

## 3-3 BIOLOGICAL RESOURCES

### Changes Since the Draft EIS/EIR

Subsequent to the release of the Draft EIS/EIR in April 2004, the Gold Line Phase II project has undergone several updates:

**Name Change:** To avoid confusion expressed about the terminology used in the Draft EIS/EIR (e.g., Phase I; Phase II, Segments 1 and 2), the proposed project is referred to in the Final EIS/EIR as the Gold Line Foothill Extension.

**Selection of a Locally Preferred Alternative and Updated Project Definition:** Following the release of the Draft EIS/EIR, the public comment period, and input from the cities along the alignment, the Construction Authority Board approved a Locally Preferred Alternative (LPA) in August 2004. This LPA included the Triple Track Alternative (2 LRT and 1 freight track) that was defined and evaluated in the Draft EIS/EIR, a station in each city, and the location of the Maintenance and Operations Facility. Segment 1 was changed to extend eastward to Azusa. A Project Definition Report (PDR) was prepared to define refined station and parking lot locations, grade crossings and two rail grade separations, and traction power substation locations. The Final EIS/EIR and engineering work that support the Final EIS/EIR are based on the project as identified in the Final PDR (March 2005), with the following modifications. Following the PDR, the Construction Authority Board approved a Revised LPA in June 2005. Between March and August 2005, station options in Arcadia and Claremont were added.

**Changes in the Discussions:** To make the Final EIS/EIR more reader-friendly, the following format and text changes have been made:

Discussion of a Transportation Systems Management (TSM) Alternative has been deleted since the LPA decision in August 2004 eliminated it as a potential preferred alternative.

Discussions of the LRT Alternatives have eliminated the breakout of the two track configurations used in the Draft EIS/EIR (Double Track and Triple Track). The Final EIS/EIR reports the impacts of a modified triple track configuration (2 LRT tracks and 1 freight track with two rail grade separations) but focuses on the phasing/geographic boundaries included in the LPA decisions.

Two LRT alternatives in the Final EIS/EIR are discussed under the general heading “Build Alternatives,” and are defined as:

1. Full Build (Pasadena to Montclair) Alternative: This alternative would extend LRT service from the existing Sierra Madre Villa Station in Pasadena through the cities of Arcadia, Monrovia, Duarte, Irwindale, Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont, terminating in Montclair. The cities from Pasadena to Azusa are also referred to in the Final EIS/EIR as Segment 1. The cities from Glendora to Montclair are also referred to in the Final EIS/EIR as Segment 2. Key changes from the Draft EIS/EIR are the inclusion of Azusa in Segment 1, the elimination of the Pacific Electric right-of-way option between Claremont and Montclair, the inclusion of a 24-acre Maintenance and Operations facility in Irwindale (the site is smaller than in the Draft EIS/EIR), and the addition of two rail grade separations. Note that the Maintenance and Operations Facility is located in Segment 1 but is part of the Full Build Alternative. In other words, it would not be constructed as an element of the Build LRT to Azusa Alternative (described below). The length of the alternative is

approximately 24 miles. One station (and parking) would be located in each city, except for Azusa, which would have two. There are two options for the station locations in Arcadia and Claremont. Segment 1 would include 2 LRT tracks throughout and 1 freight track between the Miller Brewing Company in Irwindale and the eastern boundary of Azusa. The freight track that now exists west of Miller Brewing, which serves a single customer in Monrovia, would be removed from service following relocation of that customer by the City of Monrovia. Segment 2 would include two LRT tracks throughout and 1 freight track between the eastern boundary of Azusa and Claremont. In Claremont, the single freight track joins up with the double Metrolink tracks (which are also used for freight movement) and continues through to Montclair (and beyond). This alternative also includes two railroad grade separations (in Azusa and in Pomona) so that LRT tracks would pass above the at-grade freight track. These allow the LRT and freight services to operate independently (thus eliminating the time-constrained double track option discussed in the Draft EIS/EIR). Implementation of the alternative would include relocation of the existing freight track within the rail right-of-way, but there would be no changes in the service provided to customers. The alternative includes 8 new traction power substations in Segment 2, as well as the 8 in Segment 1.

2. Build LRT to Azusa Alternative: This alternative (also referred to as Segment 1) would extend LRT service from the existing Sierra Madre Villa Station in Pasadena through the cities of Arcadia, Monrovia, Duarte, Irwindale, and to the eastern boundary of Azusa. (The main change from the Draft EIS/EIR is the inclusion of the City of Azusa.) The length of the alternative is approximately 11 miles. One station (and parking facility) would be located in each city, except for Azusa, which would have two. There are two options for the station location in Arcadia. Segment 1 would include two LRT tracks throughout and 1 freight track between the Miller Brewing Company in Irwindale and the eastern boundary of Azusa. The freight track that now exists west of Miller Brewing, which serves a single customer in Monrovia, would be removed from service following relocation of that customer by the City of Monrovia. This alternative also includes the railroad grade separation in Azusa so that LRT tracks would pass above the at-grade freight track. This allows the LRT and freight services to operate independently (thus eliminating the time-constrained double track option discussed in the Draft EIS/EIR). Implementation of the alternative would include relocation of the existing freight track within the rail right-of-way, but there would be no changes in the service provided to customers. The alternative also includes 8 new traction power substations.

As in the Draft EIS/EIR, impact forecasts use 2025 conditions, except for traffic impacts, which reflects a 2030 forecast based on the recently adopted 2004 SCAG Regional Transportation Plan.

## Summary of Impacts

The No-Build Alternative does not include any elements that would affect biological resources in Phase I cities or in the ~~Phase II~~ Foothill Extension study corridor.

For the LRT alternatives, biological impacts are limited to the proposed site of the Maintenance and Operations facility at Irwindale, the crossing of the San Gabriel River and adjoining parkland areas, and the sites that would be acquired for stations and/or parking ~~in Glendora and in Pomona (Towne Ave. option)~~. All other sites are current paved and thus have no biological resources. Where trees may be disturbed at any location, preventative measures to avoid violation of the Migratory Bird Treaty Act would be included in construction contracts.

~~Development of the proposed Maintenance and Operation facility plan would be was preceded by focused surveys to be conducted during Preliminary Engineering to determine the presence/absence of this federally or state-listed endangered plant or animal species. Until those surveys are completed, along with any necessary consultation with state and federal agencies, there is a presumed potentially adverse effect under NEPA and presumed potential significant impact under CEQA due to the loss of habitat and potential adverse effects to species associated with the habitat. Proposed Mitigation measures have been developed. The results of the focused presence/absence surveys conducted in 2005 confirmed that the proposed Maintenance and Operation facility land does not support federally or state-listed endangered and/or threatened plant or wildlife species. Therefore, the project is not expected to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a endangered, threatened, candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFG or USFWS. Development of the Maintenance and Operation facility would result in the loss of up to 30 17 acres of alluvial fan sage scrub and 5 2 acres of riparian scrub. The Kincaid parking site would result in the removal of up to 8 acres of alluvial fan sage scrub. Loss of these sensitive habitats would be considered adverse under NEPA and significant under CEQA without mitigation. Mitigation measures aimed at minimizing impacts to these sensitive plant communities have been developed. These mitigation measures would reduce impacts to a less than significant/adverse level.~~

### 3-3.1 Existing Conditions

Existing conditions were determined using a review of the most recent records of the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB) and the California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPSEI) for the quadrangles containing and surrounding the proposed project. Recent aerial photographs (July 2003) were reviewed to focus on the areas to be surveyed. Areas of current development or heavily disturbed properties were not surveyed since these would not be likely to support biological resources. After review of these records, qualified biologists conducted reconnaissance-level surveys to identify the distribution and relative abundance of general and sensitive wildlife resources in the study corridor (1,000 feet along either side of the rail alignment). A habitat assessment was also performed to determine the relative quality or potential of habitat types to support sensitive plant and wildlife species. Focused surveys for listed and sensitive plant and animal species were completed in July 2005. Sensitive plant species are shown on Figure 3-1.1 and sensitive animal species are shown on Figure 3-1.2.

#### 3-3.1.1 Vegetation

##### *a. Vegetation Communities*

Vegetation communities in the project study area include disturbed areas, ornamental landscaping, alluvial fan sage scrub, and riparian scrub. Two sensitive vegetation communities, alluvial fan sage scrub and riparian scrub, occur in the City of Irwindale. These communities are described below.

##### Coastal Sage Scrub Habitat: Alluvial Fan Sage Scrub

Alluvial fan sage scrub vegetation communities occur on alluvial outwash fans along the base of the San Gabriel, San Bernardino, and San Jacinto mountains. These communities are generally associated with infrequently scoured areas on floodplains and outwash fans in the Transverse and Peninsular ranges. Alluvial fan scrub communities are considered to be rare or threatened plant communities that are highly fragmented due to urbanization and the extensive alteration of natural stream hydrology in southern

California. These plant communities are composed of a variety of evergreen woody and drought-deciduous shrubs with a significant component of larger, evergreen shrubs typically found in chaparral<sup>1</sup> adapted to survival in the presence of intense periodic flooding. Scalebroom (*Lepidospartum squamatum*) is considered to be an indicator species of alluvial scrubs, and is usually described as a dominant or subdominant shrub in alluvial community descriptions, including the Scalebroom Series<sup>2</sup> and the *Lepidospartum-Eriodycton-Yucca* association.<sup>3</sup>

The alluvial fan sage scrub community occurring at the South Kincaid pit (the location of parking for the Irwindale Station), Miller Brewing site and the adjacent Santa Fe Dam Recreation area (location of the Maintenance and Operations Facility)–~~Irwindale site~~ has been disturbed by past surface mining activities and erosion resulting from the mining. This community is dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and brittlebush (*Encelia farinosa*); Prickly-pear cactus (*Opuntia* sp.), scalebroom, and sugarbush (*Rhus ovata*) are also present.

#### Riparian Habitat: Riparian Scrub

Riparian scrub communities generally occur along watercourses or water bodies and have soil that is flooded or saturated during at least a portion of the growing season. Vegetation consists of herbs, shrubs, and trees adapted to these wet conditions. Riparian habitat subtypes are identified by the percent cover of dominant species, with the tallest species in a multilayered canopy taking precedence. A riparian scrub habitat (~~possibly southern willow scrub~~) may occur in and around an inactive mining pit on the Miller property in the City of Irwindale. ~~however, the surveyors were unable to access this portion of the site to confirm this. It should be noted that there are no proposed project elements that would affect this potential riparian scrub habitat.~~

#### Other Areas

##### Ornamental Landscaping

Ornamental landscaping and areas of escaped ornamental plantings consist of introduced trees, shrubs, flowers, and turf grass. Ornamental landscaping occurs in green belts, parks, and horticultural plantings throughout the proposed project.

##### Disturbed Communities

Disturbed communities occur in areas whose naturally occurring plant communities have been changed by human actions, such as farming or mining, or natural phenomena, such as floods or rockfalls. Plant species occurring in disturbed areas are typically opportunistic, invasive species adapted to rapid colonization of disturbed ground. Many of these species are considered ruderal (i.e., adapted to growing in waste areas). A number of areas in the proposed project area exhibit varying degrees of past disturbance. Plant species found in these areas include telegraph weed (*Heterotheca grandiflora*), Russian thistle (*Salsola tragus*), Peruvian pepper (*Schinus molle*), puncture vine (*Tribulus terrestris*), tree tobacco (*Nicotiana glauca*), and castor bean (*Ricinus communis*).

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<sup>1</sup> Kirkpatrick and Hutchinson 1977, Smith 1980

<sup>2</sup> Sawyer and Keeler-Wolf 1998

<sup>3</sup> Kirkpatrick and Hutchinson 1977

*b. Sensitive Plant Species*

The potential occurrence of special status plants was evaluated through a literature review and visit to the proposed project area. The CNDDDB and CNPSEI literature were reviewed regarding the potential presence of threatened, endangered, candidate, or other sensitive species in the study area. The review resulted in a list of ~~58~~ 59 sensitive plant species, ~~five~~ six of which have federal- or state-protected status. Eleven of the ~~58-59~~ species were determined to have a low potential to occur on or within the vicinity of the proposed project and one species was determined to have a moderate potential to occur onsite. Of these ~~4~~ 12, ~~one is a two~~ species are federal- and state-listed endangered species; the other 10 species have a CNPS List status or R-E-D code. The ~~other~~ remaining 47 protected sensitive plant species that were identified in the initial literature review were subsequently excluded from further consideration because ~~the proposed project either~~ either the proposed project area lacks suitable conditions to support these species or the area is located well beyond their normal range. Sensitive species include all federal- and state-listed (endangered and threatened) species, federal species of concern, state rare species, and CNPS listed species.

The “potential for occurrence” ranking is based on the following criteria:

- **Absent.** Species was not observed during focused surveys conducted at an appropriate time for identification of the species or species is restricted to habitats that do not occur within the proposed project.
- **Low.** No records exist of the species occurring within the proposed project or its immediate vicinity and/or habitats needed to support the species are of poor quality.
- **Moderate.** Either a historical record exists of the species within the immediate vicinity of the proposed project (approximately 5 miles) or the habitat requirements associated with the species occur within the proposed project.
- **High.** Both a historical record exists of the species within the proposed project or its immediate vicinity (approximately 5 miles) and the habitat requirements associated with the species occur within the proposed project.
- **Occurs.** Species was observed within the proposed project at the time of the survey.

~~The 12 plant species with the potential to occur in the project footprint along with their current status, and their potential to occur (absent, low, moderate, high, or occurs within the study corridor are summarized and listed by city in Table 3-3.1. Irwindale is the only city in which the project contains suitable habitat for sensitive plant species. Only those cities that have potential for occurrence of any sensitive plant species are included in the table. A brief description of the one federal and state-listed endangered species that has a low potential to occur follows the table. No sensitive plant species were observed during the reconnaissance surveys.~~

~~Focused surveys for the sensitive plant species listed in the table above with a potential to occur in Irwindale were conducted on April 12, April 19 and May 24, 2005 at the South Kincaid pit, Miller brewing site and the adjacent Santa Fe Dam Recreation area. Surveys took place during the appropriate flowering periods for each species. No sensitive plant species were observed during the surveys and those species listed above are therefore considered absent from the Irwindale sites.~~

~~Brief descriptions follow the table of the biology of the two federal-or state-listed plant species for which suitable habitat was observed within the proposed project area.~~

**TABLE 3-3.1  
SENSITIVE PLANT SPECIES POTENTIALLY  
OCCURRING WITHIN STUDY CORRIDOR**

| Scientific Name                                  | Common Name                   | Status Designation                                       | PFO <sup>1</sup> | Habitat And Distribution   | Flowering Period | City of Potential Occurrence |
|--|-------------------------------|--|------------------|--|------------------|------------------------------|
| <b>Endangered and Threatened Plants</b>          |                               |  |                  |  |                  |                              |
| <i>Berberis nevinii</i>                          | Nevin's barberry              | ESA: FE<br>CESA: SE<br>CNPS: List 1B<br>R-E-D: 3-3-3     | ⚡ A              | Evergreen shrub occurring in chaparral, cismontane woodland, coastal scrub, and sandy or gravelly riparian scrub at elevations ranging from 950 to 2,700 feet msl.   | March - April    | Irwindale                    |
| <i>Dodecahema leptoceras</i>                     | slender-horned spineflower    | ESA: FE<br>CESA: SE<br>CNPS: List 1B<br>R-E-D: 3-3-3     | A                | Annual herb occurring in coastal scrub (alluvial fans), chaparral, and cismontane woodlands on sandy soils at elevations ranging from 660 to 2,500 feet msl.   | April - June     | Irwindale                    |
| <b>Other Sensitive Plants</b>                    |                               |  |                  |  |                  |                              |
| <i>Calochortus clavatus</i> var. <i>gracilis</i> | slender mariposa lily         | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 3-2-3 | ⚡ A              | Bulbiferous herb occurring in chaparral and coastal scrub at elevations ranging from 1,100 to 3,300 feet msl.  | March - May      | Irwindale                    |
| <i>Calochortus plummerae</i>                     | Plummer's mariposa lily       | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 2-2-3 | A                | Bulbiferous herb occurring on rocky and sandy sites, usually alluvial or granitic material, in coastal scrub, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grasslands at elevations ranging from 325 to 5,500 feet msl | May - July       | Irwindale                    |
| <i>Dudleya densiflora</i>                        | San Gabriel Mountains Dudleya | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 3-3-3 | ⚡ A              | Perennial herb occurring in chaparral, coastal scrub, lower montane coniferous forest in crevices and on decomposed granite on cliffs and canyon walls at elevations ranging from 985 to 1,700 feet msl.   | March - July     | Irwindale                    |

**TABLE 3-3.1  
SENSITIVE PLANT SPECIES POTENTIALLY  
OCCURRING WITHIN STUDY CORRIDOR**

| Scientific Name                                      | Common Name            | Status Designation                                       | PFO <sup>1</sup> | Habitat And Distribution  | Flowering Period | City of Potential Occurrence |
|--|------------------------|--|------------------|---|------------------|------------------------------|
| <i>Horkelia cuneata</i><br><i>ssp. puberula</i>      | mesa horkelia          | ESA: None<br>CESA: None<br>CNPS: List 3<br>R-E-D: 2-2-3  | ≡ A              | Perennial herb occurring in coastal scrub, chaparral, and cismontane woodland on sandy or gravelly soils at elevations ranging from 230 to 2,660 feet msl.            | February - Sept  | Irwindale                    |
| <i>Lepidium virginicum</i> var.<br><i>robinsonii</i> | Robinson's peppergrass | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 3-2-2 | ≡ A              | Annual herb occurring in coastal scrub and chaparral on dry soils at elevations ranging from 0 to 2,800 feet msl.   | January - July   | Irwindale                    |
| <i>Malacothamnus davidsonii</i>                      | Davidson's bush mallow | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 2-2-3 | ≡ A              | Deciduous shrub occurring in coastal scrub, cismontane woodland, riparian woodland, and chaparral, often-in sandy washes at elevations ranging from 610 to 2,805 msl. | June - January   | Irwindale                    |
| <i>Navarretia prostrata</i>                          | prostrate navarretia   | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 2-3-3 | ≡ A              | Annual herb occurring in coastal scrub, vernal pools, and valley and foothill grasslands in mesic soils at elevations ranging from 50 to 2,300 feet msl.              | April - July     | Irwindale                    |
| <i>Phacelia stellaris</i>                            | Brand's phacelia       | ESA: None<br>CESA: None<br>CNPS: List 1B<br>R-E-D: 3-3-2 | ≡ A              | Annual herb occurring in coastal dunes and scrub at elevations ranging from 15 to 4,970 feet msl.   | March - June     | Irwindale                    |
| <i>Senecio aphanactis</i>                            | rayless ragwort        | ESA: None<br>CESA: None<br>CNPS: List 2<br>R-E-D: 3-2-1  | ≡ A              | Annual herb occurring in cismontane woodland, coastal scrub, and chaparral on drying alkaline flats at elevations ranging from 50 to 2,625 feet msl.                  | January - April  | Irwindale                    |

**TABLE 3-3.1  
SENSITIVE PLANT SPECIES POTENTIALLY  
OCCURRING WITHIN STUDY CORRIDOR**

| Scientific Name             | Common Name              | Status Designation                                      | PFO <sup>1</sup> | Habitat And Distribution  | Flowering Period | City of Potential Occurrence |
|-----------------------------|--------------------------|---|------------------|---|------------------|------------------------------|
| <i>Sidalcea neomexicana</i> | salt spring checkerbloom | ESA: None<br>CESA: None<br>CNPS: List 2<br>R-E-D: 2-2-1 | ≠ A              | Perennial herb occurring in coastal scrub, chaparral, lower montane coniferous forest, brackish marshes, mohavean desert scrub, and playas on alkaline, mesic soils at elevations ranging from 0 to 5,020 feet msl. | March - June     | Irwindale                    |

General references: CNPSEI 2003; CNDDDB 2003; Azusa, Baldwin Park, El Monte, Glendora, Los Angeles, Mt. Baldy, Mt. Wilson, Ontario, Pasadena, and San Dimas USGS 7.5-minute quadrangles.

**Status Designation Codes:**

**Federal (Fed)**

**Endangered Species Act (ESA) Listing Codes:**

- FE Federally-listed as Endangered
- FT Federally-listed as Threatened
- FPE Federally-proposed for listing as Endangered
- FPT Federally-proposed for listing as Threatened
- FPD Federally-proposed for delisting
- FC Federal candidate species (former Category 1 candidates)
- (FSC) Federal Species of Concern (Not an active term, and is provided for informational purposes only)

**State (CA)**

**California Endangered Species Act (CESA) Listing Codes:**

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
- SCE State candidate for listing as Endangered
- SCT State candidate for listing as Threatened

**CNPS R-E-D Listing Code:**

*Rarity*

- 1: Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
- 2: Occurrence confined to several populations or one extended population.
- 3: Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

*Endangerment*

- 1: Not endangered.
- 2: Endangered in a portion of its range.
- 3: Endangered throughout its range.

*Distribution*

- 1: More or less widespread outside California.
- 2: Rare outside California.
- 3: Endemic to California (i.e., does not occur outside California)

\* Note that the R-E-D Code for List 1A plants does not

**TABLE 3-3.1  
SENSITIVE PLANT SPECIES POTENTIALLY  
OCCURRING WITHIN STUDY CORRIDOR**

| Scientific Name   | Common Name  | Status Designation | PFO <sup>1</sup> | Habitat And Distribution | Flowering Period | City of Potential Occurrence |
|---|--|--------------------|------------------|--------------------------|------------------|------------------------------|
| <b>California Native Plant Society (CNPS) Listing code:</b> |  |                    |                  |                          |                  |                              |
| List 1A:  | Plants presumed extinct in California.   |                    |                  |                          |                  |                              |
| List 1B:  | Plants rare and endangered in California and throughout their range.                           |                    |                  |                          |                  |                              |
| List 2:   | Plants rare, threatened, or endangered in California but more common elsewhere in their range. |                    |                  |                          |                  |                              |
| List 3:   | Plants about which we need more information; a review list.                                    |                    |                  |                          |                  |                              |
| List 4:   | Plants of limited distribution; a watch list.  |                    |                  |                          |                  |                              |

**1. Definitions of Occurrence Probability (PFO)**

A = Absent: Species was not observed during focused surveys conducted at an appropriate time for identification of the species or species is restricted to habitats that do not occur within the proposed project.

L = Low: No records exist of the species occurring within the proposed project or its immediate vicinity and/or habitats needed to support the species are of poor quality.

M = Moderate: Either a historical record exists of the species within the immediate vicinity of the proposed project (approximately 5 miles) or the habitat requirements associated with the species occur within the proposed project.

H = High: Both a historical record exists of the species within the proposed project or its immediate vicinity (approximately 5 miles) and the habitat requirements associated with the species occur within the proposed project.

P = Occurs: Species was observed within the proposed project at the time of the survey.

Source: Chambers Group 2003; revised 2005.

Nevin's Barberry

This species is a federally- and state-listed as endangered plant that typically occurs on steep, north-facing slopes or in low-grade sandy washes on gravelly soils. It is an evergreen shrub flowering from March to April and occurs in chaparral, cismontane woodland, coastal sage scrub, and riparian scrub habitat from 950 to 5,170 feet in elevation. Focused surveys for Nevin's barberry were conducted on April 12 and April 19, 2005 at the Kincaid pit, Miller Brewing site and adjacent Santa Fe Dam Recreation area. This species was not observed during the focused survey and is therefore considered absent from Irwindale sites.

Slender-horned Spineflower

This species is a federally- and state-listed as endangered species. This annual herb blooms from April to June and occurs in chaparral, cismontane woodlands, and coastal scrub, particularly alluvial fan sage

scrub, on flood deposited terraces and washes at an elevation of approximately 660 to 2,500 feet in elevation. Focused surveys for the slender-horned spineflower were conducted on April 12, April 19 and May 24, 2005 at the Kincaid pit, Miller Brewing site and adjacent Santa Fe Dam Recreation area. This species was not observed during the focused survey and is therefore considered absent from the Irwindale sites.

#### California Juniper

At the request of the Department of the Interior, Office of Environmental Policy and Compliance, the California juniper (*Juniperus californica*) was given the same consideration as other sensitive plant species. Although this species is not provided protection under either the Federal or California Endangered Species Act, it has highly unusual occurrence on the coastal side of Los Angeles County and indicates the unique nature of the alluvial fan sage scrub habitat in this area. No California junipers were observed at the South Kincaid pit, Miller Brewing site and adjacent Santa Fe Dam Recreation area during the focused surveys and are therefore considered absent from the Irwindale sites.

### 3-3.1.2 Wildlife

Disturbed areas and ornamental landscaping predominantly characterize the proposed project area. Two other vegetation communities, riparian scrub and alluvial fan sage scrub, are found within the proposed project area in the City of Irwindale. Wildlife species occurring within the proposed project area are characteristic of these communities.

#### *a. Amphibians*

Three species of amphibians were detected during surveys on the Miller Brewing site and the Santa Fe Dam recreation area. These included the western toad (*Bufo boreas*), Pacific chorus frog (*Pseudacris regilla*) and the California treefrog (*Hyla cadaverina*). Amphibians were not observed within the proposed project area. Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. A common amphibian species that may occur, California tree frog (*Hyla cadaverina*), would be found only in the presence of water and suitable upland habitat, which would support both breeding and foraging activities. This species would be were found along the San Gabriel River and at the bottom of the abandoned gravel pit at the Miller site within the City of Irwindale.

#### *b. Reptiles*

Two reptile species were observed during surveys of the proposed project area. These included the side-blotched lizard (*Uta stansburiana*) and San Diego horned lizard (*Phrynosoma coronatum blainvillei*). Suitable habitat, such as dry, open environments, occurs within the proposed project area. Other species of reptiles that are expected to occur on or within the proposed project area include western fence lizard (*Sceloporus occidentalis*) and southern alligator lizard (*Elgaria multicarinata*).

#### *c. Birds*

The most diverse group of animals observed during the surveys was birds. Twenty-three species of birds were observed during the surveys of the proposed project area. ~~Birds~~ Some of the birds observed include the house finch (*Carpodacus mexicanus*), California towhee (*Pipilo crissalis*), Western scrub-jay (*Aphelocoma californica*), mourning dove (*Zenaida macroura*), California quail (*Callipepla californica*),

and black phoebe (*Sayornis nigricans*). Raptors observed include the red-tailed hawk (*Buteo jamaicensis*) and Cooper's hawk (*Accipiter cooperii*). Both of these species, including their nests and eggs, are specifically protected under the Migratory Bird Protection Act (16 USC 703-712). Mature trees throughout the proposed project have the potential to support raptor-nesting sites.

*d. Mammals*

Several mammals were observed or detected during the surveys. These included the California ground squirrel (*Spermophilus beecheyi*), desert cottontail rabbit (*Sylvilagus auduboni*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), domestic cat (*Felis catus*), ~~Other species of mammals that are expected to occur on or within the proposed project area include~~ raccoon (*Procyon lotor*), and opossum (*Didelphis virginiana*).

*e. Sensitive Wildlife Species*

The potential for the presence of listed or sensitive wildlife species within the proposed project area was determined from a literature review of the CNDDDB and other pertinent biological documentation. In addition, the wildlife biologists used their expertise to survey the proposed project area to determine if habitat within the proposed project area could support these sensitive or listed species. Based on this information, a "potential for occurrence" ranking was assigned to each listed or sensitive species that could potentially occur onsite. Sensitive wildlife species include all federal and state endangered and threatened species, Federal Species of Concern (FSC), and California Special Concern Species (CSC).

After a thorough literature review of the proposed project area and vicinity, a total of 23 species were identified to have the potential to occur within the proposed project area. Of these 23 species, it was determined that 14 sensitive wildlife species occur or have a low to high potential to occur within the proposed project area due to the presence of suitable habitat and observations. The other nine sensitive wildlife species that were identified in the initial literature review were subsequently excluded from further consideration because the proposed project area either lacks suitable habitat conditions to support these species or the area is located well beyond their normal range. Of the 14 remaining sensitive wildlife species that have the potential to occur, four are federal- or state-listed as endangered or threatened, and 10 are either federal or state species of concern or sensitive wildlife species. The presence of ~~two~~ four sensitive wildlife species, San Diego horned lizard, coastal cactus wren, southern California rufous-crowned sparrow and Cooper's hawk, were observed within the proposed project area during surveys. **Table 3-3.2** provides a list by city of the federal- and state-listed endangered, threatened, and sensitive wildlife species and their potential to occur within the proposed project area. Only those cities that have potential for occurrence for any sensitive wildlife species are included in the table. A brief description of the three federal- or state-listed endangered wildlife species that have a moderate potential to occur follows the table.

**TABLE 3-3.2  
SENSITIVE WILDLIFE SPECIES POTENTIALLY  
OCCURRING WITHIN THE PROPOSED PROJECT**

| Scientific Name                         | Common Name                  | Status                  | PFO <sup>1</sup> | Habitat   | City of Potential Occurrence |
|---|------------------------------|-------------------------|------------------|---|------------------------------|
| <b>CLASS OSTEICHTHYES</b>               | <b>BONY FISH</b>             |                         |                  |   |                              |
| <i>Catostomus santaanae</i>             | Santa Ana Sucker             | ESA: FT<br>CESA:<br>CSC | L                | Endemic to Los Angeles Basin south coastal streams. Habitat generalists but prefer sand-rubble-boulder bottoms, clear water, & algae.                   | Irwindale                    |
| <b>Cyprinidae</b>                       | <b>Minnnows And Carp</b>     |                         |                  |   |                              |
| <i>Gila orcutti</i>                     | arroyo chub                  | ESA: None<br>CESA: CSC  | L                | Occurs in slow water stream sections with mud or sand bottoms. Often found in intermittent streams.   | Irwindale                    |
| <i>Rhinichthys osculus spp.</i>         | Santa Ana speckled dace      | ESA: None<br>CESA: CSC  | L                | Found only in permanent flowing streams with summer water temperatures of 17-20 Celcius. Usually inhabits shallow cobble and gravel riffles.            | Irwindale                    |
| <b>CLASS REPTILIA</b>                   | <b>REPTILES</b>              |                         |                  |   |                              |
| <b>Emydidae</b>                         | <b>Box And Water Turtles</b> |                         |                  |   |                              |
| <i>Clemmys marmorata pallida</i>        | southwestern pond turtle     | ESA: (FSC)<br>CESA: CSC | L                | Inhabits permanent or nearly permanent bodies of water in many habitat types including ponds, marshes, rivers, and streams with suitable basking sites. | Irwindale                    |
| <b>Phrynosomatidae</b>                  | <b>Lizards</b>               |                         |                  |   |                              |
| <i>Phrynosoma coronatum blainvillei</i> | San Diego horned lizard      | ESA: None<br>CESA: CSC  | P                | Occurs in coastal sage scrub, open chaparral, riparian woodland, annual grassland habitats that support adequate prey species.                          | Irwindale                    |

**TABLE 3-3.2  
SENSITIVE WILDLIFE SPECIES POTENTIALLY  
OCCURRING WITHIN THE PROPOSED PROJECT**

| Scientific Name                               | Common Name                               | Status                   | PFO <sup>1</sup> | Habitat  | City of Potential Occurrence  |
|---|---|--------------------------|------------------|--|---|
| <b>Colubridae</b>                             | <b>Colubrid Snakes</b>                    |                          |                  |  |   |
| <i>Thamnophis hammondi</i>                    | two-striped garter snake                  | ESA: None<br>CESA: CSC   | M                | Found in or near fresh water, often along streams with rocky beds and riparian growth.   | Irwindale   |
| <b>Boidae</b>                                 | <b>Boa And Pythons</b>                    |                          |                  |  |   |
| <i>Charina trivirgata</i>                     | rosy boa                                  | ESA: (FSC)<br>CESA: None | H                | Inhabits areas of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains.   | Irwindale   |
| <b>CLASS AVES</b>                             | <b>BIRDS</b>                              |                          |                  |  |   |
| <b>Accipitridae</b>                           | <b>Hawks, Kites, Harriers, And Eagles</b> |                          |                  |  |   |
| <i>Accipiter cooperii</i>                     | Cooper's hawk                             | ESA: None<br>CESA: CSC   | M, P*            | Prefers open grasslands and woodland margins with riparian vegetation and trees for nesting.   | Pasadena, Arcadia, Monrovia, Duarte, Azusa, Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair<br><br><u>*Present in Irwindale</u> |
| <b>Strigidae</b>                              | <b>Owls</b>                               |                          |                  |  |   |
| <i>Athene cunicularia hypugea</i>             | burrowing owl                             | ESA: (FSC)<br>CESA: CSC  | L                | Prefers open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent on small mammal burrows (particularly ground squirrels) for its subterranean nesting. | Irwindale   |
| <b>Troglodytidae</b>                          | <b>Wrens</b>                              |                          |                  |  |   |
| <i>Campylorhynchus brunneicapillus couesi</i> | coastal cactus wren                       | ESA: None<br>CESA: CSC   | M, P             | Typically occurs in coastal sage scrub and nests within cholla or prickly pear cactus  | Irwindale   |

**TABLE 3-3.2  
SENSITIVE WILDLIFE SPECIES POTENTIALLY  
OCCURRING WITHIN THE PROPOSED PROJECT**

| Scientific Name                            | Common Name                                       | Status                  | PFO <sup>1</sup> | Habitat   | City of Potential Occurrence |
|--|---|-------------------------|------------------|---|------------------------------|
| <b>Tyrannidae</b>                          | <b>Tyrant Flycatchers</b>                         |                         |                  |   |                              |
| <i>Empidonax traillii extimus</i>          | southwestern willow flycatcher                    | ESA: FE<br>CESA: None   | M, A             | Prefers moist thickets of dense, structurally diverse riparian habitat.   | Irwindale                    |
| <b>Sylviidae</b>                           | <b>Gnatcatchers</b>                               |                         |                  |   |                              |
| <i>Polioptila californica californica</i>  | coastal California gnatcatcher                    | ESA: FT<br>CESA: CSC    | M, A             | Occurs in coastal sage scrub vegetation on mesas, arid hillsides, and in washes and nests almost exclusively in California sagebrush.                                       | Irwindale                    |
| <b>Vireonidae</b>                          | <b>Vireos</b>                                     |                         |                  |   |                              |
| <i>Vireo bellii pusillus</i>               | least Bell's vireo                                | ESA: FE<br>CESA: SE     | M, A             | Occurs in moist thickets and riparian areas that are predominately comprised of willow and mule fat.  | Irwindale                    |
| <b>Emberizidae</b>                         | <b>Towhees, Sparrows</b>                          |                         |                  |   |                              |
| <u><i>Aimophila ruficeps canescens</i></u> | <u>Southern California Rufous-crowned Sparrow</u> | ESA: NONE<br>CESA: CSC  | P                | <u>Occurs in open shrubby habitat on rocky, xeric slopes, coastal sage scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.</u>         | <u>Irwindale</u>             |
| <b>CLASS MAMMALIA</b>                      | <b>MAMMALS</b>                                    |                         |                  |   |                              |
| <b>Cricetidae</b>                          | <b>Mice, Rats, And Voles</b>                      |                         |                  |   |                              |
| <i>Neotoma lepida intermedia</i>           | San Diego desert woodrat                          | ESA: (FSC)<br>CESA: CSC | M                | Occurs in moderate to dense canopies, especially in rock outcrops, rocky cliffs, and slopes. Occurs in Southern California from San Diego County to San Luis Obispo County. | Irwindale                    |

General references: CNDDDB 2003; Azusa, Baldwin Park, El Monte, Glendora, Los Angeles, Mt. Baldy, Mt. Wilson, Ontario, Pasadena, and San Dimas USGS 7.5-minute quadrangles.

| <p align="center"><b>TABLE 3-3.2</b><br/> <b>SENSITIVE WILDLIFE SPECIES POTENTIALLY</b><br/> <b>OCCURRING WITHIN THE PROPOSED PROJECT</b></p>   |             |        |  |         |                              |
|---|-------------|--------|--|---------|------------------------------|
| Scientific Name   | Common Name | Status | PFO <sup>1</sup>   | Habitat | City of Potential Occurrence |
| <b>Status Designation Codes:</b>  |             |        |  |         |                              |
| <b>Federal (Fed)</b><br><b>Endangered Species Act (ESA) Listing Codes:</b><br>FE Federally-listed as Endangered<br>FT Federally-listed as Threatened<br>FPE Federally-proposed for listing as Endangered<br>FPT Federally-proposed for listing as Threatened<br>FPD Federally-proposed for delisting<br>FC Federal candidate species (former Category 1 candidates)<br>(FSC) Federal Species of Concern (Not an active term, and is provided for informational purposes only) |             |        | <b>Definitions of Occurrence Probability (PFO)</b><br>A = Absent: Species is considered to be absent from the proposed project based on geographical range, absence of suitable habitat, and/or failure to detect the species during focused surveys.<br>L = Low potential for occurrence: Historical records may exist of the species occurring within the proposed project or its immediate vicinity and/or the habitats needed to support the species within the proposed project are of poor quality.<br>M = Moderate potential for occurrence: There is either a recent or historical record of the species within the proposed project or its immediate vicinity and/or habitat requirements associated with the species occur within the proposed project or its immediate vicinity.<br>H = High potential for occurrence: There is either a recent or historical record or observation of the species within or in the immediate vicinity of the proposed project and/or the diagnostic habitat requirements strongly associated with the species occur within the proposed project or in the immediate vicinity.<br>P = Occurs: The species was observed in the proposed project at the time of the survey. |         |                              |
| <b>State (CA)</b><br><b>California Endangered Species Act (CESA) Listing Codes:</b><br>SE State-listed as Endangered<br>ST State-listed as Threatened<br>SR State-listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)<br>SCE State candidate for listing as Endangered<br>SCT State candidate for listing as Threatened   |             |        |  |         |                              |
| Source: Chambers Group 2003; revised 2005.  |             |        |  |         |                              |

Brief descriptions of the biology of the three federal-or state-listed wildlife species for which suitable habitat was observed within the proposed project area are in the following paragraphs. However, critical habitat does not exist in the proposed project area for any of these species. Critical habitat identifies specific areas, both occupied and unoccupied, that are essential to the conservation of a listed species that may require protection and management.<sup>4</sup>

### Coastal California Gnatcatcher

The coastal California gnatcatcher (FT and CSC) is associated with coastal sage scrub vegetation on mesas, arid hillsides, and in washes. This species nests almost exclusively in California sagebrush. Suitable habitat is present (alluvial fan sage scrub) on the Miller property, Santa Fe Dam Recreation area and the South Kincaid pit in the City of Irwindale within the proposed project area; therefore, this species has a moderate potential for occurrence within the proposed project area. Focused surveys for the California gnatcatcher were conducted from September 2004 to February 2005 at the Miller Brewing site.

<sup>4</sup> USFWS 2000

The nine non-breeding surveys at the Miller site were all negative. Gnatcatcher surveys performed in 2005 at the Santa Fe Dam basin and the South Kincaid pit were also negative.

#### Least Bell's Vireo

The least Bell's vireo (FE and SE) is a small, migratory songbird that is dependent upon riparian habitat for breeding. Least Bell's vireo has been observed breeding within the areas of the Santa Fe Dam basin adjacent to the proposed project. Additionally, there is riparian scrub present on the Miller site in the City of Irwindale that could potentially support nesting of this species; therefore, ~~this species has a moderate potential for occurrence within the proposed project area.~~ focused surveys were performed in 2005. This species was not observed during focused surveys and is considered absent from the Miller site.

#### Southwestern Willow Flycatcher

The southwestern willow flycatcher (FE) prefers moist thickets of dense, structurally diverse riparian habitat. There were no CNDDDB occurrences, and this species has not been reported to nest within the proposed project area. However, there is riparian scrub (~~pending field verification~~) present on the Miller site in the City of Irwindale that could potentially support nesting flycatchers; therefore, ~~this species has a moderate potential to occur within the proposed project area.~~ focused surveys were performed in 2005. This species was not observed during focused surveys and is considered absent from the Miller site.

### 3-3.1.3 Wildlife Movement Corridors

Wildlife movement corridors are of substantial importance to the viability of regional planning efforts to preserve habitat linkages. In the absence of habitat linkages that allow movement to adjoining open space areas, some wildlife species, especially the larger and more mobile mammals, will not likely persist over time because the infusion of new individuals and genetic information is prevented.<sup>5</sup> A wildlife movement corridor is traditionally defined as a linear habitat whose primary wildlife function is to connect two or more significant habitat areas.<sup>6</sup> More specifically, a wildlife corridor is a piece of habitat, usually longer than wide, with vegetation and topography that facilitate the movements of wild animals (and plants) from one large patch of suitable habitat to another in order to fulfill foraging, breeding, and territorial needs.

The only wildlife movement corridor and habitat linkage within the Gold Line ~~Phase II~~ Foothill Extension Project is the San Gabriel River and its associated wetlands and the riparian corridor within the City of Irwindale.

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<sup>5</sup> MacArthur and Wilson 1967, Soule 1987, Harris and Gallagher 1989, Bennett 1990

<sup>6</sup> Harris and Gallagher 1989

## 3-3.2 Environmental Impacts

### 3-3.2.1 Evaluation Methodology

#### *a. General*

Prior to performing the field surveys, existing documentation relevant to the proposed project was reviewed. Previous environmental documents and the most recent records of the CNDDDB (2003) and the CNPSEI (2003) were reviewed for the quadrangles containing and surrounding the proposed project (i.e., Azusa, Baldwin Park, El Monte, Glendora, Los Angeles, Mt. Baldy, Mt. Wilson, Ontario, Pasadena, and San Dimas USGS 7.5-minute quadrangles). These databases contain records of reported occurrences of federal- or state-listed listed endangered or threatened species or proposed endangered or threatened species, former FSC, CSC, or otherwise sensitive species or habitat that may occur within or in the immediate vicinity of the proposed project. In addition, lists from the U.S. Fish and Wildlife Service (USFWS) were reviewed, and lists of sensitive wildlife species potentially occurring within the vicinity of the proposed project were subsequently developed.

On October 30 and December 5, 2003, biologists conducted biological reconnaissance-level surveys to identify the distribution and relative abundance of general and sensitive wildlife resources within the proposed project area. A habitat assessment was also performed to determine the relative quality or potential of the habitat types to support sensitive plant and wildlife species. Aerial photographs of the entire proposed project taken in July 2003 were analyzed to focus on the areas to be surveyed. Areas of current development or heavily disturbed properties were not surveyed after it was determined from aerial photos that there would be little to no effect on those areas.

The field surveys were conducted by walking throughout the proposed project area and recording plant and wildlife observations on standardized field data sheets. Plant communities within the proposed project area were qualitatively described. Biological resources within the proposed project area were inventoried, and the potential for the presence of sensitive plant and wildlife species and sensitive habitats was assessed, focusing on those species listed as threatened or endangered by the state and federal agencies. A list of plant and wildlife species observed was documented on standardized data sheets. Appendix A includes the list of wildlife species observed. When allowed and pertinent, digital photos were taken of each area surveyed within the proposed project area.

#### *b. Vegetation*

During the field survey, all habitat types were visited to identify dominant species and to classify each vegetation type according to Holland (1986). All plant species observed were recorded in field notes.

#### *c. Wildlife*

Reconnaissance-level field surveys were on conducted on October 30 and December 5, 2003, within the proposed project area to characterize the distribution and relative abundance of wildlife species, wildlife resources, and wildlife habitat within the proposed project area. Habitat types within the proposed project area were investigated, concentrating on sensitive habitat areas (e.g., alluvial fan sage scrub) within the proposed project area and its immediate vicinity. The surveys were conducted between the hours of 8:00 a.m. and 3:00 p.m. Wildlife and wildlife signs, including tracks, fecal material, carcasses, nests, excavations, and vocalizations, were noted and recorded on standardized data sheets.

Directed surveys for least Bell's vireos were conducted in accordance with the survey guidelines set forth by the USFWS, and included an aural survey (between dawn and 11:00 a.m.) of all riparian habitat. Biologists familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos conducted all surveys. Surveys were performed between April and July 2005 within all suitable riparian habitats on the Miller site.

Presence/absence surveys for southwestern willow flycatcher were conducted in 2005 according to the USFWS 2000 revised protocol for project related surveys and the guidelines described by Sogge et. Al. (1997). All potential southwestern willow flycatcher habitat was surveyed (by a permitted biologist) five times: one visit during period 1 (May 15-31), one visit during period 2 (June 1-21), and three visits during period 3 (June 22 to July 17). Surveys of the site were conducted prior to 1200 under temperate weather conditions.

Focused coastal California gnatcatcher surveys were conducted in 2004 and 2005 at the Miller property, Santa Fe Dam Recreation area and the South Kincaid pit utilizing USFWS 1997 protocol guidelines. The 1997 USFWS protocol requires permitted biologists to conduct six surveys, 7 days apart during the period between March 15 and June 30. From July 1 through March 14, a minimum of nine surveys is required at least two weeks apart. Surveys were conducted between 6am and 12pm under temperate weather conditions.

#### *d. Sensitive Species*

Based on the literature review, database searches, and review of recent aerial photographs, sensitive species were ranked for their potential to occur in the proposed project area. The results of this assessment are summarized in **Tables 3-3.1** and **3-3.2**.

#### Plants

For each of the sensitive plant species identified through the CNDDDB and CNPSEI databases as occurring within the vicinity of the proposed project, the habitat was assessed for the sensitive plants' potential to occur within the proposed project area. The following guidelines were utilized to assess each sensitive species' potential to occur:

- **Absent:** Species was not observed during focused surveys conducted at an appropriate time for identification of the species or species is restricted to habitats that do not occur within the proposed project area.
- **Low:** No records exist of the species occurring within the proposed project area or its immediate vicinity, and/or habitats needed to support the species are of poor quality.
- **Moderate:** Either a historical record exists of the species within the immediate vicinity of the proposed project (approximately 5 miles) or the habitat requirements associated with the species occur within the proposed project area.
- **High:** Both a historical record exists of the species within the proposed project area or its immediate vicinity (approximately 5 miles) and the habitat requirements associated with the species occur within the proposed project area.
- **Occurs:** Species was observed within the proposed project area at the time of the survey.

## Wildlife

A sensitive wildlife species was considered as a potential inhabitant of the proposed project area if its known geographical distribution encompassed part of the proposed project or if its distribution was near the proposed project and general habitat requirements of the species were present (e.g., the presence of roosting, nesting, or foraging habitat, suitable soils or vegetation communities, or a permanent water source). The “potential for occurrence” ranking is based on the following criteria:

- **Absent:** Species is considered to be absent from the proposed project area based on geographical range, absence of suitable habitat, and/or failure to detect the species during focused surveys.
- **Low potential for occurrence:** Historical records may exist of the species occurring within the proposed project area or its immediate vicinity and/or the habitats needed to support the species within the proposed project are of poor quality.
- **Moderate potential for occurrence:** There is either a recent or historical record of the species within the proposed project area or its immediate vicinity and/or habitat requirements associated with the species occur within the proposed project area or its immediate vicinity.
- **High potential for occurrence:** There is either a recent or historical record or observation of the species within proposed project area or its immediate vicinity and/or the diagnostic habitat requirements strongly associated with the species occur within the proposed project area or in the immediate vicinity.
- **Occurs:** The species was observed in the proposed project area at the time of the survey.

### 3-3.2.2 Impact Criteria

#### *a. NEPA Impact Criteria*

The project would have an adverse environmental impact on biological resources if it would:

- Have an adverse effect, either directly or through habitat modifications, on any species listed as endangered, threatened, or proposed or critical habitat for these species.
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by USFWS.
- Interfere substantially with the movement of any migratory fish or wildlife species, including actions that are prohibited by the Migratory Bird Treaty Act.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified by USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

#### *b. CEQA Impact Criteria*

The project would have a significant adverse environmental impact on biological resources if it would:

- Have an adverse effect, either directly or through habitat modifications, on any species listed as endangered, threatened, or proposed or critical habitat for these species.
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFG or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances.
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state HCP.

### 3-3.2.3 Construction-Period Impacts

#### *a. No-Build Alternative*

The No-Build Alternative does not include any elements that would affect biological resources in Phase I cities or in the ~~Phase II~~ Foothill Extension study corridor. Due to the very limited areas of construction of elements of the alternative, effects to biological resources would be expected to be less than adverse under NEPA and less than significant under CEQA.

#### *b. Build Alternatives*

There are no elements of the Foothill Extension project in the Phase I cities of Los Angeles, South Pasadena or Pasadena. There are no The only elements of the project in cities in Segment 1 of the Goldline Foothill Extension related to biological resources are in Irwindale and Azusa, there would be no impact to biological resources in the cities of Pasadena, Arcadia, Monrovia or Duarte. Potential biological impacts in Segment 1 are limited to the proposed site of the Maintenance and Operations Facility at Irwindale, the crossing of the San Gabriel River and adjoining parkland areas, and sites that would be acquired for stations and/or parking and Azusa (Citrus Station) in Irwindale. Resources at the Maintenance and Operations Facility site and along the San Gabriel are discussed under Phase II, Segment 1. The bridge crossing over the San Gabriel River is not expected to have any impacts to the river because all of the work will be completed on the existing bridge. The existing steel bridge will be removed and the new bridge will be installed on the existing piers. Cranes will work on the existing track on both sides of the river for the removal and installation activities. No painting of structures will be completed. The rail right-of-way is devoid of biological resources, largely as a result on railroad maintenance activities to ensure that no encroachments would compromise rail operations and to prevent the spread of fire from the track area to adjoining lands.

Each city along the study corridor has its own tree protection ordinances. The direct removal or pruning of ~~certain~~ trees along the rail right of way to ensure that there are no encroachments into the operating envelope of the rail vehicles may fall under the protection of such ordinances and may require city permits for the removal or alteration of these trees along the rail right of way or ~~on~~ for the development of station and parking sites. Although the Construction Authority is technically not subject to local ordinances, it would voluntarily comply with local tree protection ordinances to the extent possible. The specific tree protection ordinances for cities are listed below:

- Pasadena's Tree Protection and Street Tree Ordinance
- Arcadia's Comprehensive Tree Management Program Ordinance
- Monrovia's Oak Tree Preservation Ordinance (Title 17, Chapter 17.20)
- Duarte's Tree Ordinance (Title 13, Chapter 13.04)
- Azusa's Tree Preservation Ordinance
- Glendora's Tree Ordinance
- San Dimas' Tree Ordinance
- La Verne's Tree Preservation Ordinance
- Pomona's Tree Ordinance
- Claremont's Tree Ordinance
- Montclair's Tree Ordinance.

Mature trees within any city along the rail alignment may support nesting raptors that are protected by the Migratory Bird Treaty Act (MBTA). Effects would typically occur from removal of trees that are used by nesting raptors or, perhaps, from increased noise during construction within 500 feet of a nest. If tree removal or construction were to occur during the breeding season within 500 feet of an active nest, effects would be adverse under NEPA and significant under CEQA. This would be a direct impact. The Construction Authority is subject to the MBTA, so preventative mitigation measures for this issue are required.

Construction activities and increased traffic may result in increased amounts of dust being deposited on vegetation and trees adjacent to the proposed project. This would not be expected to have a long-term impact on the vegetation communities or trees; therefore, these temporary impacts would not be considered adverse under NEPA and would be less than significant under CEQA.

## Foothill Extension, Segment 1 – The Cities Affected and the Effects

### City of Irwindale

#### Direct Impacts: Vegetation

Sensitive Vegetation Communities. Construction of proposed Maintenance and Operations Facility and parking facilities would remove up to ~~about 30~~ 25 acres of alluvial fan sage scrub and possibly ~~5~~ 2 acres of riparian scrub around abandoned mining pits. ~~Loss of these sensitive habitats would be considered adverse under NEPA and significant under CEQA.~~ Note that the Maintenance and Operations Facility is located in Segment 1, but is part of the Full Build Alternative. In other words, it would not be constructed as an element of the Build LRT to Azusa Alternative.

In an effort to determine the historic extent of Alluvial Fan Sage Scrub habitat in the project area, historic aerial photography was acquired from Environmental Data Resources, Inc. One aerial photograph was obtained for the Miller and South Kincaid sites for each decade from 1928 to the present. Upon review of the photographs, it was determined that the 1938 aerial for the sites represented the oldest aerial available with adequate resolution for habitat analysis. A 2002 aerial photograph of the sites was used to determine the current distribution of Alluvial Fan Sage Scrub. For the purposes of this analysis, an area covering roughly 0.5 mile from the sites was defined as being the project study area totaling approximately 1335 acres. The aeriels were then georeferenced to the Universal Transverse Mercator (UTM) system and the approximate extent of Alluvial Fan Sage Scrub habitat was mapped based upon visual interpretation of the photographs. The current extent of Alluvial Fan Sage Scrub was also verified based upon observations in the field. The total acreage of historic and present Alluvial Fan Sage Scrub habitat was then compared to determine a percentage loss of habitat since 1938.

In 1938 there was approximately 827.8 acres of Alluvial Fan Sage Scrub and in 2002 there was 301.3 acres remaining. Based on this general analysis, the distribution of alluvial fan sage scrub has decreased by approximately 526.5 acres within the last 60 years and 36% of the community remains. The project would remove up to 25 acres of alluvial fan sage scrub. This represents approximately 5% of the remaining habitat within the study area. Impacts to alluvial fan sage scrub and riparian scrub habitats would be less than significant/adverse with mitigation incorporated.

Listed and Sensitive Plants. Portions of the affected lands are suitable habitat for several species of sensitive plants, including the federally and state-listed as endangered Nevin's barberry and slender-horned spineflower. Focused surveys were ~~not~~ conducted to determine the presence/absence of ~~this~~ these federal- or state-listed endangered plant species. Such surveys must be during the blooming season (generally April through June); issuance of the Draft EIS/EIR in April 2004 did not provide sufficient time for the surveys prior to 2005. Focused surveys were conducted on two separate days (April 12 and May 24, 2005) and indicate that Nevin's barberry and the slender-horned spineflower are not present on the Irwindale site. ~~Pending verification of species presence through focused surveys that would be conducted during Preliminary Engineering, there would be a presumed potentially~~ Therefore, there would be no adverse effects under NEPA and ~~potentially~~ no significant impacts under CEQA for these two species.

Ten sensitive plant species—slender mariposa lily, Plummer's mariposa lily, San Gabriel Mountains dudleya, Mesa horkelia, Robinson's pepper-grass, Davidson's bush mallow, prostrate navarretia, Brand's phacelia, Rayless ragwort, and salt spring checkerbloom— were determined to have the potential for occurrence or had been observed within the proposed project boundaries in the City of Irwindale. However, these species were not observed during the focused surveys conducted at the appropriate respective flowering periods and are therefore also considered absent from the Irwindale site. There would be no ~~are not provided protection under either the Federal or California Endangered Species Act. Pending verification of species presence through focused surveys that would be conducted during Preliminary Engineering, there are a presumed potentially~~ adverse effects under NEPA and ~~potentially~~ no significant impacts under CEQA for the above listed species.

Direct Impacts: Wildlife

Listed Wildlife Species. Alluvial fan sage scrub habitat is present within the upland areas on the proposed site of the Maintenance and Operating Facility and at the South Kincaid pit. This/These upland areas are suitable habitat for the ~~may support the~~ federally listed threatened coastal California gnatcatcher. Limited suitable riparian scrub habitat (~~pending field verification~~), which occurs within the ~~mining area that is no longer in production at the site~~ Miller site, represents suitable habitat for the least Bell's vireo and southwestern willow flycatcher. ~~may support the least Bell's vireo and southwestern willow~~

~~flycatcher. As mentioned above, focused surveys were not conducted to determine the presence/absence of these three federally or state listed threatened or endangered species that have a moderate potential to occur within the proposed project area. Pending verification of species presence through focused surveys that would be conducted during Preliminary Engineering, there is a presumed adverse effect under NEPA and a potentially significant impact under CEQA because of habitat loss.~~

Focused surveys were conducted in 2004 and 2005 and indicate that coastal California gnatcatcher, least Bell's vireo and southwestern willow flycatcher are not present on the Irwindale sites. Therefore, there would be no adverse effects under NEPA and no significant impacts under CEQA for these three species.

Other Sensitive Wildlife Species. Three sensitive reptile species (the San Diego horned lizard, two-striped garter snake, and rosy boa), along with ~~two~~ three avian species (Cooper's hawk, southern California rufous-crowned sparrow and coastal cactus wren) and one mammal species (San Diego desert wood rat), have a moderate-to-high potential of occurring or have been observed within the general study area. However, these species are not provided protection under either the Federal or California Endangered Species Act and the federal and state agencies have not established survey protocols for any of these species. Limited direct impacts to these species are expected from the loss of native habitat. Impacts to these species most likely would not represent a regionally significant impact and, therefore, are not considered adverse under NEPA or significant under CEQA.

The Cooper's hawk was observed within the project study corridor during surveys. The removal of mature, tall trees may adverse effect nesting raptor species during the breeding season (February 15 to August 31). Disturbing or destroying active nests of raptors protected by the MBTA is a violation of the Act. The Cooper's hawk and the red-tailed hawk, which were both observed during surveys of the proposed project area, are protected by the Act. If tree removal or construction were to occur during the breeding season within 500 feet of an active nest, effects would be adverse under NEPA and significant under CEQA. Preventative mitigation measures for this issue are required.

#### Indirect Impacts: Vegetation

Sensitive Vegetation Communities and Plants. Potential short-term indirect impacts to sensitive vegetation communities and plants include increased amounts of dust being deposited on vegetation and trees adjacent to the Maintenance and Operating site resulting from construction activities. This is not expected to have a long-term impact on the vegetation; therefore, preventative mitigation measures for this issue are not required.

Other Vegetation. Construction activities and increased traffic may result in increased amounts of dust being deposited on vegetation and trees adjacent to the proposed site. This is not expected to have a long-term impact on the vegetation communities or trees; therefore, preventative mitigation measures for this issue are not required.

#### Indirect Impacts: Wildlife

~~Potential indirect impacts to the coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher may include habitat fragmentation, disturbance from construction, and impacts from operation of the facility such as noise, dust, night lighting, human encroachment, and other issues associated with human encroachment. Some of the source of impacts would be eliminated when construction activities are completed. Additionally, noise impacts from construction and increased human presence would be typically be minimal for most species due to the sporadic nature of the noise associated with the rail vehicles. However, the construction of the Maintenance and Operating facility~~

~~may have substantial noise impacts if they occur during the nesting season for the coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher, which would result in an adverse effect under NEPA and a significant impact under CEQA. Preventative mitigation measures for this issue are required.~~

Listed Wildlife Species. Focused surveys were conducted in 2004 and 2005 and indicate that coastal California gnatcatcher, least Bell's vireo and southwestern willow flycatcher are not present on the Irwindale sites. Therefore, there would be no adverse effects under NEPA and no significant impacts under CEQA for these three species.

Other Sensitive Wildlife Species. Three sensitive reptile species (the San Diego horned lizard, two-striped garter snake, and rosy boa), along with ~~two~~ three avian species (Cooper's hawk, southern California rufous-crowned sparrow and coastal cactus wren) and one mammal species (San Diego desert wood rat), have a moderate-to-high potential of occurring or have been observed within the study area. However, these species are not provided protection under either the Federal or California Endangered Species Act and the federal and state agencies have not established survey protocols for any of these species. Indirect effects to these species would include habitat fragmentation, disturbance from construction and maintenance (such as noise, dust, night lighting, and human encroachment), and other issues associated with human encroachment, such as the introduction of nonnative species and trash. These effects would not be adverse under NEPA and would be less than significant under CEQA.

City of Azusa

Direct Impacts: Vegetation

Sensitive Vegetation Communities. No sensitive vegetation communities are present on or adjacent to the Citrus parking site and no impacts are expected to these resources.

Listed and Sensitive Plants. Potential habitat for listed and sensitive plants do not exist and therefore are not present on or adjacent to the Citrus parking site and no impacts are expected to these resources.

Direct Impacts: Wildlife

Listed Wildlife Species. Suitable habitat does not exist for listed wildlife species. Therefore, there would be no adverse effects under NEPA and no significant impacts under CEQA for listed wildlife species.

Other sensitive wildlife species. The removal of mature, tall trees may adverse effect nesting raptor species (i.e. Cooper's hawk) during the breeding season (February 15 to August 31). Disturbing or destroying active nests of raptors protected by the MBTA is a violation of the Act. If tree removal or construction were to occur during the breeding season within 500 feet of an active nest, effects would be adverse under NEPA and significant under CEQA. Preventative mitigation measures for this issue are required.

Indirect Impacts: Vegetation

Sensitive Vegetation Communities. No sensitive vegetation communities are present on or adjacent to the Citrus parking site and no impacts are expected to these resources.

## Indirect Impacts: Wildlife

Listed Wildlife Species. Suitable habitat does not exist for any listed wildlife species. Therefore, there would be no adverse effects under NEPA and no significant impacts under CEQA for listed wildlife species.

Other Sensitive Wildlife Species. One sensitive avian species (Cooper's hawk) has a moderate-to-high potential of occurring within the study area. However, this species is not provided protection under either the Federal or California Endangered Species Act and the federal and state agencies have not established survey protocols for this species. Indirect effects to these species would include disturbance from construction and maintenance (such as noise, dust, night lighting, and human encroachment), and other issues associated with human encroachment, such as the introduction of nonnative species and trash. These effects would not be adverse under NEPA and would be less than significant under CEQA.

## Summary of Impacts for Full Build Alternative

Due to the removal of alluvial fan sage scrub and possible a small amount of riparian scrub around abandoned mining pits at the proposed site of the Maintenance and Operating Facility there are presumed adverse effects under NEPA and potentially significant impacts under CEQA. Mitigation measures aimed at minimizing impacts to these sensitive plant communities have been developed. These mitigation measures would reduce impacts to a less than significant/adverse level. In addition to the loss of habitat, there is the potential for construction activities to disturb nesting birds, which would be violation of the MBTA. Mitigation measures aimed at minimizing impacts to nesting birds have been developed. There are no biological impacts at any other locations in the cities in Phase II Foothill Extension, Segment 1 and 2.

## Summary of Impacts for Build LRT to Azusa Alternative

Due to the removal of alluvial fan sage scrub ~~and possible a small amount of riparian scrub around abandoned mining pits~~ at the proposed site of the parking facility in Irwindale, there are presumed adverse effects under NEPA and potentially significant impacts under CEQA. Mitigation measures aimed at minimizing impacts to these sensitive plant communities have been developed. These mitigation measures would reduce impacts to a less than significant/adverse level. In addition to the loss of habitat, there is the potential for construction activities to disturb nesting birds, which would be violation of the MBTA. Mitigation measures aimed at minimizing impacts to nesting birds have been developed. There are no biological impacts at any other locations in the cities in Phase II Foothill Extension, Segment 1.

### 3-3.2.4 Long-Term Impacts

#### *a. No-Build Alternative*

There are no elements of the No-Build Alternative that would be likely to generate term impacts on biological resources to any of the cities in Phase I, Phase II Foothill Extension Segment 1 or Segment 2.

*b. Build Alternatives*

Phase I

There are no elements of the Foothill Extension project in the cities in Phase I, so there would be no long-term impacts in Los Angeles, South Pasadena or Pasadena. ~~The only location of anticipated long term biological impacts is the proposed Maintenance and Operating Facility in Irwindale (Phase II Segment 1). Construction of that facility would permanently remove habitat and operations could affect resources in surrounding areas~~

Foothill Extension, Full Build Alternative

Long-term impacts would occur at the site of the Maintenance and Operating Facility in Irwindale due to loss of habitat and operation of the facility. Focused surveys were conducted during Preliminary Engineering to determine the presence/absence of federally or state-listed endangered plant and wildlife species and were determined negative. Due to the absence of any federally or state-listed endangered species, there is a presumed potentially adverse effect under NEPA and presumed potential significant impact under CEQA due to the loss of habitat, yet no adverse effects to species associated with the habitat. Mitigation measures aimed at minimizing impacts to these sensitive plant communities have been developed. These mitigation measures would reduce impacts to a less than significant/adverse level. No long-term impacts would occur at other cities in ~~Phase II~~ Foothill Extension Segment 1 or Segment 2. ~~Until focused surveys are conducted during Preliminary Engineering to determine the presence/absence of federally or state-listed endangered plant species, there is a presumed potentially adverse effect under NEPA and presumed potential significant impact under CEQA due to the loss of habitat and potential adverse effects to species associated with the habitat.~~

Direct Impacts: Vegetation

Sensitive Vegetation Communities. There would be loss of up to 25 several acres of alluvial fan sage scrub and ~~possibly small amount up to 2 acres~~ of riparian scrub. Mitigation measures aimed at minimizing impacts to these sensitive plant communities have been developed. These mitigation measures would reduce impacts to a less than significant/adverse level. ~~As a result, impacts to these sensitive habitats by project implementation are considered adverse under NEPA and significant under CEQA.~~

Listed and Sensitive Plants. Portions of the site are suitable habitat for several species of sensitive plants, including the federally and state-listed as endangered Nevin's barberry and slender-horned spineflower. As described above, the issuance of the Draft EIS/EIR in April 2004 did not provide adequate opportunities to conduct focused surveys during the blooming season prior to 2005. Focused surveys were conducted on three separate days (April 12, April 19 and May 24, 2005) and indicate that Nevin's barberry and the slender-horned spineflower are not present on the Irwindale site. Therefore, there would be no. ~~Absent focused surveys which would be conducted during Preliminary Engineering to determine the presence/absence of this federally or state-listed endangered plant species, there is a presumed potentially adverse effects under NEPA and presumed potential no significant impacts under CEQA for these two species.~~

Ten sensitive plant species—slender mariposa lily, Plummer's mariposa lily, San Gabriel Mountains dudleya, Mesa horkelia, Robinson's pepper-grass, Davidson's bush mallow, prostrate navarretia, Brand's phacelia, Rayless ragwort, and salt spring checkerbloom—were determined to have a potential for occurrence or have been observed within the immediate area. However, these species were not observed

~~during the focused surveys conducted at the appropriate respective flowering periods and are therefore also considered absent from the Irwindale sites are not provided protection under either the Federal or California Endangered Species Act. Pending verification of species presence through focused surveys, there would be a presumed potentially. There would be no adverse effects under NEPA and presumed potentially no significant impacts under CEQA for the above listed species.~~

Direct Impacts: Wildlife

Listed Wildlife Species. ~~There would be a permanent loss of habitat for the Coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher were determined to have potential for occurrence in the immediate area. However, these species were not observed during focused surveys conducted in 2004 and 2005 and are therefore considered absent form the Irwindale sites. There would be no adverse effects under NEPA and no significant impacts under CEQA for the above listed species.~~

~~Until focused surveys are conducted during Preliminary Engineering to determine the presence/absence of these three federally or state listed threatened or endangered species that have a moderate potential to occur within the proposed project area. there would be a presumed adverse effect under NEPA and a presumed significant impact under CEQA because of habitat loss.~~

Other Sensitive Wildlife Species. The permanent loss of habitat could affect three sensitive reptile species (the San Diego horned lizard, two-striped garter snake, and rosy boa), along with two avian species (Cooper's hawk and coastal cactus wren) and one mammal species (San Diego desert wood rat), which have a moderate-to-high potential of occurring or have been observed within area. ~~However, these species are not provided protection under either the Federal or California Endangered Species Act and the federal and state agencies have not established survey protocols for any of these species.~~ Limited direct impacts to these species are expected from the loss of native habitat. Impacts to these species would not represent a regionally significant impact and, therefore, are not considered adverse under NEPA or significant under CEQA.

Indirect Impacts: Vegetation

There would be no long-term indirect impacts to vegetation with this alternative.

Indirect Impacts: Wildlife

Listed Wildlife Species. ~~The results of the focused presence/absence surveys completed in 2005 confirmed that the proposed Maintenance and Operation facility property does not support federally or state-listed endangered and/or threatened wildlife species. Therefore, these effects would not be adverse under NEPA and would be less than significant under CEQA. The operation of a new maintenance facility may have substantial noise impacts to nesting coastal California gnateatcher, least Bell's vireo, and southwestern willow flycatcher from the increased amount of human and maintenance activities, resulting in an adverse impact under NEPA and a significant impact under CEQA.~~

Other Sensitive Wildlife Species. Three sensitive reptile species (the San Diego horned lizard, two-striped garter snake, and rosy boa), along with two avian species (Cooper's hawk and coastal cactus wren) and one mammal species (San Diego desert wood rat), have a moderate-to-high potential of occurring or have been observed within the area. ~~However, these species are not provided protection under either the Federal or California Endangered Species Act and the federal and state agencies have not established survey protocols for any of these species.~~ Indirect effects to these species would include habitat fragmentation, disturbance from ongoing maintenance activities (such as noise, dust, night lighting, and human encroachment), and other issues associated with human encroachment, such as the

introduction of nonnative species and trash. These effects would not be adverse under NEPA and would be less than significant under CEQA.

### Summary of Impacts for Build LRT to Azusa Alternative

No long-term impacts would occur at cities in Phase II Foothill Extension Segment 1 (other than those associated with the Maintenance and Operations Facility in Irwindale, which is part of the Full Build Alternative).

#### 3-3.2.5 Cumulative Impacts

The Southern California Association of Governments' (SCAG) 2004 Regional Transportation Plan (RTP) Final Program EIR is the most applicable certified planning document that provides a regional cumulative impact assessment for transportation improvements (including the proposed project) through the year 2030. The RTP Final Program EIR concludes that cumulative impacts to biological resources could result due to construction in undeveloped areas and population growth and development on existing natural lands. As discussed, the proposed project would not contribute significantly to these types of impacts. The majority of the project occurs in already developed urban areas. The habitat that would be lost in the City of Irwindale is marginal and would be replaced per the mitigation measure B-7 identified at the end of this section. Additionally, the San Gabriel River wildlife movement corridor would not be adversely affected by the proposed project.

~~The primary cumulative impact on biological resources is habitat fragmentation, resulting in the loss of native habitat. Habitat fragmentation by urbanization creates isolated "islands" of wildlife habitat and negatively affects wildlife movement corridors that connect water, food, and cover sources. As fragmentation continues, connectivity between habitats and populations they support are lost. However, the proposed project's contribution to cumulative habitat fragmentation impacts would be minor. The majority of the proposed project occurs in already developed urban areas. Based on the field survey that was conducted for the proposed Maintenance and Operations facility and parking sites, the habitat areas (up to about 30-25 acres) that would be lost would be marginal on a regional basis. Additionally, the San Gabriel River wildlife movement corridor would not be affected by the proposed project.~~

~~It should be noted that on-going development in the region is likely to result in cumulative impacts.~~

#### 3-3.2.6 Impacts Addressed by Regulatory Compliance

##### *a. Construction Period*

##### No-Build Alternative

There are no anticipated construction-period impacts for the No-Build Alternative that would require regulatory compliance.

##### Build Alternatives

The impacts associated with the removal or pruning of trees required for the construction of project facilities would be reduced by voluntary compliance with the appropriate jurisdictions' tree protection ordinance.

However, compliance with tree protection ordinances does not reduce impacts to trees with nesting raptors or provide compliance with the Migratory Bird Treaty Act. Compliance with the MBTA would be required for all parts of the Build Alternatives, but especially at and near the proposed Maintenance and Operations construction site. Compliance would be demonstrated by inclusion of the following type of preventative measure in construction contracts:

- In order to avoid violations of the MBTA or Fish and Game Code 3503, the Construction Authority shall attempt to limit grubbing and removal of trees and buildings during the bird breeding season (approximately March 1 to September 1, and as early as February 1 for raptors). If the bird breeding season cannot be avoided, the Construction Authority shall retain (or cause its contractors to retain) a qualified ornithologist to initiate surveys of the construction zone 30 days prior to the initiation of construction and weekly thereafter, with the last survey not more than three days prior to the initiation of construction, to minimize the potential for nesting following the survey and prior to construction. If the ornithologist detects any occupied nest or nests of native birds within the construction zone, the area(s) supporting bird nests will conspicuously be flagged off, providing a minimum buffer of 300 feet between the nests and limits of construction (500 feet for raptors). The construction crew will be instructed to avoid any activities in this zone until the bird nests are no longer occupied, per a subsequent survey by the ornithologist.

This preventative measure is specified in Section 3-3.3.1 below.

The impacts associated with the removal or pruning of trees required for the construction of project facilities would be reduced by voluntary compliance with the appropriate jurisdictions' tree protection ordinance. Preventative measure to avoid violation of the MBTA would be included in Construction Authority contracts.

### *b. Long-Term Impacts*

There would be no long-term impacts that would be addressed by regulatory compliance for any alternative. A loss of habitat from construction of the Maintenance and Operating Facility would occur.

## 3-3.3 Mitigation

### 3-3.3.1 Construction Period Mitigation Measures

#### *a. No-Build Alternative*

The No-Build Alternative does not include elements that generate biological impacts that would require construction period mitigation.

#### *b. Build Alternatives*

The following ~~draft~~ preventative mitigation measures would ~~help~~ reduce potential biological impacts during construction:

- B-1** Construction limits shall be fenced or flagged prior to issuance of any construction permits to avoid disturbance to preserved areas. Disturbance to the vegetation outside of the project scope shall be avoided.

Consistent with the preventative measure described under regulatory compliance with regard to the MBTA, the following two measures are re-stated.

- B-2** Vegetation clearing and tree removal activities shall be conducted during the non-breeding season (September 1 through February 14) to limit impacts to nesting birds.
- B-3** In the event that vegetation clearing is necessary during the raptor breeding season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey to identify the locations of raptors within the areas that will be affected by the clearing. If the biologist finds an active nest within or adjacent to the areas requiring clearing, the biologist shall delineate a 500-foot-wide buffer zone around the nest. This zone shall be marked with flagging, and construction or clearing shall not be conducted within this buffer zone until the biologist determines that the nest is no longer active. If a 500-foot-wide buffer zone is not possible, noise barriers must be utilized. In addition, a qualified biologist shall be present at all preconstruction and pregrade meetings and will be onsite during all vegetation/tree removal and subsequent removal. The biological monitor shall be hired and trained prior to construction to monitor construction activities at the proposed project site where sensitive resources for protection and preservation have been identified.

Consistent with the regulatory requirements to prepare a Storm Water Pollution Prevention Plan as a condition of obtain permits from the Los Angeles Regional Water Quality Control Board and Santa Ana Regional Water Quality Control Board, the following two measures also provide habitat protection:

- B-4** Any equipment operated within or adjacent to a drainage (i.e., storm drain) shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be detrimental to plant and wildlife species. Cement/concrete, asphalt, paint, petroleum products, or other substances that could be hazardous, resulting from project-related activities, shall be prevented from entering the soil or waters. Any of these materials placed in an area that may result in the material entering the drainage shall be removed and disposed of at an appropriate site.
- B-5** Prior to completion of project activities each day, all trash and debris related to the project will be removed from the site to avoid attracting wildlife to the work site.

### 3-3.3.2 Long-Term Mitigation

#### *a. No-Build Alternative*

No adverse effects under NEPA or significant impacts under CEQA were identified for this alternative and no long-term mitigation is required.

#### *b. Build Alternatives*

##### Foothill Extension, Segment 1

Potentially adverse effects under NEPA and potentially significant impacts under CEQA were identified for this alternative due to the loss of habitat for creation of the Maintenance and Operating Facility. No long-term impacts were identified in any other locations in ~~Phase II~~ Foothill Extension Segment 1 cities.

The previously stated measures B-1, B-2, B-3, B-4 and B-5, along with the following draft mitigation measures, which would need to be implemented during the construction period, would reduce adverse effects under NEPA and potentially significant impacts under CEQA.

**B-6** A biological monitor shall be present during clearing of any riparian or alluvial fan sage scrub habitats. ~~If any listed species are found, the biological monitor shall stop construction and the USFWS will be notified immediately. Construction will not resume until the USFWS has been contacted and has given direction regarding subsequent actions to be taken.~~ The biological monitor has the authority to stop work temporarily in order to search for and remove any sensitive species found within the proposed project area.

~~**B-7** If focused surveys determine that the alluvial fan sage scrub habitat is occupied by the coastal California gnatcatcher, or riparian scrub habitat is occupied by the least Bell's vireo or southwestern willow flycatcher, an Endangered Species Act Section 10(a)(1)(A) or Section 7 Incidental Take Permit will be required. Completion of the Incidental Take Permit process will result in mitigation that will offset the impacts of the project on the coastal California gnatcatcher. The applicant shall demonstrate, to the satisfaction of the City of Irwindale and the resource agencies, that the project design includes a satisfactory mitigation ratio for all sensitive habitats impacted. Prior to issuance of any grading, clearing, or other permits, the property owner/developer shall submit evidence to the city that all appropriate federal, state, and county permits have been obtained for the biological resources on the site to be removed by development. These permits will specify the timing, nature, and mitigation measures, if any, that are required. No removals shall be authorized until all necessary resource agency permits have been obtained and the project complies with permit requirements.~~

~~**B-8** Prior to construction, CDFG or USFWS will be contacted for further agency recommendations regarding the wildlife species San Diego horned lizard, two striped garter snake, and rosy boa. Additionally, the following sensitive plant species slender mariposa lily, Plummer's mariposa lily, San Gabriel Mountains dudleya, mesa horkelia, Robinson's peppergrass, Davidson's bush mallow, prostrate navarretia, Brand's phacelia, rayless ragwort, and salt spring checkerbloom will be reviewed by CDFG for further recommendations prior to construction.~~

~~**B-9** If focused surveys determine that the alluvial fan sage scrub habitat or riparian scrub habitat is occupied by the Nevin's barberry, consultation with CDFG and USFWS will be necessary.~~

~~**B-10** 7 Prior to obtaining grading permits, a restoration plan for restoring riparian habitat and alluvial fan sage scrub subject to impact by the proposed project shall be developed. This plan would include compensatory mitigation through funding programs or off-site restoration. The level of mitigation would be determined via coordination with CDFG, and include site preparation, plant species, timing of planting, planting methods, seed quantities, the number of plants, maintenance measures, performance standards, annual success criteria, and a 5 year monitoring program~~

~~**B-11** 8 Construction limits shall be fenced or flagged prior to issuance of any construction permits to avoid disturbance preserved areas, to the San Gabriel River and adjacent Santa Fe Dam Recreation area. Disturbance to the vegetation outside of the project scope shall be avoided.~~

### 3-3.4 Impact Results with Mitigation

#### 3-3.4.1 Construction Period

~~Since focused surveys to confirm the presence or absence of sensitive habitat, plants and wildlife have not yet been conducted, it must be presumed that effects could be adverse under NEPA and significant under CEQA. Focused surveys will be conducted during the blooming season and other appropriate survey times, during Preliminary Engineering. It is assumed that mitigation measures, perhaps including purchase of replacement habitat, can be developed in consultation with state and federal agencies such that the impact of construction on potentially sensitive habitat or the potential loss of plants and wildlife can be mitigated to less than adverse/less than significant levels. The results of the focused presence/absence surveys completed in 2005 confirmed that the proposed Maintenance and Operation facility and Kincaid parking sites do not support federally or state-listed endangered and/or threatened plant or wildlife species. Therefore, the project is not expected to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a endangered, threatened, candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFG or USFWS. The Maintenance and Operation facility would result in the loss of up to 17 acres of alluvial fan sage scrub and up to 2 acres of riparian scrub. The Kincaid parking site in Irwindale would result in the loss of up to 8 acres of alluvial fan sage scrub. Loss of these sensitive habitats would be considered adverse under NEPA and significant under CEQA without mitigation. Mitigation measures aimed at minimizing impacts to these sensitive plant communities have been developed. These mitigation measures would reduce impacts to a less than significant/adverse level.~~

#### 3-3.4.2 Long-Term Impacts

~~See discussion under Construction period.~~ All potential long term impacts would be addressed during the construction period.