## 1.6 Encinitas Baccharis (*Baccharis vanessae*) – Category SO

### Management Units with Known Occurrences

Encinitas baccharis is a dioecious shrub endemic to San Diego County. It is limited to 12 known locations on Conserved Lands within MUs 3, 4, and 6 (see Table of Occurrences and online map: http://arcg.is/2kUb2qe). Four of these populations have fewer than 20 plants each, and only 2 populations are known to support more than 200 individuals (SDMMP 2016). Encinitas baccharis occurs in southern maritime chaparral in the vicinity of Encinitas and is associated with dense southern mixed chaparral at more inland locations. Edaphic requirements may significantly restrict dispersal, given the limited range of this species. Soil types associated with this species include Cieneba series, Corralitos loamy sand, alluvial Huerhuero, San Miguel Exchequer, granitic, andesite rock outcrops, and soils derived from acid igneous rock (USFWS 2011).

### Management Categorization Rationale

Encinitas baccharis should be managed as a Species Management Focus Category SO Species because persistence of 1 or more significant occurrences in the MSPA is at high risk of loss without immediate management action above and beyond that of daily maintenance activities (see Vol. 1, Table 2-4) and because management of chaparral habitat alone will not ensure its persistence. Factors contributing to this status include a highly limited range, altered fire regimes, human use (road maintenance, trampling), invasive exotic plants, and urban development. This species has been transplanted locally without much success (Reiser 2001). Poor seed viability may be a factor limiting the vigor of this species.

### Management and Monitoring Approach

The overarching goal for Encinitas baccharis 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 ensure persistence over the long term (>100 years) in chaparral vegetation communities.

For the 2017–2021 planning period, the management and monitoring approach for Encinitas baccharis is to:

(1) Inspect conserved occurrences every 2 years to document abundance, record threats, and identify needed management actions. Implement routine management as determined during monitoring.

(2) Survey historical Encinitas baccharis 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.

(3) Use occurrence status and threat data to develop a section for the species in the MSP Rare Plant Management Plan that prioritizes management actions. Implement the highest-priority management actions.

(4) Prepare a section for Encinitas baccharis 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. Implement the seed collection and banking plan.

For details and the most up-to-date goals, objectives, and actions, go to the MSP Portal Encinitas Baccharis summary page: https://portal.sdmmp.com/view_species.php?taxaid=183764.

## Encinitas Baccharis References

USFWS (U.S. Fish and Wildlife Service). 2011. *Baccharis vanessae (Encinitas baccharis). 5-Year Review: Summary and Evaluation*. Prepared by US Fish and Wildlife Service, Carlsbad Fish and Wildlife Service, Carlsbad, California. December 22, 2011.

Reiser, C. H. 2001. *Rare plants of San Diego County*. 2001 edition. Aquafir Press. Unpublished report.

## 1.7 San Diego Goldenstar (*Bloomeria clevelandii*) – Category SS

### Management Units with Known Occurrences

San Diego goldenstar is a perennial monocot plant species known from San Diego County southward into Baja California, Mexico (CNPS 2017). There are 23 known occurrences of San Diego goldenstar on Conserved Lands in MUs 3, 4, and 6 (see Table of Occurrences and online map: http://arcg.is/2iBAGSO). It occurs in openings within coastal sage scrub, chaparral, and valley and foothill grassland, and near vernal pools, often on clay soils. It is noted that San Diego goldenstar, formerly in the genus Muilla, was recently changed to Bloomeria (RECON 2014).

### Management Categorization Rationale

San Diego goldenstar should be managed as a Species Management Focus Category SS Species because its persistence is at lower risk of loss compared to SL and SO species; however, this species still requires species-specific management actions (see Vol. 1, Table 2-4). Threats to San Diego goldenstar include altered fire regime, human use, invasive plants, and urban development.

### Management and Monitoring Approach

The overarching goal for San Diego goldenstar 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, grassland, and vernal pool/alkali playa vegetation communities.

For the 2017–2021 planning cycle, the management and monitoring approach for San Diego goldenstar is to inspect conserved occurrences every 2 years starting in 2018 to document abundance, record threats, identify needed management actions, and implement routine management as determined during monitoring.

For details and the most up-to-date goals, objectives, and actions, go to the MSP Portal San Diego Goldenstar summary page: https://portal.sdmmp.com/view_species.php?taxaid=509575.

## San Diego Goldenstar 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. http://www.rareplants.cnps.org [accessed 17 January 2017].

RECON Environmental. 2014. *San Diego Goldenstar Translocation Plan for the Castlerock Project*. City of San Diego Project No 10046. Prepared for Pardee Homes. 36 pp.