



March 31, 2025

CDFW Science Institute
Attn: SWAP Team
715 P Street
Sacramento, CA 95814

Sent Via email: SWAP@wildlife.ca.gov

Dear SWAP Team:

Thank you for the opportunity to review and submit comments on the Draft California State Wildlife Action Plan 2025 Update (Draft SWAP). This comment letter is submitted by Defenders of Wildlife (Defenders) on behalf of its 2.1 million members and supporters in the U.S., including 311,000 in California; by the Desert Tortoise Council (Council), which seeks to maintain recovering populations of the Mojave desert tortoise (*Gopherus agassizii*) within the listed range of the species; and by the Mohave Ground Squirrel Conservation Council (MGSCC), which functions to protect the Mohave ground squirrel (*Xerospermophilus mohavensis*) throughout its range in the Western Mojave Desert.

Defenders is a national conservation organization founded in 1947 and dedicated to protecting all wild animals and plants in their natural communities; the Council was founded in 1975 focuses on conservation of various tortoise species, particularly the State- and federally-listed Threatened desert tortoise; and the MGSCC was established in 2023, with a narrow focus on the State-Threatened Mohave ground squirrel. To this end, our organizations employ science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction.

SWAP Background

The Draft SWAP is a framework that identifies actions needed to address the highest priorities for conserving California's aquatic, marine, and terrestrial resources over the next 10 years. Its implementation relies on making conservation information more accessible to resource managers and the public, and on developing lasting partnerships with a broad array of governments, agencies, organizations, businesses, and citizens.

The California Department of Fish and Wildlife (CDFW) will advocate for adoption and integration of SWAP goals, strategies, and actions into other state, local and federal agencies' plans to ensure all are contributing to the conservation of California's biological resources. The goals of the Draft SWAP are:

Goal 1 (Abundance and Richness): Maintain and increase ecosystem and native species distributions in California, while sustaining and enhancing species abundance and richness.

- Goal 1.1 (Ecosystem Distribution): Maintain and increase ecosystem distributions.
- Goal 1.2 (Native Species Range and Distribution): Maintain and increase native species ranges and distributions.
- Goal 1.3 (Native Species Abundance and Richness): Sustain and enhance native species abundance and diversity, including genetic diversity.
- Goal 1.4 (Ecosystem Richness): Sustain and enhance ecosystem diversity.

Goal 2 (Enhance Ecosystem Conditions): Maintain and improve ecological conditions vital for sustaining ecosystems in California.

- Goal 2.1 (Connectivity): Maintain and improve connectivity vital for sustaining ecosystems (including those relevant to vegetation, wildlife corridors, genetic permeability, water flow, floodplains [longitudinal and lateral], and groundwater).
- Goal 2.2 (Community Structure and Composition): Maintain and improve community structure and composition vital for sustaining ecosystems (including age structure, structural heterogeneity, habitat richness, and native and key species population levels).
- Goal 2.3 (Water Quality, Quantity, and Availability): Maintain and improve water quality (including temperature, chemistry, and pollutant/nutrient concentrations and dynamics) and water quantity and availability vital for sustaining ecosystems and their attributes (including ocean, lakes, rivers, streams, groundwater, and snowpack).
- Goal 2.4 (Soil and Sediment Quality): Maintain and improve soil and sediment quality vital for sustaining ecosystems (including soil moisture, chemistry, and pollutant/nutrient concentrations and dynamics).

Goal 3 (Enhance Ecosystem Functions and Processes): Maintain and improve ecosystem functions and processes vital for sustaining ecosystems in California.

- Goal 3.1 (Successional Dynamics): Maintain or improve successional dynamics vital for sustaining ecosystems.
- Goal 3.2 (Disturbance Regime): Maintain or improve disturbance regimes vital for

sustaining ecosystems (including fire, flooding and grazing regimes).

- Goal 3.3 (Hydrological Regime): Maintain or improve hydrological regimes vital for sustaining ecosystems (including riverine, lacustrine, and estuarine hydrodynamics).
- Goal 3.4 (Sediment Deposition Regime): Maintain or improve sediment deposition regimes vital for sustaining ecosystems (including hydro-geomorphic processes, wind-driven processes, and soil stability).

Comments

Defenders, the Council and MGSCC submit the following comments on the Draft SWAP:

1. Species of Greatest Conservation Need (SGCN): CDFW identified over 1,000 species as SGCN based on the following criteria:

- Species listed as Threatened, Endangered, or Candidate Species in California under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA).
- Species for which there is a conservation concern which are generally equivalent to CDFW's California Species of Special Concern and Fully Protected Species and the U.S. Fish and Wildlife Service's (USFWS) Bird Species of Conservation Concern.
- Species identified by CDFW as being highly vulnerable to climate change, experiencing population decline, or being highly vulnerable to other stressors (e.g., pesticides, disease, habitat loss, etc.).

Comment: The status of the following species should be corrected in Appendix C (SGCN):

Desert tortoise (*Gopherus agassizii*): The desert tortoise became a Candidate Species for listing as Endangered under CESA in 2020. In April 2024, the Fish and Game Commission voted unanimously that Endangered status may be warranted and is expected to vote to adopt its findings to formally change the status of the desert tortoise to Endangered in 2025.

Pacific marten (*Martes caurina*): The Coastal Distinct Population Segment of the Pacific Marten was listed as Threatened under the ESA in 2020. The USFWS designated 1,213,752 acres as its Critical Habitat on June 28, 2024. In California, 97 percent of its Critical Habitat is federally owned (1,125,492 acres), with an additional 17,812 acres of State lands, and the remainder (13,008 acres) in private ownership or owned by local governments, all located in Del Norte, Humboldt and Siskiyou counties.

Mohave ground squirrel (*Xerospermophilus mohavensis*): The USFWS determined that the Mohave ground squirrel (MGS) may warrant listing as Threatened under the ESA and is preparing a 12-month status review with a determination due in January 2026.

2. Province-Specific Conservation Strategies: Due to the large scale, biological diversity, sensitivity and predominately federal ownership, we selected the Sierra Nevada and Deserts Provinces for comments and recommendations.

Sierra Nevada Province: Approximately 75% of the Sierra Nevada Province is in federal ownership and management, 57% by the U.S. Forest Service, 13% by National Park Service (NPS), and 5% by the Bureau of Land Management (BLM). Stressors on the province include human population growth and development in the western Sierra foothills, forest management practices, fire suppression, large wildfires, livestock grazing, roads and trails, and off-highway vehicle use.

Old growth forests have largely been removed through timber harvesting and are associated with a dense network of roads that contribute to excessive soil erosion and deposition of sediment into streams. This has adversely impacted fish spawning gravel beds, and invertebrate and amphibian habitats.

Livestock grazing continues to adversely impact forage, cover and nesting habitat for numerous species of animals, especially in riparian, aspen, meadow, aquatic, and oak woodland habitats. According to the Draft SWAP, approximately 50-90% of livestock forage in National Forests in the Sierra Nevada is associated with riparian and meadow habitats.

Mountain biking and off-highway vehicle (OHV) use have become very popular in National Forests and have increased dramatically over the past 30 years. Within the 18 National Forests in California, there are approximately 40,000 miles of existing OHV routes. Despite executive orders mandating the minimization of impacts from OHV use [EO 11644 (1972); EO 11989 (1977)], OHV impacts continue to impact public lands and their resources. Most of the impacts occur on National Forests and public lands managed by the BLM.

Use of OHVs, and specifically all-terrain vehicles, in forests adversely affects vegetation, soil, water, and air, with potential cascading effects on ecological function. OHV recreation inadvertently causes nest or den abandonment, displaces wildlife from important foraging or watering sites, and interferes with migratory corridors.

Comment: We recommend that the Final 2025 SWAP address the impacts of livestock grazing on habitats and water quality in the Sierra Nevada Province. Conservation actions should include the retirement of livestock grazing permits through purchase of grazing leases and base property by the CDFW or conservation organizations. Funding could be obtained through the Wildlife Conservation Board under the grants program for enhancing wildlife habitat.

Comment: We recommend that the Final 2025 SWAP address the impacts of thousands of miles of OHV routes on National Forests and BLM-managed public lands. Within the 18 National Forests in

California, there are approximately 40,000 miles of existing OHV routes and more are planned, such as the Connected Communities Project that would add approximately 460 miles of new OHV routes (Sierra Buttes Trail Stewardship 2024). The existing and planned OHV routes fragment habitat and cause direct and indirect impacts to special status species, including those listed as Threatened or Endangered under the ESA and CESA.

Deserts Province: Land within the Deserts Province comprises 80% managed by federal agencies including BLM, NPS and the Department of Defense (DOD). Other public land management agencies within the region are the California Department of Parks and Recreation, CDFW, and the USFWS.

Among the SGCN are the desert tortoise, MGS, and desert bighorn sheep.

Comment/desert tortoise: We appreciate that CDFW has recognized the adverse impacts of OHV use on the desert tortoise, especially in the Western Mojave Desert. Below, we provide additional information that should be considered for inclusion in the SWAP.

On October 22, 2024, the U.S. District Court for the Northern District of California issued its order on the lawsuit filed by six environmental organizations¹ against the BLM and USFWS over BLM's approval of amendments to the California Desert Conservation Area Plan that designated OHV route networks in the Western Mojave Desert. The court found that BLM failed to minimize adverse impacts from OHV use on the desert tortoise and found that both BLM and USFWS violated the ESA.

The desert tortoise has experienced severe population declines, especially in the Western Mojave Desert on federal lands managed by the BLM due, to a large extent, to intense and widespread OHV use (Tuma et al. 2016). All desert tortoise populations in designated Critical Habitat Units are below minimum viable density and the species is on a path toward extinction in the foreseeable future. The one exception is the Desert Tortoise Research Natural Area, where OHV use and domestic sheep grazing have been prohibited since 1980. Here, desert tortoise density in 2011 was 38/mi² compared to 6.2/mi² in the adjacent Fremont Valley and Rand Mountains, both of which are designated Critical Habitat (Berry et al. 2014).

We recommend that the final SWAP identify the closure of additional OHV routes in the Western Mojave Desert as a high priority to prevent extirpation of the desert tortoise. This will require CDFW to engage with BLM in management of OHV use under the provisions of the Memorandum of Understanding with BLM for management of habitat supporting Threatened and Endangered Species (BLM and CDFG 1983).

¹ California Native Plant Society, Center for Biological Diversity, Defenders of Wildlife, Desert Survivors, Desert Tortoise Council, and Sierra Club.

In 2019, the John D. Dingell, Jr. Conservation, Management, and Recreation Act designated several OHV Open Use Areas in the Western Mojave as National Off-Highway Vehicle Recreation Areas. Some OHV open areas were expanded to include designated Desert Tortoise Critical Habitat and BLM-designated Areas of Critical Environmental Concern (ACEC) for the desert tortoise. These expansions and acres of Desert Tortoise Critical Habitat included:

- El Mirage and Spangler Hills: 2,433 acres in the Fremont-Kramer Critical Habitat Unit, and
- Johnson Valley: 9,849 acres in the Ord-Rodman Critical Habitat Unit.

These expansions that allow for unrestricted OHV use in Desert Tortoise Critical Habitat Units present additional impacts to the species that should be offset with more restrictions on OHV use in areas known to support higher densities of the desert tortoise in the Western Mojave.

The Onyx Ranch State Vehicular Recreation Area (SVRA) is the most recent unit to be added to the California State Park System and is located in the Western Mojave Desert near the Jawbone and Dove Springs Canyon OHV Open Areas managed by the BLM. The SVRA comprises 26,000 acres and habitats that support the desert tortoise. A Wildlife Habitat Protection Plan is being prepared to ensure that viable species populations are sustained, which includes the desert tortoise.

Comment: The U.S. Army finalized its plan to extend mechanized training into the Western Training Area, comprises approximately 65,000 acres of designated Critical Habitat for the desert tortoise. Desert tortoises were being removed from the area beginning in the fall of 2024 and translocated to U.S. Army lands located outside the installation.

Comments/MGS: The MGS is endemic to the Western Mojave Desert and was listed as a Rare Species by the California Fish and Game Commission in 1971 and subsequently changed to Threatened to conform with listing categories under CESA.

BLM prepared the West Mojave Plan in 2006 and designated the 1,726,712-acre MGS Conservation Area, but that designation lacked priority relative to other multiple land use activities and was largely ineffective in conserving the species and its habitat. In 2016, BLM designated the MGS ACEC totaling 1,611,843 acres of public land. Renewable energy projects were prohibited within the ACEC and a habitat disturbance cap of 1% was established to limit loss and fragmentation of MGS habitat. However, livestock grazing impacts were excluded from the disturbance cap. Livestock grazing on BLM public lands continues to occur in Rose Valley, Fremont Valley, El Paso Mountains, Spangler Hills, Lava Mountains, and north of Kramer Junction in a key MGS population center.

OHV recreation on public lands occurs throughout the MGS ACEC and is intense in some of the best remaining MGS habitats, such as in the Fremont Valley, Cuddeback Dry Lake basin, Fremont

Peak, and extending west to north of Barstow. MGS is also of concern at the Onyx Ranch SVRA, and the Spangler Hills and El Mirage OHV Open Areas.

The U.S. Army finalized its plan to extend mechanized training into the Western Training Area of Fort Irwin, comprises approximately 65,000 acres of high quality habitat for the MGS, including a designated core population for MGS (CDFW 2019), which has now been made off limits for experimental translocation for this species.

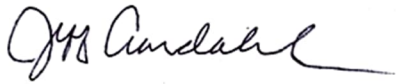
The USFWS recently announced that it has reviewed the Petition to list the MGS as a Threatened species and to designate Critical Habitat and found that it may warrant listing under the ESA, and is proceeding with a 12-month status review.

Comments/Desert bighorn sheep: Bighorn sheep occur in dozens of mountain ranges in the Deserts Province, and one Distinct Population Segment, the Peninsular bighorn sheep, occurs in the Peninsular Ranges adjacent to the Coachella Valley. In addition to bacterial pneumonia transmitted from domestic sheep, various viral diseases common in domestic cattle potentially impact desert bighorn sheep populations. Among those that are of interest are Bluetongue (BT) and Epizootic hemorrhagic disease (EHD), which are transmitted from cattle to bighorn by *Culicoides* gnats. The effects of BT and EHD on bighorn sheep populations requires further research. There is circumstantial evidence these viruses depress populations through increased lamb mortality. Mountain ranges where antibodies to these viruses were found in bighorn sheep include the Old Woman Mountains, Peninsular Ranges, Cady Mountains, and the Newberry and Ord Mountains. Desert bighorn sheep populations in the Cady Mountains and the Newberry and Ord Mountains increased substantially when cattle grazing ended or was significantly reduced.

We recommend that CDFW prioritize the development and implementation of desert bighorn sheep herd management plans for each metapopulation and, where appropriate, for each herd unit. This will require cooperation with the BLM (California Desert District) and NPS (Mojave National Preserve, Death Valley National Park and Joshua Tree National Park). Because there are so many herd units, priority should be given to those units where stressors are depressing populations, such as competition and diseases associated with domestic cattle, competition with wild burros and horses, and inadequate water sources.

Thank you for the opportunity to provide comments on the Draft SWAP 2025 Update. Please contact us if you have any questions.

Sincerely,



Jeff Aardahl
Senior California Representative
Defenders of Wildlife
jaardahl@defenders.org



Ed LaRue, Jr.
Chair, Ecosystems Advisory Committee
Desert Tortoise Council and
Mohave Ground Squirrel Conservation Council
eac@deserttortoise.org,
eac@mgsconservation.org

Literature Cited

Berry, K.H., L.M. Lyren, J.L. Yee, and T.Y. Bailey. 2014. Protection benefits desert tortoise (*Gopherus agassizii*) abundance: The influence of three management strategies on a threatened species. *Herpetological Monographs*, 28(1):66-92. 2014.
<https://meridian.allenpress.com/herpetological-monographs/article-abstract/28/1/66/188924/Protection-Benefits-Desert-Tortoise-Gopherus>

Bureau of Land Management and California Department of Fish and Game. 1983. Master Memorandum of Understanding between the California Department of Fish and Game and the Bureau of Land Management. Sacramento, California.

California Department of Fish and Wildlife. 2019. A Conservation Strategy for the Mohave ground squirrel (*Xerospermophilus mohavensis*). Sacramento, California.

Sierra Buttes Trail Stewardship. 2024. Connected Communities Project. Quincy, California.
<https://sierratrails.org/connected-communities/>

Tuma, M.W., C. Millington, N. Schumaker, and P. Burnett. 2016. Modeling Agassiz's Desert Tortoise Population Response to Anthropogenic Stressors. *Journal of Wildlife Management* 80(3):414-429.
<https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/jwmg.1044>