

### **1.13 San Miguel Savory (*Clinopodium chandleri*) – Category SL**

#### **Management Units with Known Occurrences**

San Miguel savory is a small perennial herb occurring on gabbroic and metavolcanic soils in chaparral and oak woodlands in southern California and northern Baja California, Mexico (Reiser 1994). In San Diego County, San Miguel savory is found on chamise-dominated slopes on Los Posas stony fine sandy loams or San Miguel Exchequer rocky silt loam soils.

Within the MSPA, there are 2 extant occurrences of San Miguel savory on Conserved Lands (see Table of Occurrences or online map: <http://arcg.is/2kFD8bw>). In MU3, San Miguel Mountain supports 4 locations within relative proximity that are considered a single small occurrence (<500 individuals). There is a second small occurrence in MU4 at Boulder Oaks Preserve. Old records of San Miguel savory ( $\leq 1990$ ) are from McGinty Peak, the Jamul Mountains, and Otay Mountain in MU3; from the Barona Padre Creek area in MU4; and from Sandia Creek in MU8 (City of San Diego et al. 1998; CDFW 2012). Occurrences at Jamul Mountains, Otay Mountain, and Padre Baron Creek have burned at least once in the last decade and their current status is unknown. San Miguel savory was not detected at McGinty Mountain during focused surveys in 2000 (County of San Diego 2007). This plant grows in the understory of chaparral and can be difficult to detect.

#### **Management Categorization Rationale**

San Miguel savory should be managed as a Species Management Focus Category SL Species due to a moderate risk of loss from Conserved Lands in the MSPA and because managing chaparral and oak woodland vegetation alone will not ensure its persistence (see Vol. 1, Table 2-4). San Miguel savory is at moderate risk of loss from the MSPA, as it is a perennial herb with only 2 small (<500 individuals) occurrences on Conserved Lands (see Vol. 3, App. 1, Species Profiles). The two small, isolated conserved occurrences are vulnerable to loss of genetic diversity and extirpation due to environmental or demographic stochasticity and catastrophic disturbance, such as fire. The species is also threatened by agricultural conversion, urban development, and recreational activities (CNPS 2014).

## Management and Monitoring Approach

The overarching goal for San Miguel savory is to maintain or enhance existing occurrences to ensure multiple conserved occurrences with self-sustaining populations to increase resilience to environmental and demographic stochasticity, maintain genetic diversity, and improve chances of persistence over the long term (>100 years) in chaparral, coastal sage scrub, and oak woodland vegetation communities.

For the 2017–2021 planning cycle, the management and monitoring approach is to:

- (1) Inspect San Miguel savory occurrences on Conserved Lands (see Table of Occurrences) using the regional rare plant IMG monitoring protocol to record abundance and collect habitat and threats covariate data to determine management needs. Repeat monitoring every 2 years.

Conduct routine management actions as identified through the IMG monitoring. Depending on the type and level of threat, management should be conducted as needed, not necessarily every year, and using BMPs with precautions to do no harm.

- (2) Prepare a San Miguel savory section in the MSP Seed Collection, Banking, and Bulking Plan that incorporates best science and management practices (Wall 2009; Royal Botanic Gardens, Kew 2016) to preserve genetic diversity and rescue occurrences in case of catastrophic disturbance. Begin implementing high-priority actions for San Miguel savory in the MSP Seed Collection, Banking, and Bulking Plan to collect and store seeds at a permanent seed bank and to provide propagules as needed for management-oriented research, existing population enhancement, and establishment of new occurrences
- (3) Prepare a San Miguel savory section in the MSP Rare Plant Management Plan that prioritizes management actions to enhance occurrences on Conserved Lands (see Table of Occurrences) based upon an assessment of data on occurrence status, habitat, and threats. Begin implementing highest-priority management actions identified for San Miguel savory in the MSP Rare Plant Management Plan and monitor effectiveness of implementation.

For details and the most up-to-date goals, objectives, and actions, go to the MSP Portal San Miguel Savory summary page: [https://portal.sdmmp.com/view\\_species.php?taxaid=565077](https://portal.sdmmp.com/view_species.php?taxaid=565077).

### **San Miguel Savory References**

CDFW (California Department of Fish and Wildlife). 2012. California Natural Diversity Database. Species occurrences shapefile, accessed 2012 and 2013.

City of San Diego. 1998. Final Multiple Species Conservation Program: MSCP Plan.

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Reiser, C. H. 1994. *Rare Plants of San Diego County*. Imperial Beach, CA.

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