

2.19 Invasive Species

2.19.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (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.” Federal Highway Administration (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 National Environmental Policy Act (NEPA) analysis for a proposed project.

2.19.2 Affected Environment

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

The California Invasive Plant Council (Cal-IPC) 2006 Invasive Plant Inventory highlights nonnative plants that are serious problems in wildlands (i.e., natural areas that support native ecosystems, including national, State, and local parks, ecological reserves, wildlife areas, national forests, and Bureau of Land Management lands). The inventory categorizes plants as High, Moderate, or Limited based on each species’ negative ecological impact in California. Plants categorized as High have severe ecological impacts. Plants categorized as Moderate have substantial and apparent, but not severe, ecological impacts. Plants categorized as Limited are invasive but their ecological impacts are minor on a statewide level.

As shown in Table 2.19.1, five nonnative plant species occurring on the Cal-IPC Invasive Plant Inventory (High, Moderate, and Limited) were identified in the Biological Study Area (BSA). No invasive animal species were observed in the BSA. However, two nonnative species, rock pigeon (*Columba livia*) and house sparrow (*Passer domesticus*) were observed in the BSA.

Table 2.19.1: Invasive Plant Species in the Biological Study Area

Scientific Name	Common Name	Rating
Asteraceae <i>Centaurea melitensis</i>	Sunflower family Tocalote	Moderate
Brassicaceae <i>Hirschfeldia incana</i>	Mustard family Shortpod mustard	Moderate
Chenopodiaceae <i>Salsola tragus</i>	Goosefoot Family Russian-thistle	Limited
Euphorbiaceae <i>Ricinus communis</i>	Spurge family Castor bean	Limited
Myrtaceae <i>Eucalyptus</i> sp.	Myrtle family Eucalyptus	Moderate

Source: Compiled by LSA (2017).

2.19.3 Environmental Consequences

2.19.3.1 Temporary Impacts

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

Potential impacts from invasive species associated with the construction and operation of transportation projects are considered permanent. Refer to Section 2.19.3.2, Permanent Impacts, for discussion regarding invasive species.

No Build Alternative (Alternative 1)

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 Interstate 5 (I-5) right-of-way where invasive species currently occur would not be modified under the No Build Alternative.

2.19.3.2 Permanent Impacts

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

As noted earlier, potential impacts from invasive species associated with construction and operation of transportation projects are considered permanent because the introduction of invasive species into previously undisturbed areas would result in permanent impacts to any affected native habitats. Implementation of the Build Alternative has the potential to spread invasive species to adjacent native habitats in the BSA through the entering and exiting of contaminated construction equipment, the inclusion of invasive species in seed mixtures and mulch, and through the improper removal and disposal of invasive species causing seed to be spread along

the highway. With implementation of Project Feature PF-IS-1, potential permanent impacts to invasive species under the Build Alternative would not be adverse.

PF-IS-1 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 nonnative 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 native vegetation impacted or removed will be revegetated with plant species that are native to the vicinity as approved by the District Biologist.

- After construction, all revegetated areas will comply with EO 13112.
- Erosion control and/or revegetation sites will be monitored after construction to detect and control the introduction/invasion of nonnative 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.

No Build Alternative (Alternative 1)

The No Build Alternative would not include construction or operation of any of the Build Alternative improvements. Therefore, the No Build Alternative would not result in impacts related to invasive species.

2.19.4 Avoidance, Minimization, and/or Mitigation Measures

The Preferred Alternative will incorporate the project feature outlined above in Section 2.19.3.2 that will address potential impacts. No avoidance, minimization, and/or mitigation measures are required.