

APPENDIX H

**Species-Specific Avoidance and  
Minimization Measures for  
25 Other Covered Species**

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In Chapter 3.9, a strategy is described for addressing 25 species that might not be adequately addressed through the habitat-specific conservation strategies or whose ecology and occurrence in the Habitat Conservation Plan (HCP) area are poorly understood. For each of these 25 species, interim avoidance, minimization, and mitigation measures are identified below. During and after completion of the study program for these species, the HCP Implementation Team (IT) will review the measures and adjust or revise them as necessary to provide the most appropriate avoidance, minimization, and mitigation measures strategy. Implementation of revised measures would require approval from the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG).

## Cheeseweed Moth Lacewing

- Prior to the start of construction activities, the construction area will be surveyed for the presence of creosote bush.
- An activity exclusion zone, 25 feet in radius, will be established around each creosote bush. Exclusion zones will be flagged and staked in the field prior to the start of the construction. No surface disturbing activity will occur within the exclusion zones. If a 25-foot-radius exclusion zone cannot be established, the Imperial Irrigation District (IID) will confer with the USFWS and CDFG regarding the best configuration of the exclusion zone, given the location of the bushes and construction area requirements. If the bushes cannot be avoided but are known or likely to be inhabited by lacewing, IID will confer with USFWS and CDFG to determine if the bushes should be transplanted. If the bushes can be transplanted, IID will work with USFWS and CDFG to identify a location and the appropriate procedures for transplanting those occupied bushes that cannot be avoided. Regardless of whether the shrubs are transplanted, IID would protect native desert habitat in accordance with Desert-5 for permanent loss of native desert habitat.

## Andrew's Dune Scarab Beetle

- Prior to the start of construction activities, the construction area will be surveyed for the presence of dune scarab beetles. Surveys will be conducted during the time period necessary to identify this species and will be conducted within 1 year of initiating construction activities.
- Construction will be planned to avoid, if possible, areas of open dune known to be occupied by these beetles. If areas with beetles cannot be avoided, IID will acquire and protect land that is occupied by the dune scarab beetle at a 1:1 ratio for the acreage affected.

## Banded Gila Monster

- A clearance survey will be conducted within 48 hours prior to the start of construction activities. Banded gila monsters found on the construction site will be relocated to nearby suitable habitat outside the construction area. Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities consistent with Desert Habitat-3.
- If a Gila monster occurs on the project site during construction, construction activities adjacent to the individual's location will be halted and the individual allowed to move away from the construction site. If the individual is not moving, the biological monitor will relocate it to nearby suitable habitat outside the construction area. It will be placed in the shade of a shrub.
- Prior to construction, the construction area and adjacent areas within 100 feet of the construction site will be searched for burrows that could be used by gila monsters. If potentially suitable burrows or rock piles are found, they will be checked for occupancy. Occupied burrows will be flagged and avoided (employing a 50-foot buffer) during construction. If the burrow cannot be avoided, it will be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed. If an existing burrow is unavailable, the biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original.
- Trenches, holes, or other excavations will be examined for this species prior to filling. If individuals are found, the biological monitor will relocate them to nearby suitable habitat.

## Jacumba Little Pocket Mouse

- Prior to the start of construction activities, the construction area will be surveyed for the presence of Jacumba little pocket mice. Surveys will be conducted during the time period necessary to identify this species and will be conducted within one year of initiating construction activities.
- Construction will be planned to avoid, if possible, areas of desert habitat where Jacumba little pocket mice are found. If areas with pocket mice cannot be avoided, IID will acquire and protect land that is occupied by the Jacumba little pocket mouse at a 1:1 ratio for the acreage affected.

## Yuma Hispid Cotton Rat and Colorado River Hispid Cotton Rat

- Conduct surveys to determine the extent of habitat used by hispid cotton rats in the HCP area.
- Based on the surveys, create portions of the 190 to 652 acres of managed marsh habitat with characteristics conducive to use by cotton rats.
- For scheduled construction activities associated with the drainage system, before initiation of construction activities, survey the construction site to determine whether

any cotton rats are likely to occupy site as evidenced by the occurrence of appropriate vegetation and/or species-specific surveys. If cotton rats occupy the project site, schedule construction activities that would remove habitat to occur outside of the breeding season.

## Colorado River Toad

- Conduct surveys to determine the extent of drain habitat used by Colorado River toads and identify other breeding locations (e.g., seepage areas and washes along the All American Canal [AAC]).
- Based on the surveys, create portions of the 190 to 652 acres of managed marsh habitat with characteristics conducive to use by toads.
- Introduce toads into managed marsh habitat if appropriate.
- Survey prior to the start of construction activities to determine if any potentially suitable breeding ponds occur in the construction area.
- Known breeding pools would be avoided during construction. If breeding pools could not be avoided, two known breeding pools would be acquired and protected in perpetuity for every breeding pool permanently affected. No loss of a breeding pool would be authorized until at least three pools had been identified. This practice would allow protection of two pools to mitigate the loss of one pool.
- Conduct a worker education program to minimize vehicle strikes during Operations and Maintenance (O&M) activities.

## Lowland Leopard Frog

- Conduct surveys to determine the extent of drain habitat used by lowland leopard frogs.
- Based on the surveys, create portions of the 190 to 652 acres of managed marsh habitat with characteristics conducive to use by frogs.
- Introduce frogs into managed marsh if necessary to establish consistent use.
- Manage bullfrog and *R. berlandeiri* populations in managed marsh to minimize competition with lowland leopard frog.

## Western Mastiff Bat, California Leaf-Nosed Bat, and Southwestern Cave Myotis

- Conduct surveys to determine the extent of desert dry wash woodland (DDWW) adjacent to the AAC or East Highline Canal used for foraging by these bats. Surveys will also be used to determine if other areas are important as foraging grounds or roost areas.
- Avoid foraging habitat in DDWW during construction activities. If foraging habitat cannot be avoided, acquire and protect with a conservation easement suitable habitat at a ratio of 3:1 in the immediate vicinity of removal or within 5 miles of the roost being used.

- If other areas are found to be important as roosts or foraging grounds, avoid construction or maintenance activities in these areas or replace with suitable habitat at a minimum ratio of 1:1.
- Known maternity roosts would be avoided during construction.

## **Mexican Long-Tongued Bat, Pocketed Free-Tailed Bat, and Big Free-Tailed Bat**

- Conduct surveys to determine the extent of foraging habitat within proposed construction areas that is used by these bats. Surveys will also be used to determine if other areas are important as foraging grounds or roost areas.
- Avoid foraging habitat during construction activities. If foraging habitat cannot be avoided, replace with suitable habitat at a ratio of 3:1 in the immediate vicinity of removal.
- If other areas are found to be important as roosts or foraging grounds, avoid construction or maintenance activities in these areas or replace with suitable habitat at a minimum ratio of 1:1.
- Known maternity roosts would be avoided during construction.

## **Occult Little Brown Bat, Pale Western Big-Eared Bat, and Yuma Myotis, Western Small-Footed Myotis**

- Conduct surveys to determine roost locations and important foraging areas.
- Avoid roost locations or replace with suitable roosts at a minimum ratio of 1:1 within the immediate vicinity of the roost being used.
- If other areas are found to be important as foraging grounds, avoid construction or maintenance activities in these areas or replace with suitable habitat at a minimum ratio of 1:1.
- Known maternity roosts would be avoided during construction.

## **Pallid Bat and Spotted Bat**

- Conduct surveys to determine roost locations and important foraging areas.
- Avoid roost locations or replace with suitable roosts at a minimum ratio of 1:1 within the immediate vicinity of the roost being used.
- Known maternity roosts would be avoided during construction.

## Flat-Seeded Spurge, Orcutt's Aster, Foxtail Cactus, Munz's Cactus, and Orocopia Sage

- Prior to the start of construction activities, the construction area will be surveyed for the presence of covered plant species. Surveys will be conducted during the time period necessary to identify these species but will be conducted within one year of initiating construction activities.
- If covered plant species occur on the construction area, an activity exclusion zone, 25 feet in radius, will be established around each individual. Exclusion zones will be flagged and staked in the field prior to the start of the construction. No surface disturbing activity will occur within the exclusion zones. If a 25-foot-radius exclusion zone cannot be established, IID will confer with the USFWS and CDFG regarding the best configuration of the exclusion zone, given the location of the plants and construction area requirements. If the plants cannot be avoided, IID will confer with USFWS and CDFG. The USFWS and CDFG will determine if the plants can be transplanted. If the plants can be transplanted, IID will work with USFWS and CDFG to identify a location and the appropriate procedures for transplanting those plants that cannot be avoided.