



DESERT TORTOISE COUNCIL

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**DESERT TORTOISE PRESERVE
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Via email

July 31, 2025

Austin Roy/Recovery Guidelines
Wildlife Branch
California Department of Fish and Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CESArecovery@wildlife.ca.gov

RE: Guidelines for Recovery Planning under the California Endangered Species Act

Dear Mr. Roy,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and northern Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

The Desert Tortoise Preserve Committee (DTPC) is a non-profit organization formed in 1974 to promote the welfare of the desert tortoise in its native wild state. DTPC members share a deep concern for the continued preservation of the tortoise and its habitat in the southwestern deserts and are dedicated to the recovery and conservation of the desert tortoise and other rare and endangered species inhabiting the Mojave and western Sonoran deserts. The DTPC has a long track record of protecting desert tortoises and their habitat through land acquisition, preserve management, mitigation land banking, and educational outreach.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer to receive emails for future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an “environmentally friendlier way” of receiving correspondence and documents rather than “snail mail.”

We appreciate this opportunity to provide comments on the above-referenced Proposed Action. Given the that the implementation of the Proposed Action would likely affect the Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz’s desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities authorized by the California Department of Fish and Wildlife (CDFW). Please accept, carefully review, and include in the relevant project file the following comments for the Proposed Action.

The Mojave desert tortoise (tortoise) is among the top 50 species on the list of the world’s most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature’s (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), “... based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units.”

This status, in part, prompted the DTC and DTPC to join Defenders of Wildlife (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission (Commission) in March 2020 to elevate the listing of the Mojave desert tortoise from Threatened to Endangered in California under the California Endangered Species Act (CESA). In its status review, CDFW (2024) stated: “At its public meeting on October 14, 2020, the Commission considered the petition, and based in part on the Department’s [CDFW] petition evaluation and recommendation, found sufficient information exists to indicate the petitioned action may be warranted and accepted the petition for consideration. The Commission’s decision initiated this status review to inform the Commission’s decision on whether the change in status is warranted.”

Importantly, in their April 2024 meeting, the Commission voted unanimously to accept the CDFW’s petition evaluation and recommendation to uplist the tortoise from threatened to endangered under CESA based on the scientific data provided on the species’ status, declining trend, numerous threats, and lack of effective recovery implementation and land management. On July 15, 2025, the tortoise was officially uplisted to endangered status under CESA.

Description of the Draft Recovery Planning Guidelines

In 2018, the California legislature amended CESA to give CDFW the authority to develop non-regulatory recovery plans for CESA-listed threatened and endangered species. CDFW has developed Draft Recovery Planning Guidelines (Guidelines) to implement this authority and is requesting public comments on them. CDFW proposes that the recovery planning process for listed species under CESA be similar to the process implemented by the U.S. Fish and Wildlife Service (USFWS) for species listed under the Federal Endangered Species Act (FESA). The proposed CESA recovery planning process would consist of three parts, each represented by a separate primary document:

- (1) A scientific assessment – contains “the best scientific information on a species and serves as the primary reference for the recovery plan.”
- (2) A recovery plan – contains “high-level recovery criteria and actions that are necessary to delist a species, along with the time and cost required to complete such actions.”
- (3) An implementation strategy – is an “adaptable document that provides specific tasks for achieving the recovery criteria listed in the recovery plan.”

CDFW has the discretion to adopt a federal recovery plan and/or implementation strategy with or without revisions.

CDFW will designate and lead a recovery team for each species. Recovery teams will review the available information related to a species’ status and threats; craft a recovery plan with criteria, actions, and time and cost estimates; and draft and review an implementation strategy. As recovery planning documents are finalized and approved, a recovery team will transition from a planning phase to an implementation phase. Team composition may shift and grow with the inclusion of new partners focused on carrying out specific aspects of the implementation strategy.

Comments on the Draft Guidelines

Study the History of Recovery Planning and Implementation by Federal Agencies

We recommend that CDFW carefully study the guidelines and processes that the USFWS and National Marine Fisheries Service (NMFS) have used in the past and currently use in recovery planning under FESA, and adopt only those guidelines and processes that are working well. For those guidelines and processes that have not been or are not effective, CDFW should carefully review them to determine the cause(s) of the failures and use this information to develop new guidelines and processes that would be effective. We strongly encourage CDFW to implement this adaptive management process in the development and implementation of recovery planning. Because of the numerous threats to most listed species in California and their exacerbation by climate change, these species have little time left to implement effective recovery actions. Thus, CDFW cannot afford to adopt guidelines and processes that have a history of being ineffective or unsuccessful.

When developing and finalizing recovery planning guidelines, CDFW should analyze how the recovery planning process will facilitate successful implementation of recovery actions. CDFW will accomplish nothing to help recover threatened and endangered species if recovery plans are completed and sit on a shelf. For example, CDFW should commit to (1) require their biologists who review proposed projects to work with project proponents to include effective recovery actions from the implementation strategy in the design and implementation of projects that occur in areas that listed species need for the survival and recovery (e.g., designated critical habitat), and (2) provide incentives to landowners who do not intend to develop their lands to implement recovery actions.

We support the “three document requirement” (i.e., – a scientific assessment, a recovery plan, and an implementation strategy) for recovery planning. This requirement facilitates the updating of the scientific assessment and the implementation strategy as new information becomes available on the biology, ecology, demographics, genetics, connectivity, habitat, and threats to the species without the need for a time-consuming public review period. When CDFW designates at least one species lead for each CESA-listed species, that biologist/scientist would be able to update the information in the scientific assessment annually with information from scientific papers and reports that is relevant to the survival and recovery of the species and its habitat. Thus, the timeliness of this information would help to identify changes that may be needed to the implementation strategy and help avoid further declines to the species and its habitat.

Adopting Federal Recovery Plans and/or Implementation Strategies with or without Revisions

We suggest that the ability of CDFW to adopt federal recovery plans and/or implementation strategies without revisions will likely be limited for several reasons, a few of which we describe below.

Many of the recovery planning documents for FESA-listed species in California that are also listed under CESA were not prepared using the “three document requirement.” Older recovery plans [e.g., Mohave Tui Chub Recovery Plan (USFWS 1984)] incorporated the scientific assessment, recovery plan, and implementation strategy into one document. Thus, this information in older federal recovery planning documents would need to be reformatted to meet the CDFW’s recovery planning requirements.

In addition, many federal recovery planning documents have not been updated to include the latest information from scientific papers and reports. For example, the Mohave Tui Chub Recovery Plan (USFWS 1984) is 41 years old and does not include the latest information on population occurrences, population sizes, genetics, habitat connectivity, threats, and management concerns. The Revised Recovery Plan for the Mojave Population of the Desert Tortoise (USFWS 2011) is 14 years old, and a substantial number of relevant scientific papers and reports have been published since 2011 on the tortoise and its habitat, threats, and management needs. This information is not included in the Recovery Plan or the associated section on implementation.

The benefits of these federal recovery planning documents are that they provide an excellent starting point for preparing a scientific assessment, a recovery plan, and an implementation strategy for CESA-listed species.

Some federal recovery plans may lack the important connection between the scientific assessment, the recovery plan, and the implementation strategy. A brief review of a few recent recovery plans reveals statements and recovery actions with no references to support the statements and actions recommended for recovery. Because Fish and Game Code directs CDFW to develop recovery plans based on the best available science, the information in the scientific assessment should be clearly connected to and documented in the recovery plan and the implementation strategy. This connection should be shown by providing references from the scientific literature that support the recovery criteria and actions that guide the strategy for delisting the species in the recovery plan, and identifying specific tasks necessary to implement recovery actions in the implementation strategy.

Importance of a Scientific Assessment

In the Guidelines, CDFW says that existing documents that may serve as scientific assessments include state and federal status reviews, five-year reviews, and similar documents. The purpose of federal five-year reviews is to determine whether there is information that may indicate that the legal status of that species should be changed. The purpose of a federal status review is to determine whether a species warrants listing as endangered or threatened. The purposes of these documents are different than gathering scientific information to identify and prepare what is needed to recover a listed species. Thus, these types of documents would not always provide the information needed to prepare an effective recovery plan and implementation strategy. Like older federal recovery plans, these federal documents are good starting places for preparing scientific assessments for CESA-listed species, but would typically require supplemental/updated information to provide an adequate basis for CESA scientific assessments.

For example, in the USFWS's (2022) Mojave Desert Tortoise 5-Year Review: Summary and Evaluation, the USFWS says that this document does not constitute a comprehensive literature review of the great deal of research that has been published on desert tortoises since 2011, but provides an overview of substantial new information that pertains directly to the species' status. The information that follows is on the demographic status of the tortoise focusing on density, occurrence, and genetics. Information on reproduction, recruitment, physiology, nutrition, diseases, other sources of mortality, population connectivity, etc. is not included. Thus, this document is limited in the information it provides on the needs of the tortoise for survival and recovery.

Because the Fish and Game Code directs CDFW to develop recovery plans based on the best available science, the information in the scientific assessment should be drawn from all the relevant available scientific literature on topics that affect the survival and recovery of the listed species including its long-term habitat needs. Relying on federal status reviews and five-year reviews to serve as scientific assessments would likely result in recovery plans that would not include the best available science. Consequently, we recommend using federal status reviews, five-year reviews, and similar documents for pertinent information but not to adopt them as scientific assessments.

The Guidelines indicate that CDFW would prepare the scientific assessment and then form the recovery team. This could be the order of implementation in the recovery planning process. However, if a recovery team is committed to using the best available science in the preparation of a recovery plan, they would likely conduct their own search of scientific literature and then determine the available information that constitutes the best available science. This would result in them amending the scientific assessment.

Establishing Recovery Teams for Planning and Implementation

One process that CDFW is proposing to change from the federal process is maintaining the recovery team after completing recovery planning. We strongly support having a recovery team that assists with implementation of recovery actions for listed species. These teams are needed to advocate for the funding and implementation of recovery actions by CDFW and other agencies, the private sector, academic institutions, and non-governmental organizations (NGOs). These teams will be able to focus on recovery implementation that is desperately needed because CDFW staff are already overworked with other mandates and have little time to devote to this important activity.

Managing Recovery Teams

CDFW should include the criteria for selecting the individual(s) from CDFW who will lead the recovery team. Recovery teams are not likely to function as a cohesive group, especially initially. Consequently, we recommend that a manager with experience in dealing with the formation of new teams participate in the first few recovery team meetings. The manager should facilitate the process of the recovery team becoming a cohesive team. Assigning this responsibility to staff with little or no experience in this skill is inappropriate.

Approving Recovery Planning Documents

In reviewing the Guidelines, we found no information on who would review the documents and have final authority to adopt these three documents. Will the three documents be approved by an appropriate regional manager or someone else? Information on this approval process should be included in the final Guidelines.

Composition of Recovery Teams

The Fish and Game Code provides the legal framework that CDFW must follow when developing a recovery plan. “Recovery plans must be based on the best available science, and must include site-specific management actions, criteria for delisting, and estimates of the time and cost to achieve the delisting criteria.” To comply with this requirement, CDFW should ensure that persons on each recovery team collectively possess the scientific knowledge on the life history strategy of the species including the demographic, genetic, reproductive, physiological, nutritional, and ecological needs of the species, and its habitat requirements for its long-term survival and recovery, the threats to the species and how they affect it, and the expertise in effective management actions. We recommend that recovery teams seek persons with expertise in other areas, as needed, during the development of each recovery plan and implementation strategy. There may be innovative methods that the recovery team is unaware of that would be included in the implementation strategy because the recovery team solicited information throughout the development of the recovery plan and implementation strategy.

CDFW indicated that as recovery planning documents are finalized and approved, a recovery team will transition from a planning phase to an implementation phase. Team composition may shift and grow with the inclusion of new partners focused on carrying out specific aspects of the implementation strategy.

We support this recognition of and need for the composition of the recovery team to evolve as the duties of each team transition from recovery planning to recovery implementation. Recovery implementation will likely require expertise in effective on-the-ground management actions, science-based monitoring and adaptive management, acquiring funds, and generating public support.

Establish a Timeline for Completing the Three Documents

CDFW should ensure that the completion of the three documents occurs in a reasonable time. CDFW should establish milestones and completion times for each milestone and document to ensure that the recovery planning process does not take years to complete for each species. We recommend that with some exceptions, the completion of the three documents for recovery planning should take no more than one year from final team selection to approval of the planning documents.

Prioritization of Species for Recovery Planning

“CDFW prioritizes species for recovery planning using a consistent approach.” The Guidelines then provide some criteria that CDFW may consider in this prioritization approach. We did not understand one criterion that was provided — that “high priority is given to species that are most likely to benefit from a recovery plan.” We are unsure how CDFW would know whether a species is likely to benefit from preparing a recovery plan until after the plan has been developed and implemented.

We recommend that CDFW include the likelihood of extinction in the near future as a weighted criterion for prioritizing species for recovery planning. This would include population viability. For the tortoise, the Commission reported that the scientific data provided on the species’ status, declining trend, numerous threats, and lack of effective recovery implementation and land management were all factors in their decision to uplist the tortoise to endangered in 2025. We assert that if CDFW biologists and scientists have an up-to-date scientific assessment, recovery plan, and implementation strategy from the CESA recovery planning process, they would be able to use this information to require effective actions to fully mitigate the direct, indirect, and cumulative impacts to the tortoise and other CESA-listed species and push for implementation of recovery actions identified in the implementation strategy. Unfortunately, without this information, the tortoise continues on its trajectory to extirpation in California.

Revising a Recovery Plan

After a recovery plan has been finalized or adopted by CDFW, any substantive revisions to the criteria or actions must again go through this formal public review process.

The federal agencies have a similar requirement. While we understand and support having an open and transparent process in revising a recovery plan, we remind CDFW that many species listed under FESA do not have recovery plans. For species with federal recovery plans, most plans have never been revised even though the threats have changed (e.g., climate change, etc.), the science of conservation biology on the demographic needs of a species for long-term survival has evolved, the species abundance population locations and population connectivity have changed, and management actions have changed. The absence of recovery plans for some listed species and the lack of up-to-date recovery plans for others is due in part to the laborious and time-consuming process of developing a federal recovery plan. The finalization or adoption of a recovery plan takes years under the federal process. This process is so cumbersome and time consuming that revisions to federal recovery plans rarely happen.

CDFW should learn from this process and produce recovery plans that are broad in their descriptions of the needs of CESA-listed species. The broad recovery plan then sets the stage for a specific implementation strategy that is a document that can be modified quickly as new information becomes available on the species, threats, and management actions. We use the Mojave desert tortoise as an example. Each year, several scientific papers are published on the tortoise's biological and ecological needs, threats, and results of management actions. The results and recommendations from these papers should be incorporated into scientific assessments. The recovery plan should be reviewed to determine whether this new information is a refinement of the known biology, threats, and long-term recovery needs of the tortoise or information on a new topic that has not been previously discussed in the recovery plan (e.g., solar development in tortoise critical habitats). If it is a refinement, then the scientific assessment and implementation strategy could be revised quickly and the recovery plan would not change.

Include the Requirements of Fully Protected Species in Recovery Planning and Implementation

Many species listed under CESA are also fully protected species (California Fish and Game Code §5515). Fully protected species may not be taken or possessed except with authorization from CDFW and only under specific circumstances. Their designation as fully protected is by statute passed by the California legislature in 1970 and not the listing and approval process by the California Fish and Game Commission under CESA. We presume that when a fully protected/CESA-listed species meets the definition of recovered under CESA, there would no longer be a need for it to be fully protected. If correct, we recommend that CDFW incorporate into the recovery planning and implementation process the actions needed to document when CDFW should recommend to the legislature to remove a fully protected species from the statute because its population numbers, locations, and connectivity among populations no longer warrant this level of protection.

Offer of Assistance

The DTC offers its assistance during the recovery planning and implementation phases for the tortoise. For example, we have copies of most of the published scientific papers on the tortoise/tortoise habitat for the past several years and copies of the 1994 recovery plan (USFWS 1994a), companion document (USFWS 1994b), and the 2011 revised recovery plan (USFWS 2011). The U.S. Geological Survey published the Desert Tortoise Annotated Bibliography, 1991–2015 (Berry 2016). This information would be useful in the development of the scientific assessment. We have expertise in tortoise biology and ecology with some individual members having spent thousands of hours in the field observing and collecting data on tortoises. This information would be useful in the development of the scientific assessment, recovery plan, and implementation strategy. The DTC may be able to assist with financial support for implementing specific recovery actions for the tortoise.

The DTPC also has expertise in tortoise biology and ecology, as well as a practical understanding of management needs and effective management actions. In collaboration with a range of state and federal agencies, we have more than 50 years of experience with implementing recovery actions for the tortoise (including public education, land acquisition, protective fencing, habitat restoration, mitigation land banking, and long-term stewardship of preserves). We would be pleased to offer technical guidance related to our areas of experience as part of CDFW's recovery planning process.

Please contact us at the email addresses in the letterhead for discussions on how we may help with recovery planning and implementation for the tortoise.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during recovery planning and implementation. Herein, we reiterate that the Council and the DTPC each want to be identified as an Affected Interest for this and all other actions or projects funded, authorized, or carried out by the CDFW that may affect desert tortoises, and that any subsequent environmental documentation for this effort is provided to us at the contact information listed above. Additionally, we ask that you notify the DTC at eac@deserttortoise.org and DTPC at roger.dale@tortoise-tracks.org of any proposed projects that CDFW may authorize, fund, or carry out in the range of the tortoise in California so we may comment on them to ensure CDFW fully considers and implements actions to conserve this species as part of its directive to conserve biodiversity in California.

Please respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this Proposed Action.

Respectfully,



Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson



Roger Dale
President
Desert Tortoise Preserve Committee

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