

1.16 Blochman's Dudleya (*Dudleya blochmaniae*) – Category SL

Management Units with Known Occurrences

Blochman's dudleya is a late spring-blooming (May–June) herbaceous perennial that occurs in dry stony places below 450 meters (1,500 feet) in elevation along the coast from San Luis Obispo County into southern San Diego County and northern Baja California, Mexico (CNPS 2016). It is associated with coastal bluff scrub, coastal sage scrub, grassland, and chaparral habitat. In San Diego County, this species is rare on coastal bluffs. There are 3 known locations within the MSPA; 2 of these are on Conserved Lands in MU3 (Borderfield State Park) and MU6 (Carlsbad Oaks Habitat Conservation Area) (see online map: <http://arcg.is/2hIPO1C>).

Management Categorization Rationale

Blochman's dudleya should be managed as a Species Management Focus Category SL Species due to a high risk of loss from Conserved Lands in the MSPA and because managing the general vegetation community alone will not ensure persistence of the species (see Vol. 1, Table 2-4). It is at a high risk of loss as there are only 2 occurrences on Conserved Lands in a restricted distribution with very low population size, limited suitable habitat, and isolated occurrences with a small number of plants vulnerable to loss of genetic diversity and extirpation.

The primary threats to Blochman's dudleya are human trampling/recreation, invasive plants, encroaching native plants, erosion, and small population size (CNPS 2016).

Management and Monitoring Approach

The overarching goal for Blochman's dudleya is to maintain or enhance existing occurrences and reestablish historical occurrences, as needed, to ensure multiple conserved occurrences with self-sustaining populations to increase resilience to environmental and demographic stochasticity, maintain genetic diversity, and ensure persistence over the long term (>100 years) in coastal sage scrub vegetation communities.

For the 2017–2021 planning cycle, the management and monitoring approach for Blochman’s dudleya is to:

- (1) Inspect the 2 known occurrences on Conserved Lands annually to document abundance, record threats, and identify needed management actions.
- (2) Implement needed routine management actions as determined through monitoring.
- (3) Survey historical Blochman’s dudleya locations to determine occurrence status; delineate potentially suitable habitat for new occurrences; identify the potential for enhancement and expansion; and collect data on occurrence status, habitat, threats, and management needs.
- (4) Use occurrence status and threat data to develop a section for Blochman’s dudleya in the MSP Rare Plant Management Plan that prioritizes management actions.
- (5) Initiate preparation of a section for Blochman’s dudleya in the MSP Seed Collection, Banking, and Bulking Plan that directs seed collection in the MSPA to ensure representation of different occurrences in the seed bank, provide propagules to preserve genetic diversity, support habitat restoration, and rescue occurrences in case of catastrophic disturbance.

For details and the most up-to-date goals, objectives, and actions, go to the MSP Portal Blochman’s Dudleya summary page: http://portal.sdmmp.com/view_species.php?taxaid=502165.

Blochman’s Dudleya References

CNPS (California Native Plant Society) 2017. Rare Plant Program. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 17 January 2017].