



July 24, 2024

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Sent via Email to: comments@IrwinWTADTTtranslocationEA.com

Re: Comments on the Environmental Assessment and Draft Finding of No Significant Impact for the Translocation of Desert Tortoise in the Western Training Area, Fort Irwin, California

Dear Ms. Baker:

Thank you for the opportunity to submit comments on the Environmental Assessment (EA) and Draft Finding of No Significant Impact (Draft FONSI) for the Translocation of Desert Tortoise in the Western Training Area, Fort Irwin, California. 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 316,000 in California, the Desert Tortoise Council (Council) on behalf of its members, and the Desert Tortoise Preserve Committee (Committee) on behalf of its members.

Defenders is a national conservation organization founded in 1947 and dedicated to protecting all wild animals and plants in their natural communities. To this end, we 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.

The Council is a non-profit organization founded in 1975 and 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 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.

The Committee is a non-profit organization formed in 1974 to promote the welfare of the desert tortoise in its native wild state. Committee 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.

Background Information from the EA

The Army plans to translocate approximately 350 adult desert tortoises from the 61,776-acre Western Training Area (WTA) to Army-owned lands outside the boundary of Fort Irwin prior to initiating training in 2025. All of the WTA and the Army lands are within the Superior-Cronese Critical Habitat Unit for the threatened desert tortoise designated in 1994 (USFWS 1994a).

Some desert tortoises (hatchlings and juveniles) would remain within the WTA because they would not be detected during capture and translocation activities. Translocation would include mandatory monthly monitoring of approximately 660 individual desert tortoises which would continue for a period of five years. The primary purpose of monitoring is to determine the effects of translocation on both resident and translocated desert tortoises, including movements of individuals and mortality. The Army has not used the WTA for any training activities since it was added to Fort Irwin in 2002.

From 2020 through 2022, the U.S. Geological Survey (USGS) surveyed the WTA and Western Training Area Translocation Sites (WTATS) to document habitat conditions and estimate tortoise abundance. Surveys were conducted on 1,408 plots following U.S. Fish and Wildlife Service (USFWS) protocols (USFWS 2022). All tortoise signs were recorded during surveys. The 2020 through 2022 surveys and monitoring of telemetered tortoises throughout the WTA and WTATS included observations of 783 tortoises. Of the tortoises observed, 86 percent were adult tortoises with a consistent 2 male:1 female sex ratio. Health assessments were performed on 393 tortoises and most were classified as clinically normal.

The mean estimated adult tortoise density at WTA was 1.08 adults per/km², corresponding to 273 live adult tortoises in the WTA (statistical range of 112-439) that would be translocated to three translocation sites within the WTATS. Tortoise densities in the WTATS were estimated at 0.47, 0.43 and 0.41 adults per/km² at Sites 1, 2 and 3, respectively.

Under the Proposed Action, the Army would translocate adult tortoises to the three translocation sites during April and May or September and October when weather conditions are suitable for desert tortoises. An estimated 164 adult tortoises would be translocated to Translocation Site 1, 64 to Translocation Site 2, and 123 to Translocation Site 3.

The Army does not plan to construct any additional fencing in the WTATS. Most major roads intersecting and bounding the WTATS, including most of Interstate 15 and all of Fort Irwin Road, are already enclosed with tortoise exclusionary fencing. The Army would coordinate through the Recovery and Sustainment Partnership (RASP), a joint initiative of the Department of Defense and Department of the Interior, to construct fence regionally to deter off-highway vehicle travel and along Interstate 15, which would provide protection of desert tortoise habitat in the WTATS.

Monitoring would be required for 25 years (6 years of short-term monitoring and 19 years of long-term monitoring) to determine if translocated tortoises support recovery of depleted populations in the three translocation sites. Monitoring would involve tracking translocated desert tortoises, determining population recruitment, estimating and comparing tortoise densities, conducting tortoise health assessments and evaluating genetic integration.

No additional Endangered Species Act (ESA) Section 7 consultation with the USFWS is required to implement the Proposed Action because the 2021 Biological Opinion issued to the Army included the proposed translocation of desert tortoises from the WTA.

Recreational off-highway vehicle (OHV) travel by the public could adversely impact desert tortoises that move off of Army-owned recipient sites onto public lands within the three translocation sites. However, cross-country travel is not permitted on Bureau of Land Management (BLM) lands surrounding the Army-owned Translocation Sites. OHV travel is restricted to designated open roads with further restrictions on vehicle stopping and parking in Desert Tortoise Areas of Critical Environmental Concern (ACEC) and California Desert National Conservation Lands. These restrictions on OHV travel and associated enforcement by law enforcement officers in the majority of the land surrounding the translocation sites greatly reduces the risks of translocated desert tortoise injury or mortality from vehicular travel.

Comments

Our comments on the Draft EA and Draft FONSI are as follows.

- 1. Motorized Vehicle Use on Designated Open Roads:** The desert tortoise translocation and subsequent long-term monitoring of translocated individuals will require the use of

motorized vehicles to transport personnel and equipment on designated open routes on BLM-managed public land and Army lands within the WTA and WTATS.

Comment: We recommend that the speed of motorized vehicles not exceed 15 miles per hour during the spring and fall seasons when desert tortoises are most active. This will help minimize the unintended mortality of desert tortoises from being crushed or injured by motorized vehicles. We further recommend that the Army commit to providing additional law enforcement at the translocation sites in the spring and fall to supplement that provided by the BLM, where limited law enforcement staff are distributed widely 93 million acres of public land in the western Mojave Desert.

Comment: The EA states, “The Army would coordinate through the [Recovery and Sustainment Partnership] or RASP, a joint initiative of the Department of Defense and Department of the Interior, to construct fence regionally to deter off-highway vehicle (OHV) travel and along Interstate 15 which would provide protection of desert tortoise habitat in the WTATS.”

OHV use occurs extensively within the WTATS and originates from the many designated open routes and county-maintained routes. Regional fence construction to deter OHV use within the WTATS would likely not be effective in reducing such use, which occurs on both BLM-designated closed routes and cross-country. We recommend the Army effectively close and restore all roads and trails within the translocation sites, and request that BLM close all roads and trails on BLM-managed public lands that lead directly to all the translocation sites. In addition, the Army should request that BLM close all roads and trails surrounding the translocation sites that are within the expected movement range of translocated desert tortoises, which typically attempt to return to their original home range. It makes little sense for the Army to spend considerable time and funding in protecting and monitoring translocated tortoises only to have them become vulnerable to injury and mortality due to OHV use and other human activities.

2. Effects of Desert Tortoise Translocation: According to the EA, “The translocation of desert tortoises to the Translocation Sites would augment existing desert tortoise populations. Population augmentation would have long-term beneficial impacts on the Mojave desert tortoise through improved reproductive capacity at a population level.”

Comment: Based on surveys of the translocation sites by the USGS, desert tortoise densities were very low, with 0.47 adults/km² at Site 1, 0.43 adults/km² at Site 2 and 0.41 adults/km² at Site 3. The minimum viable density of adult desert tortoises is 3.9/km² (USFWS 1994a). Density within the WTA was 1.08 adults/km², which is considerably higher than on the translocation sites, suggesting that complete exclusion of public access to the

WTA for many years through fences has provided greater protection compared to both public and Army-owned lands outside the boundary of Fort Irwin where OHV use occurs.

Prior to translocating desert tortoises to Sites 1, 2 and 3, the Army should determine why the current densities are below minimum viable density and eliminate all sources of mortality attributed to human use, elevated predation by common ravens, coyotes, and perhaps badgers, and habitats impaired by non-native invasive grasses and red-stemmed filaree, which are abundant on the translocation sites. Absent such actions, the desert tortoise translocation project would likely result in failure over the long-term because tortoises would be translocated into impaired habitats or where human impacts continue to depress those populations.

Comment: The importance of eliminating motorized vehicle use within and surrounding the translocation sites so that the translocation can augment depleted desert tortoise populations and contribute to the recovery of the species was the subject of a field research study conducted by the USGS (Berry et al. 2014). The authors found that within the Rand Mountains, Fremont Valley, and the Desert Tortoise Research Natural Area (DTRNA), all of which are in the Fremont-Kramer Critical Habitat Unit, only populations within the DTRNA were found to be stable or increasing. Within the DTRNA, 12 live desert tortoises were found on study plots compared with only two in the adjacent Fremont-Kramer Critical Habitat Unit. The important distinction between these two areas is that the DTRNA has been fenced and therefore closed to all motorized vehicle use since approximately 1980 whereas in the Rand Mountains and Fremont Valley, OHV use occurs on designated open dirt roads and trails, and also unauthorized use on BLM-designated closed routes or cross-country. The Berry et al. (2014) study reinforces the importance of fully excluding all motorized vehicle use from areas designated for the conservation and recovery of the desert tortoise by installing permeable perimeter fences.

Comment: The BLM compiled a list of desert tortoise mortalities due to crushing by motorized vehicles within the Western Mojave Recovery Unit on BLM-designated open routes from 2016-2020. Those mortalities were based on opportunistic observations rather than systematic surveys, so the actual number of mortalities is undoubtedly higher. Below is a table of the mortalities based on BLM's data.

Date	Age Class	Cause and Location of Mortality	Additional Information
4/26/2016	Subadult	Roadkill on BLM Open Route in Ord-Rodman Critical Habitat Unit (CHU)	Reported by USFWS Raven Monitoring Crew.
3/20/2017	Juvenile	Roadkill on BLM Open Route in Fremont-Kramer CHU	Reported by USFWS Raven Monitoring Crew.
10/14/2017	Adult	Roadkill within El Mirage Cooperative Management Area	El Mirage Biological Opinion provides for taking of 2 tortoises per year.
3/26/2018	Juvenile	Roadkill on BLM Open Route in Fremont-Kramer CHU	Reported by USFWS Raven Monitoring Crew.
3/30/2018	Adult	Roadkill on BLM Open Route in Fremont-Kramer CHU	Reported by USFWS Raven Monitoring Crew.
4/22/2019	Juvenile	Roadkill on BLM Open Route in Ord-Rodman CHU	Reported by Southern California Gas Co. and attributed to pipeline inspection activities.
4/29/2019	Adult	Roadkill on BLM Open Route in Ord-Rodman CHU	Located on route paralleling pipeline right of way.
8/26/2019	Juvenile	Roadkill on BLM Open Route in Ord-Rodman CHU	Carcass found on side of open route crossing wash. Reported by Southern California Edison.
8/26/2019	Adult	Roadkill on BLM Open Route in Ord-Rodman CHU	Adult Male found next to road, split in two. Reported by Southern California Edison.
9/5/2019	Adult	Roadkill on BLM Open Route in Ord-Rodman CHU	Found on road with head and limbs scattered near shell.
3/9/2020	Adult	Roadkill on BLM Open Route outside of CHU	Female found on Bagdad Chase access road for PG&E right of way, attributed to public OHV use.

Date	Age Class	Cause and Location of Mortality	Additional Information
4/3/2020	Adult	Roadkill on BLM Open Route outside of CHU	Reported by Southern California Edison.
4/20/2020	Juvenile	Roadkill on BLM Open Route outside of CHU	Reported by BLM employee.
4/26/2020	Subadult	Roadkill on BLM Open Route in Ord-Rodman CHU	Reported by USFWS Raven Monitoring Crew.
5/5/2020	Adult	Roadkill on BLM Open Route outside of CHU	Located on second Los Angeles DWP Aqueduct access road. Reported by DWP employee.

Desert tortoise mortalities due to crushing by motorized vehicles reinforces the need for the Army to exclude all such use within the three translocation sites and request that BLM also close all dirt roads and trails leading to the translocation sites and within the travel distance of translocated desert tortoises, which are known to attempt returning to their original home ranges.

3. Desert Tortoise Translocation Distance: Translocation sites were selected based on seven criteria used by the USGS to identify the most appropriate sites: land ownership, habitat suitability, distance to roads, nest density of the common raven, connectivity, precipitation, and terrestrial development index.

Comment: We note that among the criteria used by USGS to identify the most appropriate translocation sites, distance from the WTA to the translocation site was not used. Mack and Berry (2023) conducted the first long-distance translocation (greater than 500 meters) of desert tortoises from Fort Irwin in the spring of 2008 and monitored them over a period of ten years to assess effects of the translocation. From 2008-2018, more than 50% were dead by the end of the third year. Survival rate was higher on the translocation plot closest to their original home range within Fort Irwin because they showed greater fidelity to the plot, traveled shorter distances and dispersed less than those on plots farther from their original home ranges.

Comment: Based on the results reported in Mack and Berry (2023), we recommend that the Army reconsider additional sites for the translocation on Army-owned lands closer to

the WTA. Mack and Berry (2023) reported that the mean distance from desert tortoise home ranges within Fort Irwin to release sites was 23.05 kilometers.

We also recommend that translocated desert tortoises be placed within a temporary holding pen within the release site so they have a period of time to acclimate to their new environment prior to release, thus reducing their tendency to travel long distances in search for their original home range.

4. Desert Tortoise Translocation Season: The EA states the Army [W]ould only translocate tortoises in the spring (April and May) or fall (September and October) when the weather conditions are suitable for tortoise activities” and that “ If necessary, NTC would conduct winter translocations (e.g., December through February) with prior approval from USFWS, but extreme heat or cold would be avoided.”

Comment: Mack and Berry (2023) found that the season of year when desert tortoises were released should be considered because it may influence the extent of dispersal, survival, retention, and settlement within their new environments. They reported that other studies of translocation of testudinids found that release in the fall season may compel construction of burrows or shelters before the winter season dormancy period begins.

We recommend that the Army translocate one-half of the desert tortoises during the fall season and compare with those translocated during the spring season to determine if more burrows or shelter sites are associated with those translocated during the fall season.

4. Impact Mitigation Measures: Under Best Management Practices (EA page 4-3), the EA states, “Mitigation is used to reduce, avoid, or compensate for significant adverse impacts. However, this EA does not identify the need for mitigation measures because the Proposed Action would not result in any significant impacts on the natural or human environment.”

Comment: Comment: We disagree with the EA’s premise that the “Proposed Action would not result in any significant impacts on the natural or human environment.”

As noted in Comment 2, the density of adult desert tortoises at the three translocation sites is well below the minimum viable density of 3.9/km². Researchers from the USGS found that “Mortalities of study [site] and incidental tortoises, after initial encounters, occurred in both the WTATS and WTA study during 2020–2022” and that “Preliminary results and observations do not suggest recent high die-off areas in the project area from predation, disease, or climate variability.” (Houseman 2024).

Since the Houseman 2024 study preliminarily concludes that mortalities in the translocation sites are not due to predation, disease or climate variability, it is likely that

human-related mortalities (i.e., crushing and injury from motorized vehicle use, illegal collection and vandalism) are occurring.

Comment: We recommend the Army include mitigation measures in the final EA to eliminate human-related sources of mortality and injury to translocated and resident desert tortoises both within the three translocation sites and the two control sites. Those measures should include 1) elimination of all motorized vehicle use and access to the translocation sites by the general public through signing, barriers, and fences; 2) continuation of the common raven predation monitoring and population control measures; and 3) enforcement of translocation site closures to all public use and access. Absent these recommended impact mitigation measures, we do not think the Army can justify the use of a FONSI and an environmental impact statement (EIS) should be prepared.

Conclusion

Our comments are intended to increase the likelihood of success of the translocation of desert tortoises from the WTA to Army-owned lands within the WTATS. As stated above, we recommend that the translocation sites and surrounding habitat be fully protected by the exclusion of all motorized vehicle use through the use of signs, barriers and fences. Absent full exclusion of motorized vehicle use, the long-term success of the translocation project will be compromised and likely fail.

Please contact us if you have any questions or would like additional information.

Respectfully submitted,



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