

2.17 Plant Species

2.17.1 Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special-status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). The proposed project is not anticipated to impact any species listed or proposed for listing as threatened or endangered as discussed earlier in the introduction to Chapter 2.

This section of the document discusses all other special-status plant species, including CDFW Special Plants, USFWS candidate species, and California Native Plant Society (CNPS) rare, threatened, and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900–1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000–21177.

2.17.2 Affected Environment

The information in this section is based on the *Natural Environment Study* (May 2017) prepared for the proposed project.

A literature review and records search were conducted to identify the existence or potential occurrence of sensitive or special-status plant species located within or in the vicinity of the Biological Study Area (BSA). The results of the literature review indicated 46 special-status plant species as potentially occurring in the BSA.

Of the 46 special-status plant species, 12 are federally- and/or State-listed as endangered or threatened species and are not discussed in this section. As noted

earlier in the introduction to Chapter 2, habitat suitability for threatened or endangered species in the BSA was deemed low, and none were detected during biological surveys; therefore, the Build Alternative is not anticipated to impact any threatened or endangered species. As a result, threatened and endangered species are not discussed further in this document. The remaining 34 special-status plant species identified in the records search as potentially occurring in or near the vicinity of the BSA are:

- Chaparral sand-verbena (*Abronia villosa* var. *aurita*)
- Aphanisma (*Aphanisma blitoides*)
- Coulter's saltbush (*Atriplex coulteri*)
- South coast saltscale (*Atriplex pacifica*)
- Parish's brittlescale (*Atriplex parishii*)
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*)
- Malibu baccharis (*Baccharis malibuensis*)
- Intermediate mariposa lily (*Calochortus weedii* var. *intermedius*)
- Southern tarplant (*Centromadia parryi* ssp. *Australis*)
- Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*)
- Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)
- Summer holly (*Comarostaphylis diversifolia* ssp. *Diversifolia*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- Cliff spurge (*Euphorbia misera*)
- Los Angeles sunflower (*Helianthus nuttallii* ssp. *Parishii*)
- Tecate cypress (*Hesperocyparis forbesii*)
- Mesa horkelia (*Horkelia cuneata* ssp. *Puberula*)
- Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)
- Coulter's goldfields (*Lasthenia glabrata* ssp. *Coulteri*)
- Heart-leaved pitcher sage (*Lepechinia cardiophylla*)
- Intermediate monardella (*Monardella hypoleuca* ssp. *Intermedia*)
- Mud nama (*Nama stenocarpum*)
- Prostrate vernal pool navarretia (*Navarretia prostrata*)
- Coast woolly-heads (*Nemacaulis denudata* var. *denudate*)
- Chaparral nolina (*Nolina cismontane*)
- Allen's pentachaeta (*Pentachaeta aurea* ssp. *Allenii*)
- California beardtongue (*Penstemon californicus*)
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*)

- Nuttall's scrub oak (*Quercus dumosa*)
- Sanford's arrowhead (*Sagittaria sanfordii*)
- Chaparral ragwort (*Senecio aphanactis*)
- Salt Spring checkerbloom (*Sidalcea neomexicana*)
- Estuary seablite (*Suaeda esteroa*)
- San Bernardino aster (*Symphyotrichum defoliatum*)

In addition to the literature review, reconnaissance-level field surveys were conducted on February 11, 17, 18, and 19, 2015, April 6, 2015, and December 2, 2016, to characterize the general biological resources and to ascertain the presence or absence of special-status plant species and the likelihood of their occurrence in or near the BSA. None of the special-status plant species listed above were observed or otherwise detected in the BSA at the time of the surveys. The BSA does not contain, nor is it adjacent to, suitable habitat for any special-status plant species identified in the literature search, with the possible exception of southern tarplant and San Bernardino aster.

A focused botanical survey was conducted within the BSA on December 2, 2016, to determine the presence of special-status plant species including southern tarplant and San Bernardino aster. No special-status plant species (i.e., listed, proposed for listing, or candidate species) were observed or otherwise detected in the BSA at the time of the 2016 focused survey. In addition to not being observed during the focused botanical survey, San Bernardino aster is not expected to occur in the BSA because of the marginally suitable habitat and historic nature of previous records in the area; therefore, this species is not discussed further.

The BSA is highly urbanized but does support small natural areas associated with some of the drainages. Areas within the BSA are mostly developed, barren, or support ornamental vegetation dominated by nonnative species.

2.17.2.1 Southern Tarplant

The southern tarplant is not a federally- or State-listed species, but has a California Rare Plant Rank (CRPR) of 1B.1,¹ which means it is considered seriously endangered in California. Southern tarplant is also a Covered Species in the Orange County Transportation Authority (OCTA) Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP).

¹ Formerly known as CNPS 1B.1

Southern tarplant is an annual herb species that occurs at the margins of marshes and swamps, vernal mesic valley and foothill grasslands, and vernal pools from sea level to 656 feet above mean sea level. This species has been reported from several locations in Peters Canyon Wash, but not within or immediately adjacent to the BSA. There is potentially suitable habitat for southern tarplant along Peters Canyon Wash. However, during the focused botanical survey, no southern tarplant was observed. Therefore, southern tarplant does not appear to occur in the BSA, and the potential for any other special-status plant species to occur in the BSA was deemed low.

2.17.3 Environmental Consequences

The proposed project is expected to have no effect on any of the federally- or State-listed species identified as potentially occurring within the vicinity of the proposed project because no suitable habitat is present in the BSA for these species (refer to Table 2.17.1).

2.17.3.1 Temporary Impacts

Build Alternative (Alternatives 2A and 2B)

Based on the literature search, suitable habitat for southern tarplant may be located along Peters Canyon Wash. However, no southern tarplant was observed or otherwise detected during the focused botanical survey conducted within the BSA. Therefore, southern tarplant does not appear to occur in the BSA. As a result, the construction of Alternatives 2A and 2B would not result in temporary impacts on southern tarplant or other special-status plant species.

Alternative 1 (No Build Alternative)

The No Build Alternative would not include construction of any of the proposed project improvements and, as noted above, southern tarplant does not appear to occur in the BSA. Therefore, the No Build Alternative would not result in temporary impacts to southern tarplant or other special-status plant species.

2.17.3.2 Permanent Impacts

Build Alternative (Alternatives 2A and 2B)

As noted above, it was determined that southern tarplant does not appear to occur in the BSA. As a result, the construction and operation of Alternatives 2A and 2B would not result in permanent impacts on southern tarplant or other special-status plant species.

Table 2.17.1 Listed Plant Species Potentially Occurring or Known to Occur in and in the Vicinity of the BSA

Species	Status	General Habitat Description	Activity Period	Habitat Present/ Absent	Rationale
Braunton's milk-vetch <i>Astragalus brauntonii</i>	US: FE CA: 1B NCCP: NC	Perennial herb. Generally shallow calcium carbonate soils derived from marine substrates. Typically associated with the fire-dependent chaparral habitat on limestone and on down-wash sites below 2,100 ft in elevation.	January–August	A	No suitable habitat for this species is present in the BSA.
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	US: FT CA: SE/1B NCCP: NC	Bulbiferous perennial herb. Occurs primarily in vernal pools, but also found in chaparral, cismontane woodlands, coastal scrub, playas, and valley and foothill grasslands, usually in clay soils. From 115 to 4,003 ft in elevation.	March–June	A	No suitable habitat for this species is present in the BSA.
Salt marsh bird's-beak <i>Chloropyron maritimum</i> spp. <i>maritimum</i>	US: FE CA: SE/1B NCCP: NC	Annual herb. Coastal dunes and salt marshes.	May–October	A	No suitable habitat for this species is present in the BSA.
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	US: FC CA: SE/1B NCCP: NC	Annual herb. Shallow depressions or shallow, compacted, low-nutrient (e.g. sandy), or disturbed soils (e.g., dirt roads or around rodent burrows) in grassland or coastal scrub where competition from shrubs and exotic grasses is limited, primarily in northeastern Western Transverse Ranges and San Gabriel Mountains below 3,330 ft in elevation.	April–July	A	Known only from Los Angeles and Ventura Counties. Presumed extirpated from Orange County and the Los Angeles Basin.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	US: FE CA: SE/1B NCCP: NC	Annual herb. Occurs in chaparral, cismontane woodland and coastal scrub in sandy soils. From 600 to 2,280 ft in elevation.	April–June	A	The BSA is outside of the elevation range for this species.

Table 2.17.1 Listed Plant Species Potentially Occurring or Known to Occur in and in the Vicinity of the BSA

Species	Status	General Habitat Description	Activity Period	Habitat Present/ Absent	Rationale
Santa Monica dudleya <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	US: FT CA: 1B NCCP: NC	Perennial herb. Cracks and crevices of rock outcrops and cliff faces (volcanic or sedimentary) in canyons (primarily on north-facing slopes) in chaparral and coastal scrub at 500 to 5,500 ft in elevation.	March–June	A	The BSA lacks rock outcrops and cliff faces.
Laguna Beach dudleya <i>Dudleya stolonifera</i>	US: FT CA: ST/1B NCCP: NC	Perennial stoloniferous herb. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands, often in thin soil on north-facing sandstone cliffs. From 30 to 780 ft in elevation.	May–July	A	The BSA lacks rock outcrops and sandstone cliffs to support this species.
Santa Ana River woollystar <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	US: FE CA: SE/1B NCCP: NC	Riversidean alluvial fan sage scrub and chaparral in sandy or gravelly soils of floodplains and terraced fluvial deposits of the Santa Ana River and larger tributaries (Lytle and Cajon Creeks, lower portions of City and Mill Creeks) at 300 to 2,100 ft in elevation in San Bernardino and Riverside Counties.	May–September	A	The BSA is outside the range for this species.
San Diego button-celery <i>Eryngium aristulatum</i> var. <i>parishii</i>	US: FE CA: SE/1B NCCP: NC	Annual or perennial herb. Vernal pools and similar mesic habitats in coastal scrub and grassland at 50 to 2,000 ft in elevation.	April–June	A	In California, known only from Riverside and San Diego Counties.
Cliff spurge <i>Euphorbia misera</i>	US: – CA: 2B NCCP: NC	Perennial shrub. Occurs in coastal bluff scrub, coastal scrub, and Mojavean desert scrub in rocky soils or along cliffs. From 30 to 1,500 ft in elevation.	December– August	A	Occurs along immediate coastline or Mojave Desert. No suitable habitat for this species is present in the BSA.
Gambel’s watercress <i>Nasturtium (Rorippa) gambelii</i>	US: FE CA: ST/1B NCCP: NC	Marshes from 20 to 1,100 ft in elevation.	April– September	A	Currently believed to occur in California only in Santa Barbara and San Luis Obispo Counties.

Table 2.17.1 Listed Plant Species Potentially Occurring or Known to Occur in and in the Vicinity of the BSA

Species	Status	General Habitat Description	Activity Period	Habitat Present/Absent	Rationale
California Orcutt grass <i>Orcuttia californica</i>	US: FE CA: SE/1B NCCP: NC	Annual grass. Vernal pools from 50 to 2,200 ft in elevation.	April–August	A	Not known to occur in Orange County. No suitable habitat for this species is present in the BSA.
Big-leaved crownbeard <i>Verbesina dissita</i>	US: FT CA: ST/1B NCCP: NC	Perennial herb. Occurs in southern maritime chaparral (90% of time) and coastal scrub (10% of time) from 135 to 615 ft in elevation along the immediate coast.	April–July	A	Suitable habitat and conditions for this species are lacking in the BSA. Known range restricted to immediate coastline.

Source: *Natural Environment Study* (May 2017).

Status:

- CE = California Endangered
- CFP = California Fully Protected Species
- CNPS = California Native Plant Society
- CSP = California Special Plant
- CT = California Threatened
- FC = Federal Candidate
- FE = Federal Endangered
- FP, FPE, FPT = Federal Proposed
- FT = Federal Threatened

CNPS California Rare Plant Ranking Designations:

- 1A = Plants presumed extinct in California
- 1B = Plants rare and endangered in California and throughout their range
- 2 = Plants rare, threatened, or endangered in California but more common elsewhere in their range
- 3 = Plants needing more information (a review list)
- 4 = Plants of limited distribution (a watch list)

Habitat Present/Absent:

- A = No habitat is present and no further work is needed, or habitat is absent or species was absent in the BSA at the time of the focused survey.
- CH = The project footprint is located in a designated critical habitat unit, but appropriate habitat is not necessarily present.
- HP = Habitat is or may be present.
- O = The species was observed in the BSA at the time of the survey.

BSA = Biological Study Area

C = Species Covered by NCCP/HCP

CC = Species Conditionally Covered by NCCP/HCP

CNPS = California Native Plant Society

ft = foot/feet

NC = Species Not Covered by NCCP/HCP

NCCP = Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) for Orange County Transportation Authority

Alternative 1 (No Build Alternative)

The No Build Alternative would not include operation of any of the proposed project improvements and, as noted above, southern tarplant does not appear to occur in the BSA. Therefore, the No Build Alternative would not result in adverse permanent impacts to southern tarplant or other special-status plant species.

2.17.4 Avoidance, Minimization, and/or Mitigation Measures

Southern tarplant does not appear to occur in the BSA, and the Build Alternative would not result in temporary or permanent impacts to southern tarplant or other special-status species. No mitigation is required.