

5.3.11 Coast Horned Lizard (*Phrynosoma blainvillii*)



Coast Horned Lizard

Photo Credit: Ivan Parr

Status

- State Species of Special Concern

Ecological Requirements

- RCIS Regions: Monterey Bay Coastline, Inner Coast Range, Mid-Inner Coast Range, Outer Coast Range
- RCIS Natural Communities: Coastal Dune, Coastal Scrub, Mixed Chaparral, Montane Chaparral (CDFW 2020)
- Found in open areas, especially sandy areas, washes, floodplains, and wind-blown deposits with scattered low shrubs (CDFW 2000a, 2020)
- Hibernation: Burrows into the soil under surface objects such as logs or rocks, in mammal burrows, or in crevices during fall and winter months (CDFW 2000a)
- Feeds primarily on native ant species, whose populations are threatened by non-native invasive Argentine ants (CDFW 2020).
- Full species account available: Blainville’s Horned Lizard Life History Account (CDFW 2000a)
- RCIS Conservation Target: Moderate (not listed; steep declines in Monterey County)

Associated Non-Focal Species

- Monterey larkspur (*Delphinium hutchinsoniae*)

Climate Change Vulnerability Assessment

Coast horned lizard (CHL) is at “neutral risk” from climate change across the state, based on the likely persistence of current populations through 2050 and the amount of currently climatically suitable habitat likely to remain suitable (Wright et al. (2013) (Table 5-16). Projections indicate that in 2050, more than 80 percent of the species current distribution will remain and no greater than a 20 percent change in available suitable habitat will occur under low and high emission scenarios. Most of the climatically suitable habitat in the RCIS area is likely to remain suitable in 2050. Despite these projections, non-climate pressures still threaten coast horned lizard. Climate change will exacerbate the threats listed in Table 5-17.

Table 5-16. Coast Horned Lizard Climate Vulnerability Ranking

Type of Analysis	Low Emissions (RCP4.5)	High Emissions (RCP8.5)
Point Ranking (habitat)	Slightly Reduced–Low	Slightly Reduced–Low
Area Ranking (distribution)	Neutral–Low	Neutral–Low

Source: Wright et al. 2013

The goals, objectives, and actions shown in Table 5-17. aim to protect, enhance, and restore present day suitable habitats for coast horned lizard, as well as habitats that may become suitable in the future because of projected climate changes. Actions also address population stability, such as removal of non-native invasive Argentine ants, which may allow individuals to move to newly suitable habitats in the future.

A summary of natural communities where this species occurs is presented in Chapter 4. Figure 5-7 shows the range and modeled suitable habitat for the coast horned lizard.

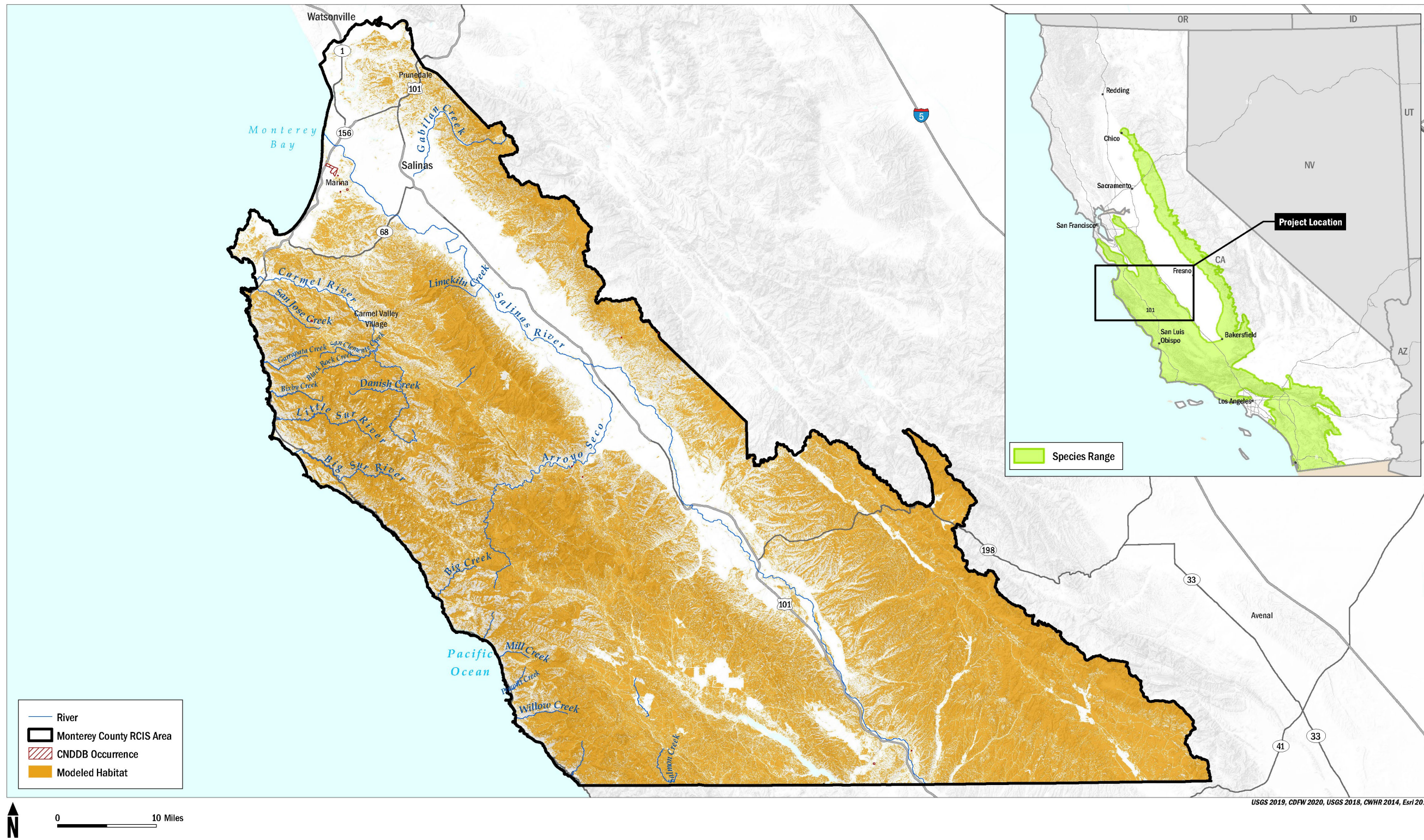


Figure 5-7. Coast Horned Lizard Range and Modeled Habitat

This page intentionally left blank

Coast Horned Lizard Conservation Priorities, Goals, Objectives, and Actions

All RC goals, objectives, and actions apply to coast horned lizard. Table 5-17. summarizes specific goals, objectives, and actions for the species.

Conservation Priorities

- Acquire and protect habitat surrounding known occurrences near Marina, the southern Salinas Valley, and in the Coast Range (RC Objective 1.1).
- Because non-native prey species are a threat to the coast horned lizard (CHL 1.2.1), control the spread of Argentine ants into occupied and suitable habitats.

Table 5-17. Coast Horned Lizard Goals, Objectives, and Actions

Goal	Objective	Threats	Co-Benefits	Action
CHL Goal 1: Promote persistence of coast horned lizard populations in the RCIS area through protection, restoration, and enhancement of habitat.	CHL Objective 1.1: Protect known occurrences and allow expansion by protecting 258,000 acres of suitable habitat. Measure progress toward achieving this objective by the number of known locations, acres of adjacent habitat, and associated/equivalent acres protected.	<ul style="list-style-type: none"> • Habitat loss, degradation, fragmentation • Climate change 	<ul style="list-style-type: none"> • Other focal/non-focal species • Biodiversity • Climate change resilience 	RC Objective 1.1 (Protection) actions.

Goal	Objective	Threats	Co-Benefits	Action
CHL Goal 1:	CHL Objective 1.2: Enhance occupied and suitable coast horned lizard habitat throughout the RCIS area. Measure progress toward achieving this objective in acres of habitat and adjacent/equivalent acres enhanced and occupied by coast horned lizard.	<ul style="list-style-type: none"> • Non-native species (e.g., argentine ants) 	<ul style="list-style-type: none"> • Non-native invasive species 	CHL 1.2.1: Prevent the invasion and spread of Argentine ants into occupied habitat by controlling soil moisture (e.g., drainage runoff, revegetation, irrigation).
CHL Goal 1:	CHL Objective 1.3: Restore occupied and suitable coast horned lizard habitat throughout the RCIS area. Measure progress toward achieving this objective in acres of habitat and adjacent/equivalent acres restored and occupied by coast horned lizard.	<ul style="list-style-type: none"> • Habitat loss, degradation, fragmentation • Climate change 	<ul style="list-style-type: none"> • Other focal/non-focal species • Biodiversity • Climate change resilience 	CHL 1.3.1: Restore suitable sandy and open habitats.

Sources: CDFW 2000a, 2015, 2019