SDZG Institute for Conservation Research

This summary of management priorities for western burrowing owl (BUOW) is provided to SDMMP in support of 1) development of SDMMP implementation priorities for 2017 onwards; and 2) the selection of aligned BUOW projects during the upcoming cycle of Regional Land Manager Grants. This information is summarized from the draft BUOW Conservation and Management Plan for San Diego County (draft BUOW Plan). The draft BUOW Plan is currently under review, and will be approved by local, state, and federal agencies (i.e., BUOW Partners Group) before dissemination.

The first priority for the next five years (2017-2022) is to manage the existing breeding BUOW population on Otay Mesa (Management Unit 3). This should include annual burrow maintenance, prioritization for burrow maintenance or closure, vegetation management, population monitoring, and tracking of known threats. Without management, this population node will be at risk of loss as development proceeds in multiple areas.

Although Otay Mesa supports the largest known BUOW population in San Diego County, it will also be important to establish nodes in other parts of the County where secure, high quality habitat exists. Long-term population persistence will depend on the establishment of more than a single node. In Management Unit 3, preparation for potential future BUOW management is being implemented at Rancho Jamul Ecological Reserve, including vegetation management and installation of artificial burrows.

One of the most extensive grasslands remaining in San Diego County is located in Management Unit 5, to the west and south of the unincorporated community of Ramona. The significance of this grassland is the number of large parcels that have conservation status and are already under management for conservation goals. Habitat assessments have shown areas of suitable habitat in this management unit.

Management Unit 6 of the County is currently under development, with designated parcels set aside as open space. Some open space parcels include areas of high habitat suitability, as indicated by the landscape-level habitat model. In addition, BUOWs were historically found in this area, and single birds or pairs are still detected incidentally.

Therefore, BUOW management efforts in these three management units need to be prioritized in the next five years. The following list of objectives have been developed from the draft BUOW Plan. These objectives generally apply in all three management units, but should be implemented strategically in coordination with SDMMP. Additionally, more tailored recommendations for specific lands are further identified in the draft BUOW Plan.

Objective	**Management Unit**
Creation of at least one additional breeding node per management unit, including owl reintroduction and artificial burrow installation.	MU3, MU5, MU6
Initiation of 3-5 year conservation breeding program to populate new breeding nodes.	MU3, MU5, MU6
Vegetation management as needed on contiguous parcels of open space identified as potential suitable habitat, including spot mowing at suitable BUOW breeding sites prior to the breeding season.	MU3, MU5, MU6
Continued management of previously restored grasslands and forblands to ensure that criteria for open ground and vegetation structure are maintained.	MU3, MU5, MU6
Development and implementation of plan for routine annual maintenance of existing artificial burrows. Gradual phase-out of reliance on artificial burrows.	MU3, MU5, MU6
Deployment of BUOW conspecific cues to attract BUOW or encourage overwintering BUOW to settle during breeding season.	MU3, MU5, MU6
Efforts to increase range and density of squirrel populations through habitat modification, translocation, or both in areas of suitable BUOW habitat.	MU3, MU5, MU6
Creation of additional berms to create suitable locations for natural squirrel burrows in areas of heavy clay or rocky soils.	MU3, MU5, MU6
Creation of a tracking system for anthropogenic threats to existing BUOW population (e.g., roadkill events, predation by subsidized predators such as corvids).	MU3, MU5, MU6
Long-term monitoring to document population trends and nest productivity, with the goals of determining (1) whether nodes are population sinks or self-sustaining and (2) whether artificial burrows in some locations are serving as ecological traps and should be closed.	MU3, MU5, MU6