



DESERT TORTOISE COUNCIL

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Via email only

12 March 2024

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RE: California Wildlife Damage Management Project Draft Environment Impact Report/Draft Environmental Impact Statement (SCH Number 2020099012 / EIS No. 20240003)

Dear Dr. Jones and Ms. Anderson,

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 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.

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 project. Given the location of the proposed project in habitats occupied by 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 U.S. Department of Agriculture – Wildlife Services in California (WS-California) and California Department of Food and Agriculture (CDFA), which we recommend be added to interagency agreements and directives (e.g., memorandums of agreement, etc.) for implementing wildlife damage management (WDM) activities, as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project.

The Mojave desert 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 Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from Threatened to Endangered in California. In its status review, California Department of Fish and Wildlife (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 February 2024 status review, CDFW concluded: "**The Department's recommendation is that uplisting the Mojave Desert Tortoise is warranted.**" Receipt of this [status review] report is to be placed on the agenda for the next available meeting [expected in April 2024] of the Commission after delivery [at the February meeting]. At that time, the report will be made available to the public for a 30-day public comment period prior to the Commission taking any action on the petition."

Description of the Proposed Program

The California Department of Food and Agriculture (CDFA) and the U.S. Department of Agriculture, Wildlife Services in California (WS-California) have prepared a joint California Environmental Quality Act (CEQA) /National Environmental Policy Act (NEPA) document to

analyze the impacts of a proposed change to the current program implemented by WS-California. WS-California currently uses an integrated approach to recommend and apply a range of legally available nonlethal and lethal methods for reducing wildlife damage and conflicts. Potential methods used as part of Wildlife Damage Management (WDM) can include physical exclusion, harassment and deterrence, capture devices, and lethal techniques.

Under the proposed program the CDFA would have a new role in statewide activities that is similar to WS-California's existing WDM activities. Thus, this CEQA/NEPA document analyzes the impacts of implementing a change to a program rather than proposing a new project.

CDFA and WS-California describe six alternatives in the Draft EIR/EIS:

Alternative 1, No Project/Continuation of WS-California: This is the No Action or No Change Alternative. No new CDFA or county WDM would be established. This alternative would not include any CDFA or county-led emergency/rapid response activities. WS-California would continue to operate WDM. This would include threatened and endangered species protection and airport wildlife hazard management (WHM). This alternative includes collaboration and identification, education and training, technical assistance, non-lethal and lethal operational WDM, and monitoring. WS-California could also loan equipment to cooperators/requestors for WDM activities.

Alternative 2, Non-Lethal Operational WDM with Exceptions: The CDFA/Counties/WS-California would provide technical assistance on lethal and non-lethal techniques and/or provide non-lethal operational WDM assistance, but would not provide lethal WDM assistance, except for cases of human health and safety, companion animal health and safety, T&E species protection, and airport WHM. Components of Alternative 2 include collaboration and identification, education and training, technical assistance, non-lethal operational WDM, and monitoring. The CDFA/Counties/WS-California could also loan equipment used for non-lethal techniques and/or other WDM activities.

Alternative 3, Non-Lethal Operational WDM: The CDFA/Counties/WS-California would provide technical assistance on lethal and non-lethal techniques and provide only non-lethal operational WDM assistance. No lethal operational WDM assistance would be provided. Components of Alternative 3 include collaboration and identification, education and training, technical assistance, non-lethal operational WDM, and monitoring. The CDFA/Counties/WS-California could also loan equipment used for non-lethal techniques and/or other WDM activities. Alternative 3 could include CDFA/County/WS-California emergency/rapid response activities, but no lethal methods.

Alternative 4, Financial Reimbursement Assistance: Alternative 4 is for CEQA consideration only. Participating counties could establish monetary compensation to affected cooperators/requestors (producers), with a focus on funding improved protection from damaging wildlife (e.g., upgrade of fencing, acquisition of guard animals). This alternative would not include operational assistance provided by the CDFA/WS-California. This alternative would not preclude the right of private entities to conduct lethal WDM on their own in accordance with state and federal laws.

Alternative 5, Cessation of WS-California: Alternative 5 would not establish or formalize a CDFA WDM Program in California or technical or operational assistance with WDM methods or provision of financial reimbursements as described in Alternative 4. Potential WDM would be handled by other entities, including but not limited to tribes, USFWS, CDFW, Counties, private-resource owners and managers, private contractors, and/or other non-federal agencies.

Proposed Alternative: CDFA would have a new role in statewide activities, formalizing a program that provides an adaptive and integrated approach, cooperator/requestor participation, technical assistance on lethal and non-lethal techniques, and/or lethal and non-lethal operational WDM assistance that is similar to WS-California's existing WDM activities. CDFA would also be a centralized data repository for integrated WDM activities (coordination and documentation review), participate in education and outreach, enact a rapid response plan for emergency WDM incidents and/or infestations, and conduct analysis of independent County integrated WDM programs (note that WDM activities of more limited scope could be delegated to individual counties by the CDFA, responding to their specific needs). WS-California would continue to provide technical assistance on lethal and non-lethal WDM techniques and/or provide lethal and non-lethal operational WDM assistance. This alternative would include WS-California T&E species protection and wildlife hazard management (WHM) at airports.

Comments on the Draft EIR/EIS

The Council's comments on the DEIR/DEIS are focused on how the proposed change to the WDM program would impact the tortoise/tortoise habitat in California both directly and indirectly. WS-California, CDFA, and counties would implement, as appropriate, methods currently used by WS-California to manage target wildlife species.

CDFA and WS-California identified the Preferred Alternative (called the Proposed Alternative) in the DEIR/DEIS. The Council requests the environmentally preferred alternative be identified in the EIR/EIS with a discussion of how the lead agencies made this determination.

The Council acknowledges and is supportive of implementing methods that reduce wildlife predation on the Mojave desert tortoise and other threatened and endangered species when this threat has been identified as an impact contributing to the decline of the species. We support management of tortoise predators to ensure that tortoises are able to survive, grow, reproduce, and recruit new individuals to grow tortoise populations and eventually recover the species. In California, all tortoise recovery units have tortoise densities that are below the threshold needed for population viability (USFWS 1994, Allison and McLuckie 2018, USFWS 2016, 2018, 2019, 2020, 2022a, 2022b).

However, the implementation of these WDM activities must not adversely affect non-target species [Non-target species are those captured or otherwise affected unintentionally during the implementation of WDM activities that targeted a different species.]. Similarly, the activities implemented for WDM must not adversely impact protected non-target species including the

tortoise. These species, especially those listed under the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) and fully protected species cannot afford to lose additional individuals because the persons recommending or implementing the WDM activities have not been educated about the ecology and behavior of, and threats to these species. Thus, it is crucial that this knowledge is formally shared, updated, and routinely taught to the people who will be recommending or implementing the WDM in the field, the wildlife specialists.

The description of the Proposed Alternative does not include training. Alternatives 1 through 3 do include training. The Proposed Alternative should include initially a robust training program to train CDFA and county personnel who will be implementing the duties of wildlife specialists in the regulatory requirements they must follow when implementing this program. The WS-California wildlife specialists should assist in administering this training.

The Council is concerned that CDFA, the counties, and their agents may not have personnel/wildlife specialists with (1) the knowledge and experience to know when they are in the range of a species listed under the FESA, CESA (e.g., Mojave desert tortoise, etc.), or protected by other regulatory methods, (2) the knowledge of what those regulatory protections mean, and (3) the knowledge and experience of the behavior and ecology of and threats to the protected species to select the appropriate lethal or non-lethal methods for the target species that will avoid take (including harming and harassing) of protected non-target species.

When the Federal Highways Administration (FHWA) delegated its authority to the state transportation agencies several years ago, some of the states in the range of the tortoise took years to learn and properly implement federal environmental laws and regulations for federal highway projects. Similarly, the Council can provide examples of county agencies in California that carry out their missions but lack staff with knowledge of federal environmental laws and regulations. In some instances, their actions resulted in take of species listed under FESA with no take authorization.

One of the goals of implementing the WDM activities should be to eliminate adverse impacts to non-target species that occur because the activities selected were not compatible with the ecology and behavior of the non-target species. In addition, monitoring the results of implemented WDM activities and regularly reporting and sharing this information is crucial to eliminate adverse impacts to non-target species. Consequently, the Council strongly recommends that the Preferred Alternative include implementing a robust training program to train all current and future personnel who will be performing the duties of a wildlife specialist and their agents about federal and California environmental laws, requirements to follow them, coordination with appropriate federal and California state agencies, and monitoring to determine whether the training program is effective.

Page 1-23: Beginning on this page and throughout the Draft EIR/Draft EIS, the word “take” is used but not defined. Sometimes it is coupled with “lethal” which implies that take as used in this document may be either lethal or non-lethal.

“Take” is defined under the FESA to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” We suggest that “take” should be defined in the EIR/EIS.

Page 2-15, Wildlife Services Decision Model: This figure shows that when formulating a wildlife damage management strategy, coordinating with local jurisdictions and partner wildlife agencies would occur. We suggest adding interested organizations, as some private groups and businesses may have expertise and approaches that are more effective than those being implemented by wildlife specialists and their agents and have less of an impact on non-target species.

Page 3-6: The following statement is provide in the Draft EIR/EIS – “Alternatives 3, 4, and 5 would not have an effect on target species as no lethal operational WDM would occur.” We are confused by this statement. Under Alternative 3, WS-California would provide non-lethal operational WDM assistance. This non-lethal assistance may result in harming or harassing animals (e.g., the activity forces the animal to leave the area, and this movement results in adverse physiological impacts to the species including death). The Draft EIR/EIS should define what “an effect” is, because we would consider this an adverse effect to the target species but accomplishing the purpose of the implemented activity.

Page 3-6, Non-Target Species: This section is missing information on the protections provided to species listed under the CESA, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and California Fish and Game codes for fully protected species and certain furbearers. Please add these laws/codes to this section of the document.

Page 4.2.2-5: This section includes Table 4.2.2-6 with the Mojave desert tortoise indicated in as a species intended as a beneficiary of WS-California activities. Below it in the document is a discussion of target and non-target species. The tortoise is not included in this discussion. For example, our understanding is that during access to some sites in the Mojave and Colorado deserts (including driving off of dirt roads) and use of some methods for lethal take of target species, the tortoise may be accidentally killed or injured. Please explain this absence of information on the tortoise.

Page 4.2.2-6, Table 4.2.2-3. Threatened and Endangered Bird and Mammal Species Intended as Beneficiaries of WS-California Activities (2010–2019): The desert tortoise is included in this table. Please add “Reptiles” to the name of this table as the tortoise is not a bird or a mammal.

Page 4.2.2-6: “Other special-status species that could benefit from removal of target species by the Proposed Project/Proposed Action include...smaller species such as kangaroo rats (*Dipodomys* sp.), arroyo toads (*Anaxyrus californicus*), and Tehachapi slender salamanders (*Batrachoseps stebbinsi*).” We suggest adding the Mohave ground squirrel (*Xerospermophilus mohavensis*) that is listed as threatened under CESA to this list.

Page 4.3-9, Wildfire: This section discusses the precautions that would be implemented for actions that could result in fire hazards, such as pyrotechnics or propane exploders. In addition, “known areas of moderate, high, and very high fire hazard risk would be subject to local regulations and applicable best practices.”

In years with above average precipitation, the germination and growth of non-native invasive plants in the Mojave and Colorado deserts after drying provide a near continuous carpet of fuel that can carry a fire started by anthropogenic sources such as catalytic converters from the operation of a vehicle and disposing of lighted cigarettes outside. WS-California, CDFA, and county personnel should implement additional precautions to ensure that their typical actions do not cause a wildfire. Please consider this information when assessing the impacts of the alternatives to the resource issue of wildfire.

Appendix C, Wildlife Damage Management Methods

Methods used for target species include various types of nets and traps, fences, and pyrotechnics. These methods have the potential to adversely impact the tortoise.

Nets and Traps: If located on or near the ground in the range of the tortoise, a tortoise may become entangled in the net resulting in injury or mortality. This occurred at the Marine Corps Air Ground Combat Center at Twentynine Palms when a camouflage netting was secured to the ground.

Fences: We presume that fencing would not be used in the Mojave or Colorado deserts as fencing could disrupt a tortoise's movement in its home range, causing it to pace along the fence in an attempt to get to the other side, overheat, and die (Peaden et al. 2017).

Pyrotechnics: Ignition sources are a concern when used in the desert as they may ignite wildfires. Please see our comments above for Page 4.3-9, Wildfire.

Page C-2-1: "CDFA shall adopt the Wildlife Services Directives as part of the WDM Program." This adoption does not mean that it is immediately implemented. We reiterate the need for a robust training program to be implemented with WS-California, CDFA, counties, and their agents.

A footnote on this page says "wildlife specialists" refer to CDFA and/or County personnel (or their agents thereof) that have been specifically trained to carry out WDM activities and methods, including technical assistance as well as operational activities in the field. Wildlife specialists are required to undergo periodic education in current WDM techniques (including use of special equipment such as federally-licensed firearms, pyrotechnics, and specialized traps), and to carry out WDM activities and methods in compliance with local, state, and federal laws."

Unfortunately, "periodic" is not defined, training budgets are tight, and this verbiage does not mention training in the ecology and behavior of and threats to non-target protected species that would include the tortoise. These areas of knowledge are appropriate for someone with the title of wildlife specialist.

This statement does not restrict these activities to being carried out by wildlife specialists at CDFA, the counties, or their agents. We recommend this restriction be clearly state in the EIR/EIS.

Page C-2-2: Animal husbandry modifications are described and include options such as the use of guarding animals (e.g., dogs). Using unleashed and unsupervised dogs in the Mojave or Sonoran Desert may result in dogs finding and injuring or killing tortoises. Unleashed dogs are a known

source of tortoise predation (Berry et al. 2014). This is another example of a method that would be flagged as inappropriate if the wildlife specialist were knowledgeable about the threats to the tortoise.

Page C-2-19, Gas cartridges: “The cartridges are placed in the active burrows of target animals, the fuse is lit, and the entrance is then tightly sealed with soil. The gas cartridges contain two active ingredients, sodium nitrate and charcoal, and once ignited the main combustion product is carbon monoxide.” Use of gas cartridges would only be used by qualified wildlife specialists who have been trained to distinguish dens and burrows of target species from those of non-target species and not in occupied habitats of T&E species as per listed on label.”

Germano and Perry (2012) reported cohabitation of a caliche cave by an American badger (*Taxidea taxus*) and an adult desert tortoise. The tortoise was unharmed even though badgers are known predators of desert tortoises.

The stipulation for gas cartridge use and the cohabitation of a tortoise with a badger reinforces the need for training in the behavior and ecology of and threats to the tortoise.

Appendix D, Biological Technical Report Wildlife Damage Management Project

Page 8: The Council believes the common raven (*Corvus corax*) should be included in the list of target species for the Mojave Desert, as it is a predator of hatchling and juvenile Mojave desert tortoises and that California-WS has removed predatory ravens in the past. Please add this target species to the list.

According to CDFW, the range of the California ground squirrel overlaps part of the range of the Mojave desert tortoise. The California ground squirrel and other rodents are target species. Their burrows are used by hatchling and juvenile desert tortoises. This behavioral and ecological information is crucial for a wildlife specialist to know when recommending/using methods to implement to manage target species. This is another example of why training about the ecology and behavior of non-target protected species in the range of where WDM activities would be implemented is necessary to minimize the take of non-target species and to prevent violating federal and state environmental laws.

Page 8: “Figure 2 shows the ecoregions and wildlife movement corridors within the study area (i.e., the State of California).” When we looked at Figure 2, the wildlife movement corridors shown were mapped at a gross scale, likely only reflecting movements between ecoregions and not within ecoregions. Although a nontarget species, the Mojave desert tortoise’s movements have been studied and connectivity routes mapped for this species within the Mojave and Sonoran deserts. We suggest contacting the Desert Tortoise Recovery Office of the U.S. Fish and Wildlife Office to obtain the most recent information on population connectivity and linkage habitats for the tortoise.

Page 30: “[I]f a non-target species is caught, every effort is made to release it unharmed unless the non-target animal is injured and determined to be not likely to survive if released.” Please provide information on what the procedure is to treat an injured, protected non-target species or physiologically stressed protected non-target species. We ask this because the tortoise has special

physiological (Zimmerman et al. 1994, Peterson 1996, Henen et al. 1998) needs especially with respect to ambient and core body temperatures and water balance.

Appendix D Biological Technical Report Wildlife Damage Management Project, Appendix A Section 7 Consultation History

This appendix to an appendix provides information on past compliance with the FESA. However, we were not able to find information on compliance with CESA such as copies of incidental take permits issued by CDFW for incidental take of protected species under CESA from implementation of WDM methods or correspondence between WS-California and CDFW or CDFA and CDFW that explains why an ITP was not needed. Please add this information to the EIR/EIS.

Please explain what “MA,” “NLAA,” “NE,” and “NLTJ,” and single, double, and triple “*” mean in this appendix on section 7 consultation.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the WS-California or CDFA that may affect desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. Additionally, we ask that you notify the Desert Tortoise Council at eac@deserttortoise.org of any proposed projects that WS-California or CDFA may authorize, fund, or carry out in the range of any species of the desert tortoise in the southwestern United States so we may comment on it to ensure WS-California and/or CDFA fully consider actions to conserve tortoises as part of their directives to conserve listed species 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 Project.

Respectfully,



Edward L. LaRue, Jr., M.S.
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