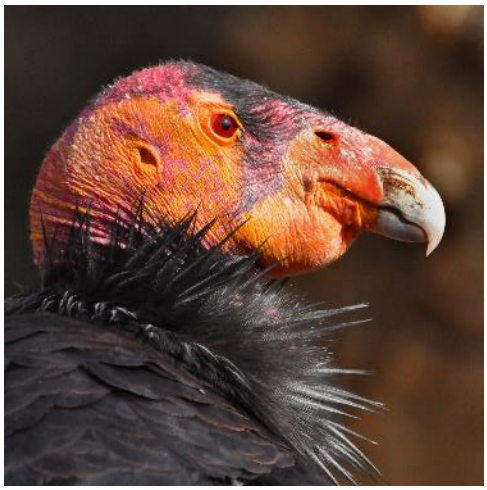
5.3.7 California Condor (*Gymnogyps californianus*)



California Condor
Photo Credit: Ivan Parr

Status

- Federally Endangered
- State Endangered
- State Fully Protected

Ecological Requirements

- RCIS Regions: Big Sur Coastline, Gablian Range and Pinnacles National Park, but fly throughout the modeled suitable habitat.
- RCIS Natural Communities: Closed-Cone Pine-Cypress, Montane Hardwood, Coastal Scrub, Rocky Outcroppings (USFWS 1996)
- Nesting habitat: Nests in cavities on steep rock formations or in the burned-out hollows of old-growth conifers (USFWS 2013)
- Foraging habitat: Includes open terrain of foothill grasslands, chaparral, or oak savannah, and open terrain at coastal sites; an obligate scavenger that takes wide-ranging foraging flights (USFWS 1996, 2013). Requires sustainable native ungulate populations as a prey base (USFWS 1996).

- Roosting habitat: Located throughout an individual's range near feeding sites on ridgelines, rocky outcrops, steep canyons, and in tall trees or snags near nesting areas and foraging habitat (USFWS 1996, 2013)
- Susceptible to mortality from lead poisoning, ingestion of microtrash, impacts at wind power facilities, wildfire, eggshell thinning, and electrocutions (USFWS 2013, 2018)
- Full species account available: California Condor (*Gymnogyps californianus*) 5-Year Review: Summary and Evaluation (USFWS 2013)
- RCIS Conservation Target: High (widespread in RCIS area, represents most of species population)

Associated Non-Focal Species

- Monterey larkspur (*Delphinium hutchinsoniae*)

Climate Change Vulnerability Assessment

Gardali et al. (2012) conducted a species-specific climate change vulnerability assessment for the California condor (CACO) on exposure and sensitivity factors:

Exposure Factors

- Extreme weather-Moderate
- Habitat suitability-Low
- Food availability- Low

Sensitivity Factors

- Habitat specialization-High
- Dispersal ability- Low
- Physiological tolerances-Low
- Migratory status- Low

The California condor only uses specific habitat types and is projected to be moderately exposed to more frequent or severe weather events. The U.S. Fish and Wildlife Service 5-Year Review (2013) predicted possible future climate change impacts. The prevailing winds that California condors rely on for soaring may or may not be affected by changing climate conditions. It is possible that large ungulate populations and ranching operations, as well as a variety of other wildlife (e.g., small mammals, pigs, coyotes), that provide food sources may be

negatively affected. An increase in wildfire frequency has the potential to destroy roosting sites and cause direct mortality, and hotter summer temperatures and a smaller snowpack may reduce water availability. The U.S. Fish and Wildlife Service (2013) did note that California condors have a very wide historical range, from the Pacific Northwest to the southwest desert, which indicates an ability to adapt to a broad range of climatic and habitat scenarios.

The goals, objectives, and actions shown in Table 5-9. aim to protect, enhance, and restore present day suitable habitats for California condor, as well as habitats that may become suitable in the future because of projected climate changes. Actions also address population stability, such as microtrash removal programs and promoting non-lead ammunition, which may allow individuals to move to newly suitable habitats in the future.

A summary of natural communities this species occurs is presented in Chapter 4.

Figure 5-3 shows the range and modeled suitable habitat for the California condor.

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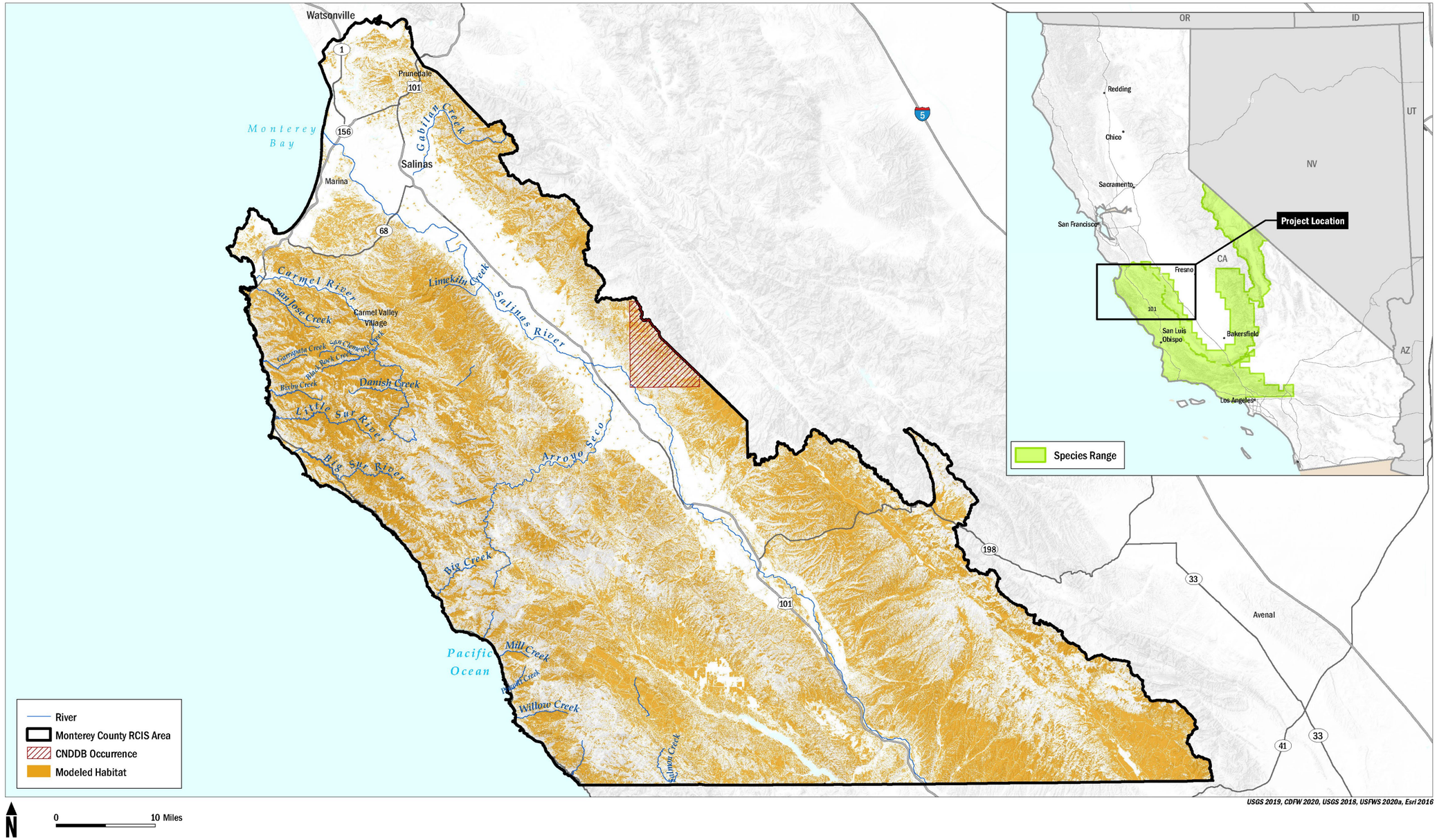

TAMC AECOM
Transportation Agency for Monterey County
Monterey County Regional Conservation Investment Strategy

FIGURE 5-3
California Condor

Figure 5-3. California Condor Range and Modeled Habitat

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California Condor Conservation Priorities, Goals, Objectives, and Actions

All RC goals, objectives, and actions apply to California condor, and Table 5-9. summarizes the goals, objectives, and actions for this species. Users should consult with the National Park Service or Ventana Wildlife Society, as co-managers of the Central California condor population, before beginning projects that could affect condors.

Conservation Priorities

- Acquire and protect habitat throughout the species range, to encourage habitat connectivity between occupied and suitable but unoccupied habitat (RC Objective 1.1).
- Mortality causes, lead poisoning from spent ammunition (leading caused), ingestion of microtrash and electrocution should be addressed where feasible, by promoting the use of high-quality copper ammunition and supporting programs that provide non-lead ammunition, placing utilities underground, and for energy facilities such as windfarms, conducting an analysis to determine compatibility with condor flight patterns (including areas where condor may fly through) (CACO Goal 2).
- Achieve habitat reslience to wildfire near identified priority areas (e.g., roost sites, nest sites) (CACO 1.2.2).

Table 5-9. California Condor Goals, Objectives, and Actions

Goal	Objective	Threats	Co-Benefits	Action
CACO Goal 1: Increase and promote a self-sustaining California condor population in the RCIS area through protection, restoration, and enhancement of habitat.	CACO Objective 1.1: Protect known occupied locations and allow expansion of habitat by protecting 391,000 acres of suitable habitat. Measure progress toward achieving this objective by the number of breeding locations, acres of adjacent foraging habitat protected and associated/equivalent acres.	• Habitat loss, degradation, fragmentation • Infrastructure construction and maintenance • Climate change	• Other focal/ non-focal species • Biodiversity • Climate change resilience	RC Objective 1.1 (Protection) actions
CACO Goal 1:	CACO Objective 1.2: Enhance occupied and suitable California condor breeding, roosting, and foraging habitat. Measure progress toward achieving this objective by acres of habitat and adjacent/equivalent acres enhanced and occupied by California condors.	• Habitat loss, degradation, fragmentation • Climate change	• Other focal/ non-focal species • Biodiversity	CACO 1.2.1: Maintain sustainable native ungulate populations to sustain the native prey base for California condor, by native ungulate reintroduction in historical foraging habitats (USFWS 1996). Ensure healthy population of other prey species (e.g., small mammals, coyotes).

Goal	Objective	Threats	Co-Benefits	Action
CACO Goal 1:	CACO Objective 1.2:	• Habitat loss, degradation, fragmentation • Climate change	• Other focal/ non-focal species • Biodiversity • Climate change resilience	CACO 1.2.2: Enhance wildfire resilience of habitat near roosting and breeding sites.
CACO Goal 1:	CACO Objective 1.2:	• Habitat loss, degradation, fragmentation • Climate change	• Other focal/ non-focal species • Biodiversity • Climate change resilience	CACO 1.2.3: Assist the Ventana Wildlife Society with their lead outreach program.
CACO Goal 1:	CACO Objective 1.3: Restore occupied and suitable California condor breeding, roosting, and foraging habitat and create new habitat. Measure progress toward achieving this objective by acres of habitat and adjacent/equivalent acres restored or created and/or occupied by California condors.	• Habitat loss, degradation, fragmentation • Climate change	• Other focal/ non-focal species • Biodiversity	CACO 1.3.1: Restore foraging habitat and roosting habitat adjacent to breeding locations. Restore breeding habitat adjacent to foraging and roosting locations.

Goal	Objective	Threats	Co-Benefits	Action
CACO Goal 2: Support stability and recovery of California condor populations in the RCIS area through measures to reduce direct mortality.	CACO Objective 2.1: Reduce contaminant-related mortality. Measure progress toward achieving this objective by the reduction of contaminant-related California condor deaths detected, compared to present day (USFWS 1996).	• Lead poisoning	• Biodiversity • Recreation • Other focal/ non-focal species • Agriculture	CACO 2.1.1: Promote the use of high-quality copper ammunition, supporting programs that provide non-lead ammunition (USFWS 2018).
CACO Goal 2:	CACO Objective 2.1:	• Ingestion of micro trash	n/a	CACO 2.1.2: Reduce the presence of microtrash in foraging and nesting habitats at sites, such as roadside pullouts or overlooks, through surveys and community outreach and cleanup days (USFWS 2013).

Goal	Objective	Threats	Co-Benefits	Action
CACO Goal 2:	CACO Objective 2.2: Reduce impact-related mortality. Measure progress toward achieving this objective by the reduction of impact-related California condor deaths detected, compared to present day.	• Power lines	• Other focal/ non-focal species • Biodiversity	CACO 2.2.1: Where feasible, relocate power lines underground or encase them in insulated tree wire in areas with high numbers of California condor collisions and electrocutions (USFWS 2018).
CACO Goal 2:	CACO Objective 2.2:	• Renewable energy development	• Other focal/ non-focal species • Biodiversity	CACO 2.2.2: Implement recommendations by the U.S. Fish and Wildlife Service and California Condor Wind Energy Working Group to minimize the potential of collisions at wind energy sites throughout all suitable habitat areas, including locations that condors soar across (such as the Salinas Valley).

Goal	Objective	Threats	Co-Benefits	Action
CACO Goal 2:	CACO Objective 2.2:	• Power lines	• Other focal/ non-focal species • Biodiversity	CACO 2.2.3: Install deterrents on power transmission towers, to reduce the likelihood for such structures to be used as roosting sites by California condors (USFWS 2018).

Sources: CDFW 2020, USFWS 1996, 2013, 2018