

2.18 Animal Species

2.18.1 Regulatory Setting

Many State and federal laws regulate impacts to wildlife. The USFWS, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and the CDFW are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the FESA or CESA. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.19, Threatened and Endangered Species. All other special status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 - 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

2.18.2 Affected Environment

Information presented in this section was obtained from the NES (mi) (January 2019) and the Bat Habitat Assessment (May 2018).

2.18.2.1 Common Wildlife

Native wildlife is expected to be minimal within the proposed project site due to the lack of native plant communities, the degree of disturbance, and the minimal habitat value. In some portions of the Study Area, such as along Santiago Creek, native riparian bird species may be present. However, most wildlife species that may occur are expected to be those species that typically adapt to human-altered landscapes and urban/residential environments. Examples of this would include western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), western scrub-jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), house finch (*Carpodacus mexicanus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), California ground squirrel (*Otospermophilus beecheyi*), Audubon's cottontail (*Sylvilagus audubonii*), and coyote (*Canis latrans*).

2.18.2.2 Habitat Connectivity

The opportunity for wildlife movement within the proposed project area is minimal. Santiago Creek may provide for wildlife movement of common animal species associated with the proposed project area such as coyotes, raccoons, ground squirrels, and other small mammals. The nearest project improvements to Santiago Creek are approximately 1.0 mile south near the eastbound SR 22 to northbound SR 55 connector and approximately 3.0 miles north at the Katella Avenue/SR 55 southbound on-ramp.

2.18.2.3 Regional Species and Habitats of Concern

Bats

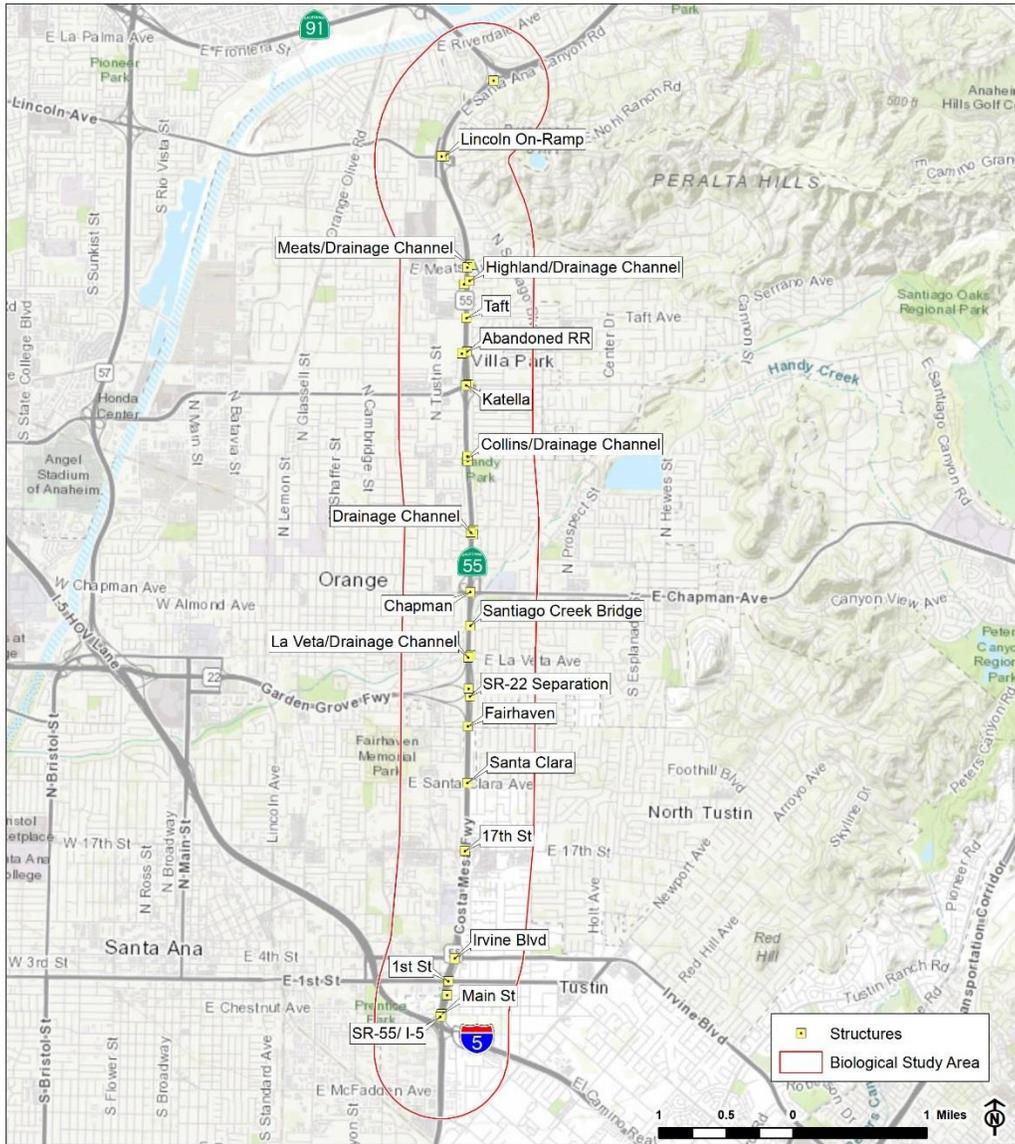
Potential foraging and tree-roosting habitat for bats is scattered throughout the proposed project area, primarily in the form of non-native trees (such as eucalyptus and palm trees) and insects associated with patches of ornamental vegetation and concrete-lined drainages. Santiago Creek provides the only native, although substantially degraded, riparian vegetation.

A focused bat survey was therefore conducted by Jacobs Engineering biologists Bruce Palmer and David Charlton (May 2018). Site visits were conducted to inspect 26 specific roadway-related structural features within the proposed project area that may potentially provide suitable day or night roosting locations for bats. Daytime inspections of these bridge and drainage structures within the proposed project area were conducted on July 13, 2017. The sides and undersides of each bridge and culvert were thoroughly searched with the aid of a spotlight and binoculars. Crevices, expansion joints, weep holes, cavities, and other recessed areas (e.g., girder and wall unions) were searched for the presence of roosting bats and for bat sign such as guano deposits and staining of walls and crevices from bat urine and body secretions indicating current or past use of an area by roosting bats. Each structure was also evaluated as a potential roost site based on the physical features of the structure (e.g., depth of crevices) and its proximity to suitable foraging habitat (e.g., vegetated areas) and water sites. Figure 2.18-1 shows the structure locations within the project area.

A small amount of bat sign was detected at two structures: Santiago Creek Bridge over SR 55 and the abandoned railroad overhead, suggesting transitory use of these sites as a night roost. Staining and two guano pellets were observed stuck to the side of a crevice on the underside of Santiago Bridge, and staining was located on the underside of the abandoned railroad overhead. It is possible that a few bats may occasionally night-roost in or on other surveyed structures, but no evidence was found of day-roosting bats in these structures. There was no accumulation of guano pellets or extensive staining as evidence of persistent day- or night-roosting, nor were any bats observed day-roosting at these structures. Though surveys were conducted past the peak of the maternity period, if a maternity colony had been present, guano and staining would have been evident.

Based on the closed bridge underside, lack of open crevices, the high levels of traffic passing under most bridges, and lack of observed bat sign (e.g., guano and staining), potential day roost opportunities for bats within the SR 55 project area are limited to two bridges (Santiago Creek and the abandoned railroad overhead) and one culvert (Highland Drainage Channel).

Figure 2.18-1. Project Structure Locations



SR-55 Improvement Project: I-5 to SR-91
Figure 5: Project Structure Locations

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Potential night roosting sites may occur at four additional sites (Lincoln Avenue undercrossing, Taft Avenue undercrossing, Chapman Avenue undercrossing, and westbound SR 22 separation). Surrounding bat foraging habitat is considered relatively low quality. Additionally, there is a low probability that bats consistently utilize these structures for roosting.

NCCP/HCP Covered Species

Since the proposed project is a covered activity under the NCCP/HCP, the 10 covered animal species identified in the NCCP/HCP and shown in Table 2.18-1 were assessed for potential to occur within the Study Area.

Table 2.18-1: NCCP/HCP Covered Animal Species

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
bobcat	<i>Lynx rufus</i>	N/A	Woodlands, desert, shrublands, urban	HP	Habitat may be present within Santiago Creek
mountain lion	<i>Puma concolor</i>	SPM	Deserts, coast forests, arid hillsides, scrub and oak woodland	A	No suitable habitat exists within the Study Area
cactus wren	<i>Campylorhynchus brunneicapillus</i>	BCC/SSC	Deserts; arid foothills that have cactus, mesquite, yucca and other types of desert scrub	A	The Study Area does not contain desert, arid foothills, cactus or other types of desert scrub.
coastal California gnatcatcher	<i>Poliptila californica californica</i>	FT/SSC	Coastal sage scrub, California sagebrush	A	The Study Area contains sparse, disturbed areas of California sagebrush but does not provide habitat for this species.
least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/SE	Riparian forest	HP	Although marginal habitat exists in Santiago Creek, no construction activities would take place in or adjacent to the creek, and no impacts would occur to this species.
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE/SE	Riparian forest	HP	Although marginal habitat exists in Santiago Creek, no construction activities would take place in or adjacent to the creek, and no impacts would occur to this species.
arroyo chub	<i>Gila orcutti</i>	SSC	low gradient pools and flat-water habitats with gravel and sand substrate that support at least some aquatic/emergent vegetation	A	The project does not contain low-gradient pools or flatwater habitats.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
coast horned lizard	<i>Phrynosoma blainvillii</i>	SSC	Valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats.	A	The project does not contain suitable habitat for the coast horned lizard.
orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	WL	low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats.	A	The project does not contain suitable habitat for the orange-throated whiptail.
western pond turtle	<i>Emys marmorata</i>	SSC	marshes, streams, rivers, ponds, and lakes	A	No western pond turtles have been documented in the portion of Santiago Creek that lies within the Study Area.

Notes: Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); USFWS Birds of Conservation Concern (BCC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS)

Potential habitat exists for bobcat, least Bell's vireo, and southwestern willow flycatcher within the Study Area. Although marginal habitat exists for these three species, the proposed project is a covered activity under the NCCP/HCP as an OCTA M2 project. Therefore, the proposed project has already been analyzed, and protocol level surveys are not required.

Migratory Birds

Although no migratory birds were observed during surveys, the proposed project area does provide habitat for foraging and nesting migratory birds.

2.18.3 Environmental Consequences

2.18.3.1 Temporary Impacts

Build Alternative

Common Wildlife

No temporary or permanent impacts to common wildlife are expected to occur as a direct result of the proposed project. Common wildlife currently using the Study Area are adapted to highly urbanized areas. The proposed project would not change the surrounding urbanization or use of the area by common wildlife.

Habitat Connectivity

Santiago Creek crosses the proposed project site and may function as a wildlife corridor for common animals such as coyotes, bobcats, raccoons, rabbits, opossums, and mice. The nearest project improvements to Santiago Creek are approximately 1 mile south near the eastbound

SR 22 to northbound SR 55 connector and approximately 3 miles north at the Katella Avenue/SR 55 southbound on-ramp. No construction activities would take place within or adjacent to the creek, and the project would have no direct permanent or temporary impacts to habitat connectivity.

Regional Species and Habitats of Concern

Bats

Since potential day roost opportunities for bats within the SR 55 project area are limited to two bridges (Santiago Creek and the abandoned railroad overhead) and one culvert (Highland Drainage Channel), temporary direct and indirect impacts from noise and vibration may occur to roosting bats and maternity colonies of roosting bats during bridge or culvert widening and/or replacement activities. Bats frightened from a day roost and bat maternity colonies, which consist of female bats and flightless young, are particularly vulnerable to these types of impacts.

At the four potential night roosting sites (Lincoln Avenue undercrossing, Taft Avenue undercrossing, Chapman Avenue undercrossing, and westbound SR 22 separation), surrounding bat foraging habitat is considered relatively low quality; and, therefore, there is a low probability that bats consistently utilize these structures for roosting. However, the loss of night roost sites could impact bat energetics, even though bats often change night roost sites. Temporary construction activities would only occur adjacent to the Lincoln Avenue undercrossing associated with relocation of the southbound Lincoln Avenue off-ramp. Foliage-roosting bats may also be subject to direct or indirect temporary impacts during clearing and grubbing associated with project activities.

NCCP/HCP Covered Species

Low quality riparian habitat is present within Santiago Creek for three NCCP/HCP covered species: bobcat, least Bell's vireo, and southwestern willow flycatcher as shown in Table 2.18-1 above. However, no temporary or permanent direct or indirect impacts would occur to habitat within Santiago Creek. The nearest project improvements to Santiago Creek are approximately 1 mile south near the eastbound SR 22 to northbound SR 55 connector, and approximately 3 miles north at the Katella Avenue/SR 55 southbound on-ramp. No construction will take place within or adjacent to the section of SR 55 that crosses Santiago Creek. The project would have no impacts to any of the 13 covered species.

Migratory Birds

The proposed project provides little to no suitable habitat for nesting and foraging migratory birds. However, bird species adapted to freeway noise could nest within or adjacent to the proposed project impact area. Temporary direct impacts to these bird species may include increased noise, dust, lighting from construction activities, and clearing and grubbing to accommodate project features. Indirect or secondary impacts are not anticipated to occur.

No Build Alternative

The No Build Alternative would not result in construction or improvements within the project area and, therefore, would not result in temporary or permanent impacts on animal species.

2.18.3.2 Permanent Impacts

Build Alternative

The proposed project Study Area does not contain habitat for any of the covered animal species identified in the NCCP/HCP except for Santiago Creek, which will not be impacted by construction activities. Indirect or secondary impacts on these species are not anticipated to occur. Therefore, the project will not permanently impact State and/or federally listed wildlife species or species covered under the NCCP/HCP.

No Build Alternative

The No Build Alternative would not result in the construction or improvements within the project area and, therefore, would not result in permanent impacts on animal species. No indirect or secondary impacts on animal species would result from the No Build Alternative.

2.18.4 Avoidance, Minimization, and/or Mitigation Measures

BIO-1 BATS Complete preconstruction bat habitat assessment will be conducted to reevaluate the protection status for bat species potentially within the project area. Preconstruction habitat assessment will include the following:

A bat roost habitat reassessment and acoustic and emergence bat surveys should be completed throughout the Study Area within one year ahead of project implementation.

At project structures that may provide night roost habitat (Lincoln Avenue undercrossing, Taft Avenue undercrossing, Chapman Avenue undercrossing, and westbound SR 22 separation), determine which species may be present and their approximate number through acoustic monitoring and exit counts.

Verify if maternity colonies are present.

Ascertain which species are using project structures for night roosting.

Determine if special conservation measures may apply based on current regulatory practices, including exclusion measures, if necessary.

NCCP/HCP Covered Species

Though no impacts would occur to NCCP/HCP covered animal species, avoidance and minimization measures are proposed in case native or nesting bird species are found prior to construction.

BIO-2 MIGRATORY BIRDS To minimize impacts to potential nesting birds, the proposed Minimization Measure will implement the NCCP/HCP Nesting Bird Policy as follows:

Proposed project activities (including, but not limited to, staging and disturbances to native and non-native vegetation, structures, and substrates) should occur

outside the avian breeding season, which generally runs from January 15 to September 15 (as early as January 1 for some birds) to avoid disturbance to breeding birds or destruction of the nest or eggs. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.

If the Construction Lead determines that avoidance of the avian breeding season is not feasible, at least two weeks prior to the initiation of project activities, a qualified biologist with experience in conducting breeding bird surveys will conduct weekly bird surveys to detect presence/absence of native bird species occurring in suitable nesting habitat that is to be directly or indirectly disturbed and (as access to adjacent areas allows) any other such habitat within an appropriate buffer distance of the disturbance area. Generally, the buffer distance should be 300 feet (500 feet for raptors); however, because the covered freeway improvement projects will generally occur along noisy freeways, a buffer distance as low as 100 feet for non-raptors could be appropriate. If a narrow buffer distance is warranted, the Construction Lead will have a qualified biologist identify the appropriate buffer distances for raptors and non-raptors and notify the Wildlife Agencies. The surveys should continue on a weekly basis, with the last survey being conducted no more than three days prior to the initiation of project activities. If a native or nesting bird species is found, the Construction Lead will do one of the following to avoid and minimize direct impacts on native birds and the nest or eggs of any birds:

- Implement default 300-foot minimum avoidance buffers for all birds and 500-foot minimum avoidance buffers for all raptor species. The breeding habitat/nest site will be fenced and/or flagged in all directions, and this area will not be disturbed until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the project.
- If a narrower buffer distance is determined appropriate by the qualified biologist, the Construction Lead will develop a project-specific Nesting Bird Management Plan. The site-specific nest protection plan will be developed collaboratively with Wildlife Agencies and submitted to the Wildlife Agencies, although the Wildlife Agencies will not be responsible for approving the narrower buffer distance and the Nesting Bird Management Plan. The Plan should include detailed methodologies and definitions to enable a qualified avian biologist to monitor and implement nest-specific buffers based on topography, vegetation, species, and individual bird behavior. This Nesting Bird Management Plan will be supported by a Nest Log that tracks each nest and its outcome. The Nest Log will be submitted to the Wildlife Agencies at the end of each week.
- The Construction Lead may propose an alternative plan for avoidance and nesting birds for Wildlife Agencies' review and approval.
- Flagging, stakes, and/or construction fencing should be used to demarcate the inside boundary of the buffer between the project activities and the nest. The

Construction Lead personnel, including all contractors working on site, should be instructed on the sensitivity of the area. The Construction Lead will document the results of the recommended protective measures described above to demonstrate compliance with applicable State and federal laws pertaining to the protection of native birds.

- The biological monitor will be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor will send weekly monitoring reports to the OCTA NCCP Administrator during the grubbing and clearing of vegetation and will notify the OCTA NCCP Administrator immediately if project activities take, possess, or needlessly destroy the nest or eggs of any bird as well as birds-of-prey and their nest or eggs. Within 48 hours of damage to an active nest or eggs or observed death or injury of birds protected under State law or the Migratory Bird Treaty Act (MBTA) (which includes, but not is limited to, the birds on the Covered Species list), OCTA will notify the Wildlife Agencies.

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