

1.5 Aphanisma (*Aphanisma blitoides*) – Category SL

Management Units with Known Occurrences

Aphanisma is an annual herb found in alkaline areas on coastal bluffs and sandy beaches and foredunes in southern California, the Channel Islands, and northern Baja California, Mexico (Reiser 1994; Skinner and Pavlik 1994). Within the MSPA, there is 1 recently documented occurrence of *aphanisma* on Conserved Lands in MU1 at Cabrillo National Monument (see Table of Occurrences or online map: <http://arcg.is/2kFHNu1>). However, in 2015, surveys found more locations of *aphanisma* indicating there is potential for 2 occurrences at the monument (SDNHM 2017). More comprehensive surveys and mapping will be conducted in 2016 to determine the overall extent and number of occurrences at Cabrillo National Monument. Outside the MSPA, *aphanisma* occurs at San Onofre State Beach and at 2 locations on the Point Loma Naval Base (CDFW 2012; SDNHM 2013). There were reports of the species on unconserved lands near the Torrey Pines Glider Port (CDFW 2012) and Mount Soledad (T. Oberbauer, pers. comm.). Historically, the species was reported in scattered locations from San Onofre south to San Dieguito Creek and at La Jolla, Pacific Beach, San Diego Bay, Silver Strand, Tijuana River Valley, and Imperial Beach (Reiser 1994; Skinner and Pavlik 1994).

Management Categorization Rationale

Aphanisma 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 coastal bluffs, beaches, and foredunes alone will not ensure its persistence (see Vol. 1, Table 2-4). *Aphanisma* is at high risk of loss from the MSPA as it is an annual herb with limited suitable habitat and only 1 to 2 occurrences on Conserved Lands. This species is vulnerable to loss of genetic diversity and extirpation due to environmental and demographic stochasticity and catastrophic disturbance.

Management and Monitoring Approach

The overarching goal for *aphanisma* is to maintain or enhance existing occurrence(s) and establish new occurrences, as needed, 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 coastal bluff, coastal dune, and coastal sage scrub vegetation communities.

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

- (1) Inspect extant aphanisma occurrence 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.
- (2) Conduct routine management actions as identified through the IMG and use BMPs with precautions to do no harm.
- (3) Perform multiple surveys to delineate potentially suitable habitat for new occurrences at historic locations to determine occurrence status and at existing occurrences to identify the potential for enhancement and expansion. Collect data on occurrence status, habitat, and threats, and determine management needs.
- (4) Begin preparing a section for aphanisma in the MSP Seed Collection, Banking, and Bulking Plan to preserve genetic diversity and rescue occurrences in case of catastrophic disturbance.
- (5) Begin preparing a section in the MSP Rare Plant Management Plan that prioritizes management actions to maintain and expand conserved occurrences based upon an assessment of data on occurrence status, habitat, and threats where management recommendations for reestablishment of historic occurrences and/or establishment of new occurrences are prioritized in suitable habitat as needed to achieve ≥ 3 occurrences with self-sustaining populations on Conserved Lands.

For details and the most up-to-date goals, objectives, and actions, go to the MSP Portal [Aphanisma summary page:](https://portal.sdmmp.com/view_species.php?taxaid=20679)
[https://portal.sdmmp.com/view_species.php?taxaid=20679.](https://portal.sdmmp.com/view_species.php?taxaid=20679)

Aphanisma References

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

Reiser, C. 1994. *Rare Plants of San Diego County*. <http://sandiego.sierraclub.org/rareplants/> Accessed 2012 and 2013.

SDNHM (San Diego Natural History Museum). 2013. *San Diego County Plant Atlas*. <http://www.sdnhm.org/science/botany/projects> Accessed 2013.

SDNHM. 2017. *San Diego County Plant Atlas*. <http://www.sdplantatlas.org/>. Accessed 2017.

Skinner, M., and B. Pavlik. 1994. *Inventory of Rare and Endangered Vascular Plants of California*. California Native Plant Society.