

## 3.17 Plant Species

### 3.17.1 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). Please see the Threatened and Endangered Species section 3.19 in this document for detailed information about these species.

This section of the document discusses all the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare 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. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), CA Public Resources Code, Sections 2100–21177.

### 3.17.2 Affected Environment

This section is based on the *Natural Environment Study* (NES; December 2015), the *Supplemental Natural Environment Study* (Supplemental NES; April 2016), and the *Biological Assessment* (BA; April 2016) prepared for the Proposed Project.

A literature review and a records search were conducted to identify the existence or potential occurrence of special-status plant species located within or in the vicinity of the Biological Study Area (BSA). The most recent records of the California Natural Diversity Data Base (CNDDB) (Commercial Version) and the California Rare Plant Rank (CRPR; formerly the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California) (2011, 2013, and 2014) were reviewed for the quadrangles containing and surrounding the BSA (i.e., the *Orange, Yorba Linda,*

*Black Star Canyon, and Prado Dam, California, United States Geological Survey [USGS] 7.5-minute quadrangles*). These databases contain records of reported occurrences of federal- or State-listed endangered, threatened, proposed endangered or threatened species; California Species of Special Concern (SSC); or otherwise special-status species or habitat that may occur within or in the immediate vicinity of the BSA. In addition, a list of species occurring in the County of Orange was obtained from the USFWS Information, Planning, and Conservation (IPaC) System online database on May 19 and June 15, 2011, September 9, 2013, and December 1, 2014. Official species lists were obtained from the USFWS on January 22, 2014, February 2, 2015, February 11, 2016, and September 16, 2016.

Reconnaissance-level surveys and plant community mapping were conducted on May 10, 2011, March 17, 2015, and March 19, 2015. A full season of focused botanical surveys within the BSA were conducted on May 10 and June 28, 2011. A late season botanical survey was conducted on August 22, 2013, and early season focused botanical surveys were conducted on May 15, 16, 20, and 27, 2014, which completed a full season plant survey. In addition, botanical surveys of the recently added slope area south of SR-91 were conducted on March 17 and 19, 2015.

The results of the literature review indicated that a total of 39 special-status plant species have the potential to occur within or in the vicinity of the BSA. Seven are Federal- and/or State-listed as threatened or endangered species and are discussed in Section 3.19, Threatened and Endangered Species.

Of the remaining 32 special-status plant species identified through the literature review as potentially occurring in the BSA, it was determined that the BSA does not contain suitable habitat for the following 16 species:

- Coulter's saltbush (*Atriplex coulteri*)
- South Coast saltscale (*Atriplex pacifica*)
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*)
- Malibu baccharis (*Baccharis malibuensis*)
- Lucky morning-glory (*Calystegia felix*)
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*)
- Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)
- White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*)
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- Heart-leaved pitcher sage (*Lepechinia cardiophylla*)

- Jokerst's monardella (*Monardella australis* ssp. *jokerstii*)
- Hall's monardella (*Monardella macrantha* ssp. *hallii*)
- Mud nama (*Nama stenocarpum*)
- California beardtongue (*Penstemon californicus*)
- Santiago Peak phacelia (*Phacelia keckii*)
- Salt Spring checkerbloom (*Sidalcea neomexicana*)

None of these 16 special-status plant species were observed or otherwise detected in the BSA at the time of the surveys. Therefore, these species are considered absent from the BSA and are not discussed further in this section.

Suitable habitat for the remaining 16 special-status plant species occurs or potentially occurs in the BSA. These special-status plant species are:

- Chaparral sand-verbena (*Abronia villosa* var. *aurita*)
- Intermediate mariposa lily (*Calochortus weedii* var. *intermedius*)
- Lewis' evening-primrose (*Camissoniopsis lewisii*)
- Southern tarplant (*Centromadia parryi* ssp. *australis*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- Tecate cypress (*Hesperocyparis forbesii*)
- Vernal barley (*Hordeum intercedens*)
- Southern California black walnut (*Juglans californica*)
- Intermediate monardella (*Monardella hypoleuca* ssp. *intermedia*)
- Felt-leaved monardella (*Monardella macrantha* ssp. *hallii*)
- Chaparral nolina (*Nolina cismontane*)
- Allen's pentachaeta (*Pentachaeta aurea* ssp. *allenii*)
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*)
- Coulter's matilija poppy (*Romneya coulteri*)
- Chaparral ragwort (*Senecio aphanactis*)
- San Bernardino aster (*Symphyotrichum defoliatum*)

However, with the exception of California black walnut and Coulter's matilija poppy, none of these species was found in the BSA during botanical surveys conducted in 2011, 2013, and 2014, which were performed during the appropriate blooming period for these species when they would have been observed. Therefore, those 14 species are also considered absent from the BSA. California black walnut and Coulter's matilija poppy are the only special status species present in the BSA and are discussed further below.

### **3.17.2.1 California Black Walnut**

Southern California black walnut (California walnut or California black walnut) is not federally and/or State-listed and has no official status. However, California walnut merits consideration under CEQA because of the relatively limited distribution of California walnut woodland, and it is a CNPS CRPR 4 species (plants of limited distribution). California walnut is only found in Southern California. Recent construction has removed this habitat in many areas, and its future is uncertain. California walnut prefers very loose, moist soil on steep hillsides with northern and eastern exposures at elevations below 900 feet (ft), although it is not confined to these areas. California walnut occurs within many other plant communities and is often a component of grassland, coastal sage scrub (CSS), chaparral, riparian woodland, oak woodland, and mixed canyon woodland.

California walnut trees were observed in the BSA during botanical surveys conducted in 2011, 2013, and 2014. Figure 3.15.1, provided earlier, shows the locations where California walnut trees were observed.

- Approximately 3 individual California black walnut trees were observed in the median of the SR-241/SR-91 junction, specifically the median in the north end of SR-241 (Sheet 6 of Figure 3.15.1). All of these individuals were saplings less than 5 ft tall, with trunk diameters less than 5 inches.
- Approximately 10 individual trees were observed north of SR-91, adjacent to the SR-91 westbound off-ramp at Gypsum Canyon Road (Sheet 6 of Figure 3.15.1).
- Approximately 10 to 20 scattered mature individual trees were observed on the north side of a sound wall northwest of the SR-91 /Gypsum Canyon Road interchange adjacent to the Canyon RV Park, which is located within the boundaries of Featherly Regional Park(Sheets 5 and 6 of Figure 3.15.1).

### **3.17.2.2 Coulter's Matilija Poppy**

Coulter's Matilija poppy is not federally and/or State listed and has no official status. However, Coulter's Matilija poppy merits consideration because of its relatively limited distribution in California. Coulter's Matilija poppy is a perennial shrub that grows to up to 8 ft tall. It has large paper mâché-like flowers that are white with a yellow center. It occurs in CSS and chaparral habitats up to 4,000 ft in elevation. This species is a California Special Plant and a CNPS 4 species (plants of limited distribution).

Suitable habitat exists for this species in the BSA and it was observed in the BSA during the August 2013 and May 2014 botanical surveys. Figure 3.15.1 (Sheets 7 and 8) shows the locations where Coulter's Matilija poppies were observed in the BSA. During the focused surveys in 2013, approximately 100 individuals were observed south of SR-91, east of SR-241. Two additional individuals were observed approximately 0.25 mile farther east. In spring 2014, poppies were found at these 2013 locations, with 45 additional individuals found in the vicinity. In 2013 and 2014, a total of 147 plants were identified in the BSA.

### **3.17.3 Environmental Consequences**

#### **3.17.3.1 Temporary Impacts**

##### ***Build Alternative (Two-Lane Express Lanes Connector) (Preferred Alternative)***

###### ***California Black Walnut***

The California black walnut trees at the Gypsum Canyon off-ramp and those at the adjacent Canyon RV Park would not be directly impacted by the Proposed Project because they are outside the proposed temporary impact area and some are protected by an existing sound wall. There may be temporary indirect impacts to the Gypsum Canyon off-ramp trees due to potential fuel spills from construction equipment and activities of equipment or personnel outside designated construction areas and Environmentally Sensitive Areas (ESAs) in the vicinity of the trees. The Canyon RV Park walnut trees are outside of the proposed temporary impact area and are protected by an existing sound wall.

Measure PS-1, provided later in this section, which requires barriers to be installed around the protected zone of any California black walnut tree, would avoid and/or minimize temporary impacts to California black walnut trees.

###### ***Coulter's Matilija Poppy***

There may be direct temporary impacts to Coulter's Matilija poppy. Potential temporary indirect impacts to this plant include potential fuel spills from construction equipment and activities of equipment or personnel outside designated construction areas and ESAs. This plant may be partially and/or fully removed during soil disturbance. To the extent feasible, this plant would be protected in place, once the full extent of the soil disturbance is known. Coulter's Matilija poppy is not protected by any federal, State, or local regulations, and project impacts to this CNPS CRPR 4 species are relatively limited. Therefore, no compensatory mitigation is required. Measure PS-3, provided later in this section, which requires barriers to be installed

around the protected zone of any Coulter's Matilija poppies, would avoid and/or minimize temporary impacts to Coulter's Matilija poppy.

### **No Build Alternative**

The No Build Alternative does not include any improvements to SR 241 or SR-91 in the Project Area. Therefore, no temporary impacts to special-status plant species would occur as a result of the No Build Alternative.

#### **3.17.3.2 Permanent Impacts**

##### ***Build Alternative (Two-Lane Express Lanes Connector) (Preferred Alternative)***

###### ***California Black Walnut***

California black walnut trees are not protected by any federal, State, or local regulations. As shown in Figure 3.15.2 (Sheets 5 and 6 of Figure 3.15.2), the Proposed Project may result in permanent direct impacts to three California black walnut saplings, a CNPS CRPR 4 species, in the median of the SR-241/SR-91 interchange (at the north end of SR-241). Permanent impacts may include complete removal, heavy encroachment, or extensive branch removal that may have substantial detrimental impacts to the long-term viability of the trees due to the placement of the overhead connector. These three saplings would be protected in place, to the extent feasible. While these three saplings may be permanently impacted by the Proposed Project, the complete removal of these three saplings is not expected to substantially affect the long-term viability of this species because it is a CNPS CRPR 4 species. They are young trees, and they occur outside a native woodland habitat.

The California black walnut trees at the Gypsum Canyon off-ramp and the adjacent Canyon RV Park are not expected to be directly impacted by the Proposed Project. Permanent indirect impacts due to increased storm water runoff, traffic, litter, or through enhancing the germination and proliferation of nonnative invasive plant species is highly unlikely due to the location of these walnut trees adjacent to the Gypsum Canyon off-ramp. The Gypsum Canyon off-ramp and Canyon RV Park walnut trees are outside the Project Area, and some of the trees are protected by an existing sound wall.

Furthermore, the California black walnut trees that may be permanently impacted by the Proposed Project consist of a few individual saplings located within a median. These three saplings are not in a natural walnut woodland setting. Therefore, potential removal of these few individuals by the Proposed Project does not require any

compensatory mitigation. Measure PS-1, provided later in this section, which requires barriers to be installed around the protected zone of any California black walnut tree, and Measure PS-2, which requires the relocation of the California black walnut saplings located in the median of the SR-241/SR-91 interchange (if feasible), would avoid and/or minimize permanent impacts to California black walnut.

#### *Coulter's Matilija Poppy*

The Coulter's Matilija poppies within the slope area south of SR-91 would be removed to accommodate drainage improvements and an access road. Figure 3.15.2 illustrates where the Proposed Project would impact Coulter's Matilija poppies. While some or all of these individuals may be permanently impacted by the Proposed Project, even the complete removal of these populations is not expected to substantially affect the long-term viability of this species as it is a CNPS CRPR 4 species that is growing in marginal quality habitat adjacent to SR-91.

Coulter's Matilija poppy is not protected by any federal, State, or local regulations, and project impacts to this CNPS CRPR 4 species are relatively limited. Therefore, no compensatory mitigation is required. Measure PS-3, which requires barriers to be installed around the protected zone of any Coulter's Matilija poppies, would minimize permanent impacts to Coulter's Matilija poppy.

#### **No Build Alternative**

The No Build Alternative does not include any improvements to the SR-241 or SR-91 in the Project Area. Therefore, no permanent impacts to special-status plant species would occur as a result of the No Build Alternative.

### **3.17.4 Avoidance, Minimization, and/or Mitigation Measures**

The following measure would avoid and/or minimize impacts to California black walnut trees:

**Measure PS-1 California Black Walnut Environmentally Sensitive Areas.** Prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around the protected zone of any southern California black walnut tree and designated as an Environmentally Sensitive Area (ESA) to be preserved for those trees not within the footprint of project structures or areas of ground disturbance. The protected zone will extend 5 feet (ft) outside of the drip line or 15 ft from the trunk of the tree, whichever is greater. No grading or fill

activity of any type will be permitted within the ESA. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby California black walnut trees. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESA. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where trees are immediately adjacent to planned grading activities.

**Measure PS-2 California Black Walnut Sapling Relocations.** The California black walnut saplings in the median of the SR-241/SR-91 interchange will be assessed at the time of construction and relocated within Caltrans right-of-way, if feasible.

The following measure would avoid and/or minimize impacts to Coulter's Matilija poppies:

**Measure PS-3 Coulter's Matilija Poppies Environmentally Sensitive Areas.** Prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around the protected zone of any Coulter's Matilija poppies and designated as an ESA to be preserved to the extent feasible. The protected zone will extend 5 ft outside of the vegetation edge. No grading or fill activity of any type will be permitted within the ESA. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby Coulter's Matilija poppies. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESA. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where Coulter's Matilija poppies are adjacent to planned grading activities.