

## 2.20 Invasive Species

### 2.20.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed EO 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” FHWA guidance issued August 10, 1999, directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the NEPA analysis for a proposed project.

### 2.20.2 Affected Environment

Information presented in this section was obtained from the NES (mi) dated January 2019.

During rare plant surveys described above, 21 invasive plant species were documented within the Study Area, as shown in Table 2.20-1.

**Table 2.20-1: Invasive Plant Species Within Study Area**

Scientific Name	Common Name	Cal-IPC Rating
<i>Arundo donax</i>	giant reed	High
<i>Avena barbata</i>	slender oat	Moderate
<i>Avena fatua</i>	wild oats	Moderate
<i>Bromus diandrus</i>	ripgut brome	Moderate
<i>Carpobrotus edulis</i>	highway iceplant	High
<i>Centaurea melitensis</i>	toocalote	Moderate
<i>Eucalyptus camaldulensis</i>	red gum	Limited
<i>Ficus carica</i>	edible fig	Moderate
<i>Foeniculum vulgare</i>	fennel	Moderate
<i>Hedera canariensis</i>	Algerian ivy	High
<i>Hirschfeldia incana</i>	short-pod mustard	Moderate
<i>Lobularia maritima</i>	sweet alyssum	Limited
<i>Marrubium vulgare</i>	horehound	Limited
<i>Nicotiana glauca</i>	tree tobacco	Moderate
<i>Olea europaea</i>	olive	Limited
<i>Pennisetum setaceum</i>	crimson fountain grass	Moderate
<i>Plantago lanceolata</i>	English plantain	Limited
<i>Polypogon monspeliensis</i>	rabbitsfoot grass	Limited
<i>Ricinus communis</i>	castor bean	Limited
<i>Salsola tragus</i>	Russian thistle	Limited
<i>Schinus molle</i>	Peruvian pepper tree	Limited

**Notes:** Cal-IPC: California Invasive Plants Council.

No invasive animal species were documented within the Study Area.

## **2.20.3 Environmental Consequences**

### **2.20.3.1 Temporary Impacts**

#### Build Alternative

Potential impacts from invasive species associated with the construction and operation of the project are considered permanent. See Section 2.20.3.2 Permanent Impacts for discussion regarding invasive species.

#### No Build Alternative

The No Build Alternative would not include construction of any of the proposed project improvements. As a result, as described under permanent impacts, the No Build Alternative would not result in new impacts related to invasive species. Locations within the SR 55 right-of-way where invasive species currently occur would not be modified under the No Build Alternative.

### **2.20.3.2 Permanent Impacts**

#### Build Alternative

The introduction of invasive species into previously undisturbed areas constitute as permanent direct and indirect impacts to any affected native habitats. The proposed project has the potential to spread invasive species to adjacent native habitats in the Biological Study Area through the entering and exiting of contaminated construction equipment, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species, which may cause seed to be spread along the highway.

In compliance with EO 133112, to minimize direct impacts associated with invasive plant species, various measures have been incorporated into the Proposed Project, including avoiding the use of invasive plant material during and after construction, a weed abatement program, and litter control, as identified in Section 2.20.4.

#### No Build Alternative

The No Build Alternative would not result in the construction or improvements within the project area and, therefore, would not result in spread of invasive species within the project area. No indirect or secondary impacts on these species would result from implementation of the No Build Alternative.

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

**BIO-3 INVASIVE SPECIES** To minimize impacts associated with the potential to spread invasive plant species, the following project features have been incorporated into the proposed project, including avoiding the use of invasive plant material during and after construction, a weed abatement program, and litter control, as stated below:

**Weed Abatement Program.** In compliance with Executive Order 13112, and guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control plans included in the project will not use species listed as invasive. A weed abatement program shall be developed for the proposed project and incorporated into the Plans, Specifications, and Estimates (PS&E) package to avoid and/or minimize the importation of non-native plant material during and after construction. At a minimum, the program shall include the following measures:

- During construction, invasive plant material will be removed from the proposed project work area. All removed invasive plant material will be disposed of properly in a landfill or other suitable facility.
- During construction, the Construction Contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one project location to another.
- During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible.
- During construction, the Construction Contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily, or more often when needed due to dry or windy conditions, to prevent excessive amounts of dust.
- During construction, the Construction Contractor shall ensure that all material stockpiled is sufficiently watered or covered to prevent excessive amounts of dust. During construction, soil, gravel, and rock will be obtained from weed-free sources.
- Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.
- After construction, affected areas adjacent to native vegetation will be revegetated with plant species that are native to the vicinity as approved by the District Biologist.
- After construction, all revegetated areas will avoid the use of species listed on the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory that have a High or Moderate rating.
- Erosion control and/or revegetation sites will be monitored after construction to detect and control the introduction/invasion of non-native species. The monitoring period will be determined in consultation with resource agencies.
- Eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur; the use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the District Biologist.
- All woody invasive species will be removed from the proposed project limits.

**Best Management Practices During Construction.** All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated nonsensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering waters of the United States.

**Trash Control.** To avoid attracting predators of Covered Species and other sensitive species, the proposed project site will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site(s).

**Invasive Species Control.** Invasive species will be removed from the project work area and controlled during construction. The use of known invasive plant species (i.e., plant species listed in Cal-IPC's California Invasive Plant Inventory with a High or Moderate rating) will be prohibited for construction, revegetation, and landscaping activities. Project measures will be included to ensure invasive plant material is not spread from the project site to other areas by disposal off site or by tracking seed on equipment, clothing, and shoes. Equipment/material imported from an area of invasive plants must be identified and measures implemented to prevent importation and spreading of non-native plant material within the project site. All construction equipment will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project site. Eradication strategies (i.e., weed abatement programs) will be employed should an invasion occur during construction.