003 along Otay River, downstream of Lower Otay Reservoir, over 8 miles from the project areas (CDFW 2022); no suitable woodland or desert habitat in project areas.
American badger <i>Taxidea taxus</i>	CNDDDB, MSCP	–/SSC	Throughout the state except in the humid coastal forests of Del Norte County and the northwest portion of Humboldt County	Shrubland, open grasslands, fields, and alpine meadows with friable soils	Low/Moderate; documented occurrence in Yogurt Canyon area, approximately 2 miles from Smuggler's Gulch (no date recorded) (CDFW 2022); widespread species; marginally suitable shrubland, grassland, and fields present in or near project areas.

a – Status Codes: **Federal:** FE = Listed as endangered under the federal Endangered Species Act, FT = Listed as threatened under the federal Endangered Species Act, FPT = Federally proposed as threatened, FC = Federal candidate species, FD = Federally delisted, BGEPA = Federally protected under the Bald and Golden Eagle Protection Act; **State:** SE = Listed as endangered under the California Endangered Species Act, ST = Listed as threatened under the California Endangered Species Act, SD = State delisted, SSC = CDFW Species of Special Concern, SFP = CDFW Fully Protected species

b – In July 2015, after a 90-day review in response to a petition to list the western spadefoot toad, USFWS determined that there was sufficient evidence to support the potential listing of the species (FWS-R8-ES-2015-0066). In January 2020, the USFWS initiated a status review (12-month finding), requesting information to support a Species Status Assessment and inform a possible future critical habitat determination. Although the species is not an official candidate for listing at this time, it has been included in this section in anticipation of possible future listing.

c – Potential for foraging, loafing, fly-over, or stopover during migration; no potential for nesting because project areas are outside of species' nesting range, or there is a lack of suitable nesting habitat.

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