

## 3.20 Animal Species

The analysis of impacts of the proposed MCP project on animal species is based on the *Natural Environment Study* (NES) (July 2008), the *Supplement to the Natural Environment Study* (December 2011), the Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis (September 2014), and the Determination of Biologically Equivalent or Superior Preservation Analysis Addendum (October 2014) provided in Appendix T of this Final EIR/EIS.

### 3.20.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and the California Department of Fish and Wildlife (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 federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 3.21 below. 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 Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

### 3.20.2 Affected Environment

A literature review resulted in a list of 52 sensitive animal species that may occur in or within the vicinity of the Biological Study Area (BSA). Of these 52 sensitive wildlife species, 15 are listed as federal and/or state-endangered or threatened, or

proposed endangered or threatened, and are discussed in Section 3.21, Threatened and Endangered Species. Seven of the remaining 52 sensitive wildlife species, bank swallow (*Riparia riparia*), San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), two-striped garter snake (*Thamnophis hammondi*), western pond turtle (*Emys marmorata*), San Diego mountain king snake (*Lampropeltis zonata pulchra*), coast range newt (*Taricha torosa torosa*), and arroyo chub (*Gila orcutti*), are considered to be absent from the BSA and the surrounding area due to a lack of suitable habitat. This section discusses the 31 remaining non-listed animal species with a low to high potential to occur in or near the BSA.

Focused surveys were conducted for burrowing owl and Los Angeles pocket mouse, pursuant to Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) requirements. The survey results include:

- **Burrowing Owl.** One burrowing owl was observed in 2011 within the BSA east of the Perris Valley Storm Drain within the common alignment for Alternatives 4 Modified, 5 Modified, and 9 Modified and their Design Variations. Additionally, suitable habitat, including agricultural fields, ruderal areas, and nonnative grasslands, is located throughout the BSA that the burrowing owl may subsequently occupy due to the transitory nature of the species.
- **Los Angeles Pocket Mouse.** The Los Angeles pocket mouse was captured within Riversidean sage scrub and nonnative grasslands in the BSA at two locations: (1) southwest of the San Jacinto River and Lake Perris near the San Jacinto Wildlife Area, and (2) northeast of the San Jacinto River and Sanderson Avenue in the City of San Jacinto. At the survey area south of Lake Perris, the nonnative grassland is not considered to be suitable for long-term conservation for the species; however, the Riversidean sage scrub is considered occupied by the Los Angeles pocket mouse. The survey area adjacent to the San Jacinto River, east of Sanderson Avenue, was determined to have long-term conservation value for the Los Angeles pocket mouse based on the trapping results conducted for an adjacent property owner west of Sanderson Avenue in areas contiguous with the BSA of the MCP project.

During the 2005 and 2006 field surveys, the following other special-status animal species were observed within the BSA: northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) and San Diego desert woodrat (*Neotoma lepida intermedia*).

Additionally, a habitat suitability assessment for bats was conducted on bridge structures at the western end of the BSA in spring 2007. No sign of bats were observed. However, bat roosts may change seasonally and roosting locations may occur in bridge structures and larger culverts throughout the BSA. Therefore, further identification of suitable bat roosting locations will be needed closer to construction.

The following species from the literature search were not observed during the 2005, 2006, or 2011 field surveys; however, habitat that may be suitable is present within the BSA for the following 27 species:

- Western spadefoot (*Spea hammondi*)
- Orangethroat whiptail (*Aspidoscelis hyperythra*)
- Coast horned lizard (*Phrynosoma coronatum*)
- Red diamond rattlesnake (*Crotalus ruber*)
- Silvery legless lizard (*Anniella pulchra pulchra*)
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*)
- Golden eagle (*Aquila chrysaetos*)
- Short-eared owl (*Asio flammeus*)
- Northern harrier (*Circus cyaneus*)
- California yellow warbler (*Dendroica petechia brewsteri*)
- White-tailed kite (*Elanus leucurus*)
- Yellow-breasted chat (*Icteria virens*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Tricolored blackbird (*Agelaius tricolor*)
- Long-eared owl (*Asio otus*)
- Purple martin (*Progne subis*)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
- Pallid bat (*Antrozous pallidus*)
- Townsend's big-eared bat (*Corynorhinus townsendii*)
- Spotted bat (*Euderma maculatum*)
- Western mastiff bat (*Eumops perotis*)
- Western red bat (*Lasiurus blossevillii*)
- Western yellow bat (*Lasiurus xanthinus*)
- Big free-tailed bat (*Nyctinomops macrotis*)
- Pocketed free-tailed bat (*Nyctinomops femorasacca*)
- Southern grasshopper mouse (*Onychomys torridus ramona*)
- American badger (*Taxidea taxus*)

### 3.20.3 Environmental Consequences

#### 3.20.3.1 Permanent Impacts

##### **Build Alternatives**

##### *Burrowing Owl*

The area of direct impacts to burrowing owls is based on a 300-foot (ft) foraging radius (6.5 acres) around any primary burrow occupied by paired or unpaired resident birds (California Burrowing Owl Consortium 1993, p. 6). As shown in Table 3.20.A, there will be 3.1 acres of direct impacts to burrowing owl foraging habitat and burrows occupied by one burrowing owl along the common alignment of all MCP Build Alternatives. Habitat that may be suitable for burrowing owl covers large areas affected by all MCP Build Alternatives in the project area. By minimizing the project footprint in the preliminary design of the MCP Build Alternatives, impacts (loss of suitable burrowing owl habitat) were greatly minimized.

**Table 3.20.A Impacts to Burrowing Owl Breeding/Foraging/Nesting Habitat**

Alternative/Design Variation	Impacts (acres) <sup>1</sup>
Alternative 4 Modified	3.1
Alternative 4 Modified SJN DV	3.1
Alternative 4 Modified SJRB DV	3.1
Alternative 5 Modified	3.1
Alternative 5 Modified SJN DV	3.1
Alternative 5 Modified SJRB DV	3.1
Alternative 9 Modified	3.1
Alternative 9 Modified SJN DV	3.1
Alternative 9 Modified SJRB DV	3.1
Alternative 9 Modified SJRB DV (Preferred Alternative)	3.1

Sources: *Supplement to the Natural Environment Study* (December 2011) and the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination* (September 2014) provided in Appendix T of this Final EIR/EIS.

<sup>1</sup> Based on 300 ft of foraging radius around occupied burrows of pairs or unpaired resident single birds (Burrowing Owl Consortium 1993). Acreages include temporary and permanent impacts.

No parts overlap the SR-79 Realignment Project.

ft = foot/feet

SJN DV = San Jacinto North Design Variation

SJRB DV = San Jacinto River Bridge Design Variation

SR-79 = State Route 79

In addition to direct loss of habitat, other direct impacts to burrowing owls and/or suitable habitat on adjacent lands may result from increase in lighting at night, headlamp glare, and noise. Indirect impacts may result from edge effects such as future development, exotic plant and animal infestations, litter, fire, and unauthorized recreational use. Increased fire frequency may result in type conversion of native

habitats and an increase of exotic plant species. Type conversions from more open native habitat to more dense nonnative grasslands could reduce the area of potential burrowing owl nesting habitat. The MCP project may provide additional access points for unauthorized off-road vehicle use, which may destroy native habitat and burrowing owl burrows, and may also promote exotic plant infestation. Future development in this area and use of the MCP freeway may result in additional litter. Litter may also result in animal infestations, which may result in additional predators in the area that may prey on the burrowing owl.

Due to the presence of suitable habitat within the MCP project footprint, a preconstruction survey will be required, to determine if any owls have subsequently occupied the MCP project footprint prior to ground-breaking activities.

#### *Los Angeles Pocket Mouse*

The project will directly impact 44.07 acres of Los Angeles pocket mouse occupied habitat suitable for long-term conservation for the base case alternatives and the San Jacinto River Bridge Design Variation (SJRBDV) and 44.26 acres for the San Jacinto North Design Variation (SJNDV), and 20.85 acres for the preferred alternative (Alternative 9 Modified with the SJRBDV) as shown in Table 3.20.B.

Edge effects of the project on areas occupied by Los Angeles pocket mouse may result from an increase in light, glare, and noise associated with vehicles and daytime and nighttime construction activities.

Indirect effects may result from edge effects such as exotic plant and animal infestations, litter, fire, unauthorized recreational use, and pollutants associated with vehicle use of the freeway. Increased fire frequency may result in type conversion of native habitats and an increase of exotic plant species, which may not provide habitat for the Los Angeles pocket mouse. The MCP project may provide additional access points for unauthorized off-road vehicle use, which may destroy native habitat and sensitive species and may also promote exotic plant infestation. Future development in the area and use of the MCP freeway may result in additional litter. Litter may also result in animal infestations, which may result in additional predators in the area that may prey on the Los Angeles pocket mouse. Artificial lighting may also affect surface activity of these nocturnal mammals. Also, owls and other predators may be able to hunt more efficiently under artificial light, thus increasing predation risk (MSHCP 2003).

**Table 3.20.B Impacts to Los Angeles Pocket Mouse Habitat Suitable for Long-Term Conservation**

Alternative/Design Variation	Impacts (acres)
Alternative 4 Modified	44.07
Alternative 4 Modified SJN DV	44.26
Alternative 4 Modified SJRB DV	44.07
Alternative 5 Modified	44.07
Alternative 5 Modified SJN DV	44.26
Alternative 5 Modified SJRB DV	44.07
Alternative 9 Modified	44.07
Alternative 9 Modified SJN DV	44.26
Alternative 9 Modified SJRB DV	44.07
<u>Alternative 9 Modified SJRB DV (Preferred Alternative)</u>	<u>20.85<sup>1</sup></u>

Source: *Supplement to the Natural Environment Study* (December 2011) and the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination provided in Appendix T of this Final EIR/EIS*.

Note: Acreages summarized above include temporary and permanent impacts. No parts overlap the SR-79 Realignment Project.

<sup>1</sup> The reduction in impacts is based on design refinements included in the Preferred Alternative using three retaining walls (Refer to Figure 2.5.A provided in Chapter 2, Project Alternatives).

SJN DV = San Jacinto North Design Variation

SJRB DV = San Jacinto River Bridge Design Variation

SR-79 = State Route 79

### *Bat Species*

The following bat species were identified as possibly occurring within the BSA: pallid bat, Townsend’s big-eared bat, spotted bat, western mastiff bat, western red bat, western yellow bat, big free-tailed bat, and pocketed free-tailed bat.

The project will directly impact the edges of existing bridges and larger culverts that may provide maternity roosts and foraging roosts for bat species. Those bridges and culverts will be impacted by extending the existing structures to accommodate the MCP project improvements. The existing bridges and culverts will not be removed; therefore, only a small part of bat roosting habitat may be permanently altered by the MCP Build Alternatives. Bat maternity roosts change seasonally; therefore, maternity roosting surveys will be conducted between May 1 and August 31 prior to construction at larger culverts and bridges to determine the location of active maternity roosts.

### *Other Non-Listed Animal Species*

As noted earlier, 27 species from the literature search were not observed during the 2005, 2006, or 2011 field surveys; however, habitat that may be suitable is present within the BSA for those species.

Impacts to the following special-status species are covered by the MSHCP: western spadefoot, orangethroat whiptail, coast horned lizard, red diamond rattlesnake, golden eagle, northern harrier, California yellow warbler, white-tailed kite, yellow-breasted chat, loggerhead shrike, tricolored blackbird, purple martin, and San Diego black-tailed jackrabbit. Although these species have a low to moderate occurrence probability and they were not observed during field studies within the BSA, the MCP Build Alternatives may indirectly impact these species through the loss of potential habitat (as summarized in Appendix N, Regional Species of Concern and Coverage under the Western Riverside County Multiple Species Habitat Conservation Plan). Any potential impacts to these species are not considered substantial because they are widespread in distribution in relatively common habitats and are not State or federally listed as threatened or endangered. The types of habitats these species are or may be present in the BSA are summarized in the Species Occurrence Table in Appendix N, and impacts to those habitats are summarized in Table 3.17.B in Section 3.17, Natural Communities.

Impacts to the following species are not covered under the Western Riverside County MSHCP: silvery legless lizard, coast patch-nose snake, short-eared owl, long eared owl, pallid bat, Townsend's big-eared bat, spotted bat, western mastiff bat, western red bat, western yellow bat, big free-tailed bat, pocketed free-tailed bat, southern grasshopper mouse, and American badger.

Impacts to the bird and bat species are addressed in the subsections titled "Migratory Bird Treaty Act" and "Bat Species," respectively. The remaining four species not covered by the MSHCP are two reptile (silvery legless lizard and coast patch-nose snake) and two mammal species (southern grasshopper mouse and American badger), which are also widespread in distribution throughout California. Silvery legless lizard is found in drainages and woodlands and has a moderate potential to occur within the MCP BSA. The closest known occurrences are approximately 12 miles to the north in Redlands. Coast patch-nose snake is found in washes and scrub and occurs near San Jacinto and Perris and has a high potential to occur within the BSA. Southern grasshopper mouse has a moderate potential to occur in grasslands and is known from Perris, Romoland, and the March Air Reserve Base. American badger has a high

potential to occur within the BSA and is known to occur southeast of Lake Perris. Although no specific avoidance and minimization measures are identified for these remaining species, these species will benefit from the MCP design to facilitate wildlife crossings in the Western Riverside County MSCHP Criteria Area, which are the locations with the highest likelihood of these species to occur (specifically the San Jacinto River bridges in the Lakeview area and City of San Jacinto and Wildlife Crossing No. 10 near Princess Ann Road at Proposed Constrained Linkage 20). Additionally, the 4,125-foot-long retaining wall south of Lake Perris will also provide a barrier to prevent small mammal species from entering the right of way.

#### *Migratory Bird Treaty Act*

Per the Western Riverside County MSHCP, Volume 3, Implementing Agreement, the USFWS Section 10(a)(1)(b) permit also constitutes a Migratory Bird Treaty Act Special Purpose Permit for Take of all MSHCP Covered Species Adequately Conserved, with the exception of the bald eagle, golden eagle, and other bird species protected by the Migratory Bird Treaty Act but not listed under the Federal Endangered Species Act (FESA).

Take associated with habitat loss for bird species covered under the MSHCP is avoided or minimized by complying with the guidelines and restrictions provided in the MSHCP, Section 6.1.2, Section 7.5.3, Table 9-2, and Appendix C. To comply with the Migratory Bird Treaty Act, clearing of vegetation with suitable habitat for species protected by the Migratory Bird Treaty Act within nesting season (February 15 to September 15) will be preceded by surveys to ensure that there is no take of non-listed nesting bird species, as required in Measure NC-3, provided earlier in Section 3.17, Natural Communities. In addition, if any trees are scheduled to be removed between January 15 and February 15, a preconstruction raptor survey would be required prior to removal of any trees.

#### *Bald and Golden Eagle Protection Act*

The Bald Eagle Protection Act of 1940 (United States Code [USC] Title 16, Chapter 5A, Subchapter II, Sections 668 a–d), as subsequently amended, provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, or commerce of such birds, including their parts, nests, or eggs. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." In addition to direct actions on individual birds, activities that interfere with normal breeding, feeding, or sheltering behavior, resulting in death,



injury, nest abandonment, or decreased reproduction, may constitute violations of this act.

Take of bald or golden eagle is not anticipated as a result of the MCP project, as nesting habitat suitable for these species does not occur within the BSA, and adjacent areas that would not to be disturbed would still provide adequate foraging habitat for these eagles.

To protect suitable nesting habitat for this species, if any trees are scheduled to be removed between January 15 and September 15, a preconstruction eagle survey would be required prior to removal of any trees, as required in Measure NC-3, provided earlier in Section 3.17, Natural Communities.

### **No Build Alternatives**

Under Alternative 1A, the planned street network would be constructed, except for improvements to the Ramona Expressway. Because the existing Ramona Expressway would not be modified, there would be no permanent impacts to special-status animal species along that road under Alternative 1A. Therefore, impacts to special-status animal species in the vicinity of Ramona Expressway would be less for Alternative 1A than for that under the MCP Build Alternatives.

Under Alternative 1B, the planned street network would be developed according to the Circulation Element of the Riverside County General Plan, including improvements to the Ramona Expressway. Under Alternative 1B, the Ramona Expressway would be widened and permanent impacts to special-status animal species would be expected to be less than for the MCP Build Alternatives.

### **3.20.3.2 Temporary Impacts**

Temporary impacts to animal species may occur during construction where habitats are temporarily disturbed during grading or other activities. However, temporarily disturbed habitats will be restored and/or revegetated with native species. Temporary construction effects to animal species are expected as a result of construction noise, light, vibration, dust, and human encroachment. Although temporary nighttime construction activities may occur in areas along Interstate 215 in order to minimize traffic detours, because these high traffic areas do not occur at environmentally sensitive areas with long-term conservation value for special-status species, nighttime construction lighting is anticipated to have only minor disruption to species covered under the MSHCP. Additional construction activities could temporarily

impede access to potential bat roost sites in the crevices of bridges, culverts, and overhead structures.

All impacts (including both temporary and permanent) will occur within the MCP right-of-way footprint. For this impact analysis, a conservative (worst-case) right-of-way footprint was established for each alternative that includes areas of cut-and-fill, staging areas for construction vehicles, equipment and materials, haul routes, and water quality treatment features. While some parts of this right-of-way footprint will be only temporarily disturbed during construction and would be revegetated with native plant species, it is not expected that this revegetation would fully restore the functions and values of the impacted wildlife habitat.

Temporary impacts to riparian habitats and jurisdictional areas at bridge crossings have been identified, as summarized in Sections 3.17, Natural Communities, and 3.18, Wetlands and Other Waters. However, the remaining temporary impacts, including temporary impacts to animal species were conservatively analyzed with a worst-case impact scenario wherein all areas within the right-of-way footprint were calculated as permanent impacts.

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

Habitat that may be suitable for burrowing owl covers large areas affected by all MCP Build Alternatives in the project area. By minimizing the project footprint in the preliminary design of the MCP Build Alternatives, impacts (loss of suitable burrowing owl habitat) were greatly minimized.

In 2005, the preliminary design of the MCP project was revised to avoid impacts to the Stephens' Kangaroo Rat Reserve, which also included reducing the impacts to Los Angeles pocket mouse in the vicinity of Lake Perris, east of the existing Bernasconi Road, by aligning the MCP Build Alternatives as much as possible to the south of habitat suitable for Los Angeles pocket mouse. Also, the realignment of Bernasconi Road near Lake Perris, which is required for the MCP project, was designed to avoid a majority of habitat suitable for the Los Angeles pocket mouse. In the vicinity of the MCP/State Route 79 (SR-79) interchange, the project was also redesigned to widen Sanderson Avenue on the west side in order to avoid all impacts to Los Angeles pocket mouse occupied habitat that exists east of the Sanderson Avenue bridge over the San Jacinto River. Since the release of the Recirculated Draft EIR/Supplemental Draft EIS, as part of the preparation of Geometric Approval Drawings, RCTC continued to refine details of engineering and looked for

opportunities to further reduce impacts. As a result of those activities, RCTC was able to reduce impacts to both LAPM and SBKR occupied/suitable habitat. By doing so, the acres of impacts to areas considered riparian habitats were also reduced.

Specifically, as part of the Build Alternatives evaluated in the Recirculated Draft EIR/Supplemental Draft EIS, RCTC was proposing cut and fill within the right of way. Based on the current refinements, RCTC is proposing to provide retaining walls in certain areas to reduce the amount of grading and potential impacts of the preferred alternative in certain areas as shown in Table 3.20.B. By proposing walls instead of cut slopes, the acreages of habitat disturbance for the Build Alternatives were reduced compared to the 44 acres of impacts reported in the Recirculated Draft EIR/Supplemental Draft EIS. In addition, these walls will help prevent Los Angeles pocket mouse and other small mammals from entering the MCP right of way.

In addition, an approximately 1.5-mile-long segment of Alternative 9 Modified with the SJRB DV, the preferred alternative, was shifted south to avoid the acquisition of 3.4 acres of land in the San Jacinto Wildlife Area described by CDFW as occupied by the Los Angeles pocket mouse. As a result of this realignment and reduced right-of-way needs due to the use of additional retaining walls, the potential impacts of the preferred alternative on the Los Angeles pocket mouse habitat suitable for long term conservation were reduced by over 20 acres, to 20.85 acres, compared to the other Build Alternatives.

Refer also to Section 3.17, Natural Communities, which discusses the Determination of Biologically Equivalent or Superior Preservation Analysis conducted to assess and address impacts to Los Angeles pocket mouse under the Western Riverside County MSHCP.

Mitigation for impacts to the burrowing owl, Los Angeles pocket mouse, and other species covered under the Western Riverside County MSHCP will be achieved through implementation of the measures specified in the MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis provided in Appendix T. The Western Riverside County MSHCP was conceived, developed, and is being implemented specifically to address the direct, indirect, cumulative, and growth-related effects on species and habitats in western Riverside County resulting from build out of covered land use and infrastructure projects, including the MCP project.

The Recirculated Draft EIR/Supplemental Draft EIS included Measure AS-4, which required the preparation of Determinations of Biologically Equivalent or Superior Preservation (DBESPs) for the Los Angeles pocket mouse pursuant to Sections 6.1.2 and 6.1.3 of the Western Riverside County MSHCP. That measure was satisfied based on completion of the Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination and the Regional Conservation Authority Joint Project Review for the MCP project (both provided in Appendix T of this Final EIR/EIS). As a result, that part of Measure AS-4 is no longer required for the MCP project. In addition, a DBESP for the burrowing owl is also included in the Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination provided in Appendix T. Refer also to Section 3.17, Natural Communities, for additional discussion regarding the compliance of the MCP project with the requirements of the Western Riverside County MSHCP.

Measure AS-4 in the Recirculated Draft EIR/Supplemental Draft EIS also included a requirement regarding conservation of off-site mitigation areas in perpetuity; that part of Measure AS-4 is still applicable and is included in Measure TE-1 later in Section 3.21, Threatened and Endangered Species. As a result, Measure AS-4 in the Recirculated Draft EIR/Supplemental Draft EIS was deleted from the list of measures below and the remaining measures were renumbered accordingly.

Edge effects resulting from an increase in light and glare associated with vehicles and daytime and nighttime construction activities will be reduced by incorporating shielded lighting near environmentally sensitive areas.

Indirect impacts of exotic plant and animal infestations, litter, and fire will be reduced by regular roadside maintenance to remove litter and weeds from the right of way.

Measures AS-1 through AS-3 are based on the DBESP for the burrowing owl in the Mid County Parkway MSHCP Consistency Determination of Biologically Equivalent or Superior Preservation Analysis (provided in Appendix T) for the burrowing owl.

The following measures applicable to all MCP Build Alternatives will avoid and minimize impacts to sensitive animal species during construction of the MCP project:

**AS-1 Burrowing Owl Habitat.** During final design, the Riverside County Transportation Commission (RCTC) Project Engineer and Project Biologist will require the design engineer to identify all areas of potential burrowing owl habitat within the project footprint and the immediately surrounding areas (including the known location east of

Perris Valley Drain) and will designate those areas on the project specifications.

To ensure that any burrowing owl that may subsequently occupy the site are not affected by construction activities, the RCTC Resident Engineer will require the Construction Contractor to have preconstruction burrowing owl surveys conducted by the Project Biologist within 120 days prior to ground disturbance in the areas identified as potential burrowing owl habitat. These preconstruction surveys are required to comply with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the federal Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code.

During all site preparation, disturbance, grading, and construction activities, the RCTC Resident Engineer will require the Construction Contractor to implement all burrowing owl measures, including the preconstruction surveys described above.

**AS-2 Active Burrowing Owl Nests.** During all site preparation, disturbance, grading, and construction activities, the RCTC Resident Engineer will require the Construction Contractor to avoid the take of active burrowing owl nests. If the focused burrowing owl surveys required in Measure AS-1 determine that the project disturbance limits support burrowing owls, the burrowing owls will be relocated or translocated, as required in the relocation/translocation plan required in Measure AS-3. No site preparation, disturbance, grading, or construction activities will be allowed in those areas until the Project Biologist confirms that the burrowing owl relocation/translocation activities are complete.

**AS-3 Burrowing Owl Relocation/Translocation Plan.** If burrowing owls are identified during the preconstruction surveys (required in Measure AS-4) and cannot be avoided between 60 and 90 days prior to any ground-disturbing activities, the RCTC Project Manager and Project Biologist will prepare a Burrowing Owl Relocation/Translocation Plan. The RCTC Project Manager and the Project Biologist will submit the Plan to the California Department of Fish and Wildlife

(CDFW) and the Regional Conservation Authority for approval prior to any ground disturbing activities. The Plan will include, but not be limited to, the following:

- Passive and, if needed, active relocation of BUOW by a qualified avian biologist.
- Passive relocation activities to exclude BUOW from burrows and to provide artificial burrows elsewhere; BUOW will be passively evicted only during the non-breeding season (September 1 to January 31).
- Active relocation to capture BUOW from original burrows that would be destroyed by construction activity, take them to a new site well removed from the original site, and release them into a new burrow; BUOW will be captured and moved during the non-breeding season or early in the breeding season but just prior to egg-laying (i.e., late January or early February).
- Capture and banding of BUOW for identification and monitoring.
- BUOW will be captured at least 1 week prior to passive or active relocation activities.
- Passive and active relocation sites will be selected and finalized in consultation with the RCA and the Wildlife Agencies.
- Passive and active relocation of owls to the identified relocation sites.
- Monitoring will be conducted prior to, during, and after passive or active relocation efforts.
- Habitat and artificial nest burrow management activities will be conducted at least once annually to maintain conditions that support BUOW.
- Data collection and reporting to the RCA and the Wildlife Agencies regarding the results of presence/absence surveys, nest/burrow locations, locations to which the BUOW were moved, capture and banding data, date and time passively relocated owls were excluded from original burrows or actively relocated owls were released into field enclosures, date field enclosures were removed, nest burrow monitoring visits, burrow habitat characteristics, reproductive success information from nest visits, artificial nest burrow installation and maintenance activities and

outcomes, habitat management activities and outcomes, and results of burrow inspections using the infrared video scope.

- A description of passive relocation techniques;
- Methodology for monitoring and inspection of occupied and potentially suitable burrows;
- Description of monitoring frequency to confirm owls have vacated occupied burrows within the MCP project footprint;
- Requirement that any relocation and translocation will occur outside of the breeding season; and
- Requirement that sites proposed for burrowing owl translocation sites will be identified and created in coordination with the wildlife agencies to establish new colonies.

During all site preparation, disturbance, grading, and construction activities in burrowing owl habitat, the RCTC Resident Engineer will require the Construction Contractor to implement the provisions in the *Burrowing Owl Relocation/Translocation Plan*. The RCTC Project Biologist will monitor the Construction Contractor's compliance with the provision of that Plan.

**AS-4**

**Bat Maternity Roosting Survey.** Between May 1 and August 31 and prior to any site preparation, disturbance, grading, or ground disturbance activities, the RCTC Resident Engineer will require the Construction Contractor to retain a qualified bat biologist at least 12 months prior to any construction activities at bridges. The qualified bat biologist must have extensive experience identifying bats in southern California and have experience in the ecology of bats using human-constructed structures. The qualified bat biologist will survey the project limits and assess the presence of or potential for bat maternity roosts, which are generally formed in spring and may change seasonally. Where existing or potential roosting habitat is present, the qualified bat biologist will conduct nighttime surveys that include a combination of structure inspection, sampling, exit counts, and acoustic surveys. A report will be prepared summarizing the data collected during these nighttime surveys, and will include any necessary avoidance and minimization recommendations such as directing light and noise away from bat habitat, humane bat eviction/exclusion, and replacement roosting habitat.

**AS-5**

**Humane Bat Eviction/Exclusion.** Prior to site preparation, disturbance, grading, or construction activities in areas containing bat habitat, the RCTC Resident Engineer will require the Construction Contractor to install temporary bat eviction/exclusion devices under the supervision of a qualified bat biologist. The installation of the exclusion devices will be limited to the fall (September and October) preceding construction activities at structures containing bat habitat, in order to avoid trapping flightless young inside these structures during the summer or hibernating individuals during the winter. The exclusion devices must be retained in place to keep each structure free of bats until the completion of construction at that location. All bat exclusion devices and techniques will be coordinated with the California Department of Transportation (Caltrans) Biologist, the RCTC Project Manager, the RCTC Resident Engineer, the Construction Contractor, the Project Biologist, and the qualified bat biologist.

In cases where bats are evicted from maternity roosts, and will remain excluded from these roosts throughout the maternity season (April through August), the RCTC Resident Engineer and the qualified bat biologist will replace roosting structures to minimize effects to excluded bats by providing an alternative site for these bats to rear young during the maternity seasons. The replacement roosting structures will be of suitable design and installed to provide roosting habitat for those bat species that are being evicted. The timing of installation of replacement roosting structures will be based on the expert opinion of the qualified bat biologist to ensure that roosting structures are installed with sufficient time for evicted roosting bats to find and commence occupation of the replacement roosting structures.

**AS-6**

**Retention of Existing Bat Roosting Habitat and Creation of Habitat Replacement Structures.** Prior to any site preparation, disturbance, grading, or construction, the RCTC Project Engineer and the RCTC qualified bat biologist will determine whether structural features providing existing bat roosting habitat cannot be permanently retained following construction. If that is the case, the qualified bat biologist will identify permanent alternative roosting habitat/replacement structures to be installed during construction. The



project specifications will include suitable designs and specifications for bat exclusion and habitat replacement structures. All habitat replacement structures will provide suitable habitat (in terms of both design and installation) for those species of bats being evicted.

Prior to and during construction, the RCTC Resident Engineer will require the Construction Contractor, under the guidance of the qualified bat biologist, to properly implement the designs and specifications for permanent bat exclusion and habitat replacement structures included in the project specifications. The timing of the installation of replacement roosting structures shall be based on the expert opinion of the qualified bat biologist to ensure that roosting structures are installed with sufficient time for evicted roosting bats to find and commence occupation of the replacement roosting structures. The installation and maintenance of those structures will be monitored by the qualified bat biologist.

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