

5.3.25 Carmel Valley Bush Mallow (*Malacothamnus palmeri* var. *involucratus*)



Carmel Valley bush mallow

Status

- California Rare Plant Rank 1B.2

Ecological Requirements

- RCIS Regions: Carmel Valley, Inner Coast Range, Mid Inner Coast Range, Outer Coast Range
- RCIS Natural Communities: Coastal Scrub, Mixed Chaparral (CDFW 2020)
- Found on talus hilltops and slopes, sometimes in serpentine soils (CDFW 2020)
- Fire dependent (CDFW 2020)
- Full species account available: California Natural Diversity Database, RareFind 5 (CDFW 2020)
- RCIS Conservation Target: Moderate (non-listed, limited range, represents Carmel Valley)

Associated Non-Focal Species

- Carmel Valley cliff aster (*Malacothrix saxatilis* var. *arachnoidea*)
- Woolly-leaf manzanita shrubland (*Arctostaphylos tomentosa* Alliance)

Climate Change Vulnerability Assessment

Table 5-38 summarizes the climate change exposure, spatial distribution, and vulnerability of natural communities associated with the Carmel Valley bush mallow (CVBM). Statewide, coastal scrub communities could experience a 25 to 75 percent reduction in habitat suitability, and mixed chaparral communities could experience a 0 to 25 percent reduction in habitat suitability.

Table 5-38. Carmel Valley Bush Mallow Natural Communities Climate Vulnerability Ranking

Natural Communities	Climate Exposure and Spatial Disruption Rank High Emissions (RCP8.5) Warm and Wet	Climate Exposure and Spatial Disruption Rank High Emissions (RCP8.5) Hot and Dry	Combined Vulnerability Rank High Emissions (RCP8.5)
Coastal Scrub	Moderate	Moderate to Mid-High	Moderate to Mid-High
Mixed Chaparral	Low to Moderate	Moderate to Mid-High	Moderate to Mid-High

Source: Thorne et al. 2016

The goals, objectives, and actions shown in Table 5-39 aim to protect, enhance, and restore present day suitable habitats for Carmel Valley bush mallow, as well as habitats that may become suitable in the future because of projected climate changes. Actions also address population stability, such as prescribed burns, which may allow individuals to move to newly suitable habitats in the future.

Figure 5-21 shows the range and modeled habitat for Carmel Valley bush mallow.

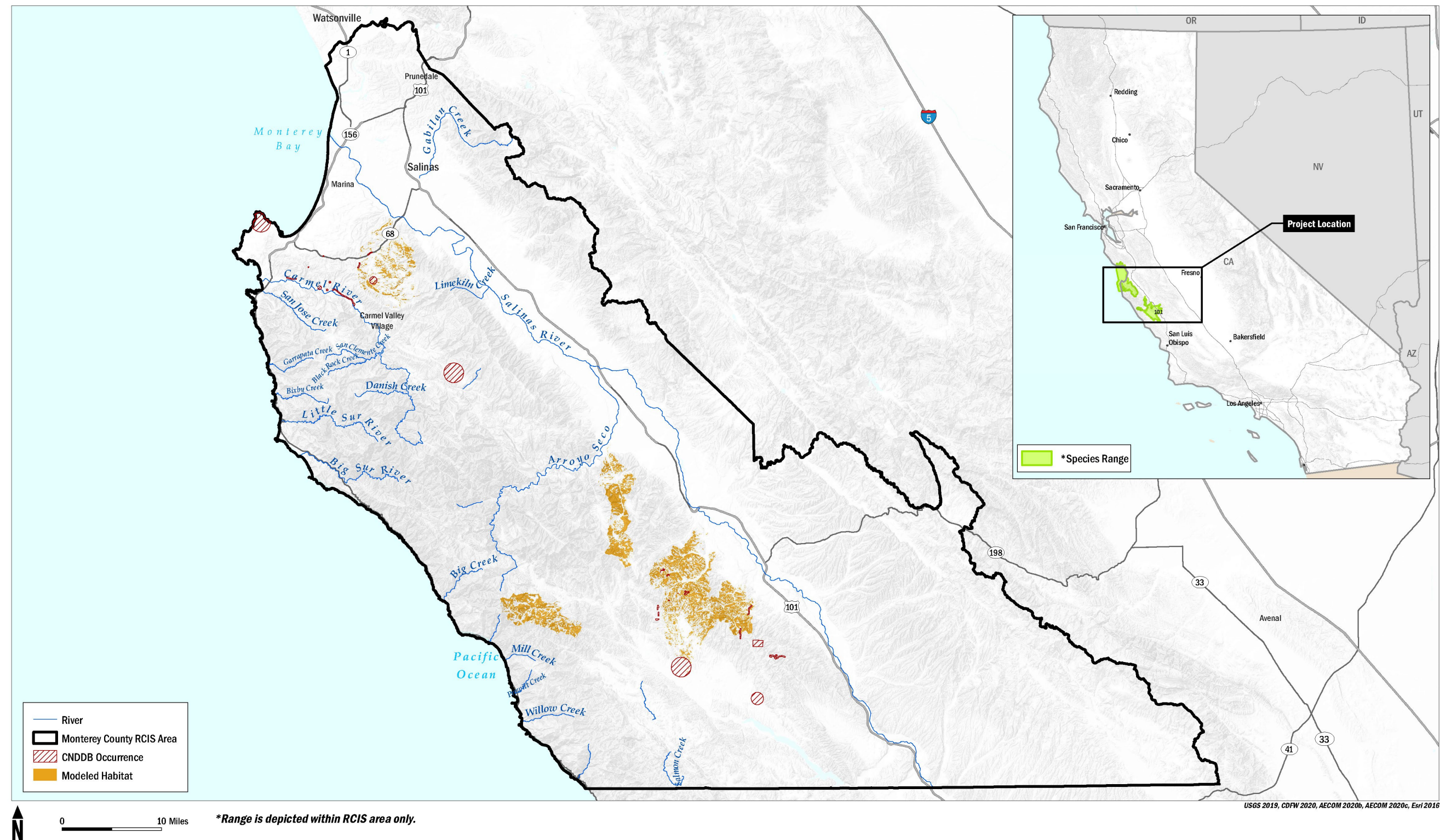


Figure 5-21. Carmel Valley Bush Mallow Range and Modeled Habitat

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Carmel Valley Bush Mallow Conservation Priorities Goals, Objectives, and Actions

RC Goal 1 and all Plant goals, objectives, and actions apply to Carmel Valley bush mallow. Table 5-39 summarizes specific goals, objectives, and actions for the species

Conservation Priorities

- Protect suitable habitat surrounding known occurrences in the Santa Lucia Range, Carmel Valley, Fort Hunter Liggett, and surrounding areas (RC Objective 1.1).
- Enhance suitable habitat through prescribed burns, because of the species fire dependence, near known occurrences to promote plant establishment, and expansion (CVBM 1.2.1).

Table 5-39. Carmel Valley Bush Mallow Goals, Objectives, and Actions

Goal	Objective	Threats	Co-Benefits	Action
CVBM Goal 1. Promote persistence of Carmel Valley bush mallow populations in the RCIS area through protection, restoration, and enhancement of habitat.	CVBM Objective 1.1: Protect known occurrences and allow expansion by protecting 8,200 acres of suitable or potentially suitable habitat for Carmel Valley bush mallow. Measure progress toward achieving this objective by the number of known occurrences, acres of suitable or potentially suitable habitat, and adjacent/equivalent acres protected.	<ul style="list-style-type: none"> • Habitat loss, degradation, fragmentation • Climate change 	<ul style="list-style-type: none"> • Biodiversity • Other focal species/non-focal species • Climate change resilience 	RC Objective 1.1 (Protection) actions

Goal	Objective	Threats	Co-Benefits	Action
CVBM Goal 1.	CVBM Objective 1.2: Enhance Carmel Valley bush mallow habitat. Measure progress toward achieving this objective by acres of habitat and adjacent/equivalent acres enhanced.	<ul style="list-style-type: none"> • Fire suppression activities 	<ul style="list-style-type: none"> • Fire management • Biodiversity • Other focal/non-focal species 	CVBM 1.2.1: Use prescribed burns to promote plant establishment, in coordination with scientific advisors, land managers, universities, and/or regulatory agencies to inform the location and frequency of potential burn areas.
CVBM Goal 1.	CVBM Objective 1.2:	<ul style="list-style-type: none"> • RC Objective 1.2 (Enhancement) threats 	<ul style="list-style-type: none"> • Other focal/non-focal species • Biodiversity • Climate change resilience 	RC Objective (Enhancement) 1.2 actions
CVBM Goal 1.	CVBM Objective 1.3: Restore Carmel Valley bush mallow habitat. Measure progress toward achieving this objective by acres of habitat and adjacent/equivalent acres enhanced.	<ul style="list-style-type: none"> • Plant Objective (Restoration) 1.1 threats 	<ul style="list-style-type: none"> • Fire management • Biodiversity • Other focal/non-focal species 	Plant Objective (Restoration) 1.1 actions

Sources: CDFW 2015, 2020; CNPS 2019b