

3.3.3 Plant Species

Focused botanical surveys of the BSA for the proposed project and the immediate surrounding areas were conducted by qualified biologists in 2009 and 2010. The results of the surveys are detailed in the NES, which was completed in August 2011 and revised in March 2012, and are summarized in this section.

3.3.3.1 Regulatory Setting

USFWS and 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 afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered (T/E) species; these are species that are formally listed or proposed for listing as endangered or threatened under the FESA and/or the California Endangered Species Act (CESA). See Section 3.3.5, Threatened and Endangered Species, for detailed information about these species.

This section discusses all of the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and CNPS rare and endangered plants.

The regulatory requirements for FESA can be found at 16 U.S.C., Section 1531, *et seq.* (see also 50 CFR Part 402). The regulatory requirements for CESA can be found at CFGC Section 2050, *et seq.* Department projects are also subject to the Native Plant Protection Act, found at CFGC Section 1900-1913, and CEQA, CA PRC, Sections 2100-21177.

3.3.3.2 Affected Environment

Based on the literature review, 24 special-status plant species are reported to occur within the USGS quadrangles surrounding the proposed project. Five of these special-status plant species are federally and/or state-listed endangered, threatened, or candidate species and are discussed further in Section 3.3.5, Threatened and Endangered Species. Twenty-three (23) of these special-status plant species were determined to have an *Absent* (A) potential for occurrence designation within the BSA.

The remaining special-status species identified in the literature review are considered special-status by CDFW, USFWS, local agencies, and/or special-interest groups (e.g., CNPS). Although not federally or state-listed, these species are perceived as having declining populations or local populations that are sparse, rapidly dwindling, or otherwise unstable. Table 3.3.3-1 includes a list of all remaining special-status plant species, their habitat descriptions, status, and potential for occurrence.

Table 3.3.3-1: Special-Status Plant Species Potential for Occurrence within BSA

Scientific Name Common Name	Status	General Habitat Description	Habitat Present (HP) or Absent (A)	Rationale
<i>Abronia villosa</i> <i>var. aurita</i> Chaparral sand- verbena	CNPS: List 1B.1	Annual herb. Occurs in coastal scrub and chaparral on sandy soils. From 260 to 5,250 ft in elevation. Flowering season is January – September.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Aphanisma blitoides</i> Aphanisma	CNPS: List 1B.2	Annual herb. Occurs in coastal scrub, coastal dunes, and coastal bluff scrub in sandy or clay soils. Up to 1,000 ft in elevation. Flowering season is March – June.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Atriplex coulteri</i> Coulter’s saltbush	CNPS: List 1B.2	Perennial herb. Occurs in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland on alkaline or clay soils. From 30 to 1,510 ft in elevation. Flowering season is March – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Atriplex pacifica</i> South coast saltscare	CNPS: List 1B.2	Annual herb. Occurs in chenopod scrub, coastal dunes, coastal scrub, coastal bluff scrub, and playas, often in alkali soils. Up to 1,640 ft in elevation. Flowering season is March – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Atriplex parishii</i> Parish’s brittlescale	CNPS: List 1B.1	Annual herb. Occurs in chenopod scrub, vernal pools, and playas, usually, on drying alkali flay with fine soils. From 10 to 6,230 ft in elevation. Flowering season is June – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Atriplex serenana</i> <i>var. davidsonii</i> Davidson’s saltscare	CNPS: List 1B.2	Annual herb. Occurs in coastal bluff scrub and coastal scrub on alkaline soils. From 10 to 820 ft in elevation. Flowering season is April – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.

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<i>Calystegia sepium ssp. binghamiae</i> Santa Barbara morning-glory	CNPS: List 1A	Rhizomatous perennial herb. Occurs in coastal marshes and swamps. Up to 100 ft in elevation. Flowering season is April – May.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Centromadia parryi ssp. australis</i> Southern tarplant	CNPS: List 1B.1	Annual herb. Occurs in vernal pools, margins of marshes and swamps, and vernal mesic valley and foothill grasslands, sometimes with saltgrass on alkaline soils. Up to 1,400 ft in elevation. Flowering season is May – November.	HP	Species distribution is restricted by substantive habitat requirements, which occur within the BSA, and further survey or study may be necessary to determine likely presence or absence of this species. Not observed during botanical surveys conducted during the appropriate blooming period for this plant in 2010.
<i>Dudleya multicaulis</i> Many-stemmed dudleya	CNPS: List 1B.2	Perennial herb. Occurs in coastal scrub, chaparral, and valley and foothill grassland, usually on clay soils or grassy slopes. Up to 2,590 ft in elevation. Flowering season is April – July.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Helianthus nuttallii ssp. parishii</i> Los Angeles sunflower	CNPS: List 1A	Rhizomatous perennial herb. Occurs in coastal salt and freshwater marshes and swamps. From 15 to 5,500 ft in elevation. Flowering season is August – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Lasthenia glabrata ssp. coulteri</i> Coulter’s goldfields	CNPS: List 1B.1	Annual herb. Occurs in coastal salt marshes and swamps, valley and foothill grasslands, playas, sinks, and vernal pools. Up to 4,590 ft in elevation. Flowering season is February – June.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Nama stenocarpum</i> Mud nama	CNPS: List 2.2	Annual to perennial herb. Occurs in marshes and swamps, and along lake margins and riverbanks, and intermittently wet areas. From 15 to 1,640 ft in elevation. Flowering season is January – July.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.

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<i>Navarretia prostrata</i> Prostrate navarretia	CNPS: List 1B.1	Annual herb. Occurs in coastal scrub, vernal pools, and valley and foothill grasslands in mesic soils. From 50 to 2,300 ft in elevation. Flowering season is April – July.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Nemacaulis denudata</i> var. <i>denudata</i> Coast woolly-heads	CNPS: List 1B.2	Annual herb. Occurs in coastal dunes. Up to 330 ft in elevation. Flowering season is April – September.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Phacelia stellaris</i> Brand’s phacelia	CNPS: List 1B.1	Annual herb. Occurs in coastal dunes and scrub. From 15 to 4,970 ft in elevation. Flowering season is March – June.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Sagittaria sanfordii</i> Sanford’s arrowhead	CNPS: List 1B.2	Rhizomatous perennial herb. Occurs in shallow freshwater swamps and marshes. Up to 2,000 ft in elevation. Flowering season is May – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Sidalcea neomexicana</i> Salt spring checkerbloom	CNPS: List 2.2	Perennial herb. Occurs in coastal scrub, chaparral, lower montane coniferous forest, brackish marshes, Mohavean desert scrub, and playas on alkaline, mesic soils. Up to 5,020 ft in elevation. Flowering season is March – June.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<i>Suaeda esteroa</i> Estuary seablite	CNPS: List 1B.2	Perennial herb. Occurs in coastal salt marshes and swamps. Up to 15 ft in elevation. Flowering season is May – October.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.

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<i>Symphotrichum defoliatum</i> San Bernardino aster	CNPS: List 1B.2	Rhizomatous perennial herb. Occurs in meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and valley and foothill grasslands, often in disturbed places. Up to 6,690 ft in elevation. Flowering season is July – November.	A	Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the BSA, and no further survey or study is obligatory to determine likely presence or absence of this species.
<p>STATUS CODES</p> <p>California Native Plant Society (CNPS) Classifications</p> <p>1A Plants Presumed Extinct in California</p> <p>1B Plants Rare, Threatened, or Endangered in California and Elsewhere</p> <p>2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere</p> <p>3 Plants About Which We Need More Information - A Review List</p> <p>4 Plants of Limited Distribution - A Watch List</p> <p>Threat Code</p> <p>0.1 Seriously threatened in California (high degree/immediacy of threat)</p> <p>0.2 Fairly threatened in California (moderate degree/immediacy of threat)</p> <p>0.3 Not threatened in California (low degree/immediacy of threats or no current threats known)</p>				

Source: URS 2012.

Habitat for one special-status plant species was identified within the BSA:

- Southern Tarplant (*Centromadia parryi* ssp. *australis*)

The Southern Tarplant is an annual herb that occurs in vernal pools, margins of marshes and swamps, and vernal mesic valley and foothill grasslands, sometimes with saltgrass on alkaline soil up to 1,400 ft in elevation. Flowering season is May through November. The Southern Tarplant is listed by CNPS as a 1B.1 species.

Although potential habitat for this species occurs within limited portions of the BSA, general surveys conducted within the BSA in 2009 and focused surveys conducted in 2009 and 2010 concluded that this species was absent from the BSA. Twelve (12) reported populations of Southern Tarplant are reported within the Los Alamitos, Seal Beach, and Newport Beach quadrangles containing the BSA (CDFW 2010). Four of the locations are historical records (i.e., 1920-1930s) and are considered extirpated. The remaining 8 populations are considered extant and occur from 1.5 to 2.4 miles from the BSA limits. These extant populations are generally associated with Newport Back Bay or Bolsa Chica State Park, and no populations are reported to occur within the BSA.

3.3.3.3 Environmental Consequences

Permanent Impacts

No Build Alternative

The No Build Alternative proposes no construction or other disturbance in the BSA; therefore, the No Build Alternative would result in no adverse impacts to special-status plant species.

Build Alternatives

Botanical surveys to establish the presence/absence of special-status plant species in the BSA were conducted during the appropriate blooming period in 2009 and 2010. No plant species observed within the BSA are considered special-status; therefore, no impacts to special-status plants would occur as a result of the project.

Temporary Impacts

No Build Alternative

The No Build Alternative does not propose any construction or other disturbance in the BSA; therefore, the No Build Alternative would result in no adverse impacts to special-status plant species.

Build Alternatives

Botanical surveys to establish the presence/absence of special-status plant species in the BSA were conducted during the appropriate blooming period in 2009 and 2010. No plant species observed within the BSA are considered special-status; therefore, no impacts to special-status plants would occur as a result of the project.

3.3.3.4 Avoidance, Minimization, and/or Mitigation Measures

BIO-4: Although no special status plant species were observed during preliminary surveys, pre-construction special status plant surveys will be conducted prior to any ground disturbing activities.