



July 6, 2021

NEPA Planner
Fort Irwin Directorate of Public Works
Environmental Division
Building 602, Fifth Street
Fort Irwin, CA 92310–5085
Via email to: usarmy.jbsa.aec.nepa@mail.mil

Re: Comments on Draft Environmental Impact Statement for Training and Public Land Withdrawal Extension, Fort Irwin, California

Dear Sir or Madam:

Thank you for the opportunity to submit comments on the Draft Environmental Impact Statement (DEIS) for the proposed Training and Public Land Withdrawal Extension at Fort Irwin, California (Proposed Action). Comments included in this letter are submitted by Defenders of Wildlife (Defenders) on behalf of its 2.2 million members and supporters in the U.S., including 323,000 in California and by the Desert Tortoise Council (Council), which functions to conserve and recover wild tortoises in sustainable habitats. Defenders submitted scoping comments on the Proposed Action along with the Council in a letter dated September 8, 2020.

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 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.

Brief Description of the Proposed Action (taken directly from the DEIS)

“Fort Irwin is comprised of 753,537 acres in the Mojave Desert southern California and within the California Desert Conservation Area (CDCA). The National Training Center (NTC) at Fort Irwin trains various types of Army Brigade Combat Teams (BCTs) and provides joint training for all branches of the U.S. military. Up to 12 BCT training rotations occur per year on numerous training areas and fixed ranges which accommodate mechanized equipment and live-fire exercises and training on the use of individual weapons systems. The Proposed Action includes modernized training, training infrastructure improvements and the extension of the existing land withdrawal. The Proposed Action is necessary to support new training doctrine with large combat operations against near-peer adversaries, accommodate testing and training with new weapons systems.”

“Approximately 110,000 acres of Fort Irwin are public lands withdrawn from all types of appropriation and reserved for military purposes under Public Law 107–107 in 2001, which expires on December 28, 2026. The Army has a continuing military need for use of the withdrawn public land and intends to request that the U.S. Congress extend the withdrawal for at least 25 years, or in the alternative, for an indefinite period until there is no longer a military need for the land. Upon a separate application by the Army, the Bureau of Land Management will file a notice in the Federal Register of a U.S. Army withdrawal extension application. The Final EIS will be submitted to the U.S. Congress as a Legislative EIS to support the request for extension of the current land withdrawal and reservation for continued use by the U.S. Army.”

“The Draft EIS analyzes a range of Proposed Mission Change Alternatives to the Proposed Action—No Mission Change, a Withdrawal Extension and a No Withdrawal Extension Alternative. The Mission Change Alternatives include different intensity and extent of training and training infrastructure. In the Western Training Area, a range of medium-to-heavy intensity training alternatives are analyzed. The No Mission Change Alternative would continue training at the current level with no modernization of training or improvement of training infrastructure.”

“The Withdrawal Extension Alternative would extend the current withdrawal for 25 years or indefinitely until there is no longer a military need for the land. The No Withdrawal Extension Alternative would result in 110,000 acres in the Western and Eastern Training Areas returned to the public domain and managed by the Bureau of Land Management (BLM). The decision on the proposed land withdrawal will be made by the U.S. Congress. The U.S. Army Preferred Alternative has not been determined at this time and will be described in Final EIS.”

“The Mission Change Alternatives would result in minor-to-moderate adverse effects that would be in addition to the effects of the No Mission Change Alternative; however, none of the effects would be significant. The environmental effects from the Withdrawal Extension Alternative would be comparable to those discussed for the Mission Change Alternatives. While the effects of the No Withdrawal Extension Alternative are uncertain, because of the unknown future uses of these areas if Army training is not conducted, it is expected that the No Withdrawal Extension Alternative would result in negligible effects on resources compared to the Withdrawal Extension Alternative.”

DEIS Comments

We submit the following comments and recommendations on the DEIS:

1. Western Training Area (WTA)

The WTA was added to Fort Irwin through federal legislation signed into law on December 21, 2002. It is comprised of 61,776 of public land withdrawn from public land laws and entry under the mining law for exclusive use by the Army.

Comment/Agassiz's Desert Tortoise: Of all the mission changes proposed within the various ranges and training areas, we are most concerned over potential adverse impacts within the WTA, which has remained unused since being added to Fort Irwin through federal legislation on December 21, 2002. The entire area is within the Superior-Cronese Critical Habitat Unit (CHU) for the threatened Agassiz's desert tortoise (*Gopherus agassizii*)¹. Subsequent to being added to Fort Irwin, the Army fenced the area to identify the former public lands as being located within a military installation where public access is prohibited. Excluding public access to the WTA for a period of approximately 15 years has likely benefited the desert tortoise and numerous other uncommon plant and animal species through exclusion of all public use, especially including motorized vehicles.

According to the U.S. Fish and Wildlife Service (USFWS),^{2,3} use of the WTA for increased training would require the translocation of approximately 1,100 adult and sub-adult desert tortoises off the site and onto adjacent lands owned by the Army and public lands managed by the BLM. Some desert tortoises (hatchlings and juveniles) would remain within the area because they would not be detected during capture and translocation activities.

To offset the impacts of the expansion of Fort Irwin, the Army acquired approximately 102,000 acres of private land within the Superior-Cronese and Ord-Rodman CHUs for the desert tortoise in approximately 2004. It also acquired livestock grazing permits and ranch base property for the Harper Lake, Cronese Lake and Cady Mountain allotments and facilitated the permanent removal of livestock and the allotments by BLM. The 2004 biological opinion stated, "All land purchased [by the Army] will directly or indirectly promote the survival, recovery, and conservation of the desert tortoise or Lane Mountain milk-vetch." The Army also provided funding to BLM to restore or rehabilitate unauthorized off-highway vehicle (OHV) routes and increase enforcement of OHV use restrictions on public lands. We greatly appreciate the Army's previous contributions to recovery of the desert tortoise.

The Army is proposing alternative training uses of the WTA, stating, "Training activities may increase substantially in the Western Training Area as the Army completes the necessary mitigation

¹ FWS. 2012. Biological Opinion for the Proposed Addition of Maneuver Training Lands at Fort Irwin, California (8-8-09-F-43R). Ventura Fish and Wildlife Office, Ventura, California. July 30, 2009.

² USFWS. 2004. Biological Opinion for the Proposed Addition of Maneuver Training Lands at Fort Irwin, California (1-8-03-F-48). Ventura Fish and Wildlife Office, Ventura, California. March 15, 2004.

³ USFWS. 2012. Biological Opinion for the Proposed Addition of Maneuver Training Lands at Fort Irwin, California (8-8-09-F-43R). Ventura Fish and Wildlife Office, Ventura, California. July 30, 2009.

measures agreed upon in the 2005 SFEIS and Record of Decision (Fort Irwin, 2005, 2006), as well as measures now being developed in consultation with the USFWS.”

Since the 2004 biological opinion, the status of the desert tortoise in the Western Mojave Recovery Unit, including the Superior-Cronese CHU, has changed, with an ongoing downward population trend through 2019.⁴ According to Allison and McLuckie (2018)⁵, density of adult desert tortoises in the Western Mojave Recovery Unit declined by 51 percent between years 2004-2014, with an annual rate of decline of 7.1 percent. The authors also stated, “However, if the area available to tortoises is decreasing, then trends in tortoise density no longer capture the magnitude of decreases in abundance.” Their research did not take into account the loss of occupied, suitable habitat for the desert tortoise from the expansion of Fort Irwin, the Marine Corps Air Ground Combat Center at Twentynine Palms and numerous large-scale solar energy projects. Lastly, Allison and McLuckie (2018) concluded, “The negative population trends in most of the TCAs [Tortoise Conservation Areas] for Mojave Desert Tortoises indicate that this species is on the path to extinction under current conditions. This may reflect inadequate recovery action implementation, slow response by tortoises and their habitat to implemented actions, or new and ongoing human activities in the desert that have not been mitigated appropriately.”

The 2009 biological opinion addressed the WTA where the density of adult desert tortoises was 16.4/km² (6.3/mi²) in the corresponding Superior-Cronese CHU based on surveys performed from 2001-2005.⁶ The density of adult desert tortoises in the Superior-Cronese CHU is currently 1.9/km² based on the 2019 rangewide monitoring report published by the Desert Tortoise Recovery Office of the USFWS.⁷ The current density of adult desert tortoises is significantly less than the minimum viable density estimate of 3.9/km² from the USFWS 1994 recovery plan for the species.⁸

All desert tortoises detected within the WTA would be captured and released onto federal lands within the adjacent Superior-Cronese CHU through relocation (short distance adjacent to the WTA boundary, or translocation involving greater distances that exceed the average home range of an adult desert tortoise. The DEIS indicates desert tortoise relocation and translocation would follow “...agreements in the 2014 Biological Opinion (USFWS, 2014) and 2021 Biological Opinion that is being developed (Appendix 4.1A).”

Recommendation: We recommend the Army’s use of the WTA be designed to be compatible with maintaining at a minimum, and preferably enhancing, the desert tortoise population. We suggest

⁴ United States Fish and Wildlife Service. 2021. Desert Tortoise Recovery webpage. Monitoring. Desert Tortoise Recovery Office. Reno, Nevada. https://www.fws.gov/nevada/desert_tortoise/dtro/dtro_monitor.html.

⁵ Allison, L.J. and A.M. McLuckie. 2018. Population Trends in Mojave Desert Tortoises (*Gopherus agassizii*). Herpetological Conservation and Biology 13(2):433-452. http://www.herpconbio.org/Volume_13/Issue_2/Allison_McLuckie_2018.pdf.

⁶ United States Fish and Wildlife Service. 2006. Range-wide monitoring of the Mojave population of the desert tortoise: 2001-2005 summary report. Desert Tortoise Recovery Office. Reno, Nevada. https://www.fws.gov/nevada/desert_tortoise/documents/reports/rangewide_monitoring_report_20061024.pdf.

⁷ United States Fish and Wildlife Service. 2020. Range-wide Monitoring of the Mojave Desert Tortoise (*Gopherus agassizii*): 2019 Annual Reporting. Desert Tortoise Recovery Office. Reno, Nevada. https://www.fws.gov/nevada/desert_tortoise/documents/reports/2020/2019_DRAFT_RangewideMojaveDesertTortoiseMonitoring.pdf.

⁸ United States Fish and Wildlife Service. 1994. Desert Tortoise (Mojave Population) Recovery Plan. Desert Tortoise Recovery Office. Reno, Nevada. http://ecos.fws.gov/docs/recovery_plans/1994/940628.pdf.

maximizing the use of the WTA with aircraft and minimal use of the area by mechanized land-based vehicles. Aircraft impacts could be lessened by reducing the number of aircraft Logistics Support Areas (LSAs) to the minimum number needed to meet training needs. Based on our review of the DEIS, it appears WTA Alternative 1, Medium-intensity Aviation Task Force, may be compatible with retaining and enhancing the desert tortoise population and its habitat. Regarding land-based vehicle use, adjusting it to correspond with the less-active seasons of the desert tortoise (typically June-August and November-February) may substantially reduce potential direct impacts to the tortoise. Further minimizing the impacts of Alternative 1 could lead to another alternative, which we term a Low-intensity Aviation Task Force.

We offer this recommendation given the ongoing decline in adult desert tortoise populations in the Western Mojave Recovery Unit and specifically within the Superior-Cronese CHU, which are now considerably less than minimum viable density. This recommendation would preclude the need to capture, relocate and translocate up to approximately 1,100 desert tortoises from the WTA, including the corresponding multiyear telemetry studies necessary to track individual animals to determine the short and long-term effects of moving them out of the WTA.

Recommendation: If tortoises require relocation and translocation from the WTA onto adjacent federal land outside Fort Irwin, we recommend that the receiving area be fully protected from all multiple land use activities. This can be achieved through implementing specific land use controls as detailed below, along with development of a robust monitoring plan. The latter is needed to test the efficacy of implementing these protective measures and to provide remedies to address specific failures (e.g., regular repair of breaches in the perimeter fence):

- Perimeter fence
- Dedicated law enforcement patrol
- Closed to all motorized vehicle use
- Closed to all firearm use, including hunting
- Closed to public access except by permit
- Withdrawn from public land laws and entry under mining laws

We make this recommendation based on the steep, ongoing decline in the desert tortoise population throughout the Western Mojave Recovery Unit and the Superior-Cronese CHU adjacent to Fort Irwin. This decline is due to a variety of human and human-related factors which have degraded habitat and placed tortoises at risk. Vehicle use is associated with desert tortoise mortality and destruction of its critical habitat. Vehicle use is also associated with the spread of invasive non-native plants, vandalism, shooting, trash dumping and the subsidization of common ravens which prey on tortoises.

We realize the details of a relocation and translocation plan involve not only the Army, but also the BLM and USFWS. We recommend that Scott Wilson (scott.wilson@wildlife.ca.gov), Program Manager for the Inland Deserts Region of the California Department of Fish and Wildlife (CDFW) be invited to participate in the development and implementation of a tortoise translocation plan since the species is currently listed as threatened under the California Endangered Species Act (CESA) and is a candidate under this Act for listing as endangered. This action would be consistent

with the intent of the Sikes Act Improvement Act to provide “mutual agreement of the parties [i.e., DOD, USFWS, state fish and wildlife agency] and state concerning the conservation, protection, and management of fish and wildlife resources.”

Recommendation: The Final Environmental Impact Statement (FEIS) should clarify if any of the lands within the WTA were acquired by the Army in 2004 to offset the impacts of Fort Irwin expansion. The DEIS indicates the Army acquired some private lands within the area but did not clarify the purpose of the acquisition. If these lands were acquired with funding intended to offset or mitigate the impacts of the expansion, they should be excluded from all forms of training and other surface disturbing activities. A large majority of the 102,000 acres of private land the Army acquired to offset the impacts of the expansion were acquired from the Catellus Development Corporation. We recommend that such lands be identified on a map in the Final EIS.

Comment/Mohave Ground Squirrel (MGS): According to Leitner⁹, the WTA supports a significant population of MGS (*Xerospermophilus mohavensis*), based on numerous field surveys dating back to 1977. The species was first state listed as threatened in 1971 by the California Fish and Game Commission. The WTA was surveyed from 2006-2007 in support of future planning by the Army for expanded training activities. Those surveys resulted in 36 individual MGS captured at 10 of 12 protocol trapping grids distributed throughout the WTA (Leitner 2009).

MGS have previously been recorded at Goldstone, Nelson, Bicycle and Drinkwater Lakes, Lucky Fuse and Lizard Gulch.¹⁰ However, MGS have not been detected in these areas recently, including east of the Gary Owen impact area or on the Goldstone Complex (U.S. Army 2006). The National Training Center (NTC) encompasses about 360,500 acres of MGS habitat, or roughly 7.4% of the species’ range.¹¹ Krzysik (1991) noted heavy shrub losses and MGS habitat disturbance at NTC associated with mapped vehicle use and bombing.¹² Tank maneuver areas and long-term bombing targets established and upgraded by the U.S. Air Force in the Leach Lake Tactical Range have likely rendered potential MGS habitat unsuitable.¹³ Leitner additionally identified the Coolgardie Mesa-Superior Valley area to the south of Fort Irwin as a Mohave ground squirrel Core Area in his 2009 status report.

The DEIS states the MGS “...would experience displacement, habitat degradation and loss, and potential incidental mortality from training events; however, it is unlikely that brigade-level activities in the Western Training Area would affect the species at the local population level or jeopardize the

⁹ Leitner, P. 2009. Current status of the Mohave ground squirrel. Transactions of the Western Section of The Wildlife Society 44:11-29.

¹⁰ United States Army. 2006. National Training Center and Fort Irwin Integrated Natural Resources Management Plan and Environmental Assessment 2006-2011. Directorate of Public Works. Environmental Division. Fort Irwin, California.

¹¹ Wilkerson, C., and G. Stewart. 2005. Petition to list the Mohave ground squirrel (*Spermophilus mohavensis*) as a federally endangered species. Defenders of Wildlife. California Program Office. Sacramento, California. 49 pp.

¹² Krzysik, A.J. 1991. Ecological assessment of military training effects on threatened, endangered, and sensitive animals and plants at Fort Irwin, California. U.S. Army Corps of Engineers Resource Laboratory. Champaign, Illinois. 107 pp.

¹³ ITS Corporation. 2006. Environmental assessment updating targets on Leach Lake Tactical Range at the National Training Center, Fort Irwin, California. Document prepared for U.S. Army Corps of Engineers, Fort Worth District and U.S. Air Force, Nellis Air Force Base (AFB). On file, Nellis AFB, Nevada.

continued existence of the species. These species will continue to be monitored and managed in accordance with the Fort Irwin INRMP [Integrated Natural Resources Management Plan].”

Further, the DEIS discloses that MGS abundance within Fort Irwin is greatest in the WTA, where the species occurrence was documented on 9 of 10 randomly placed sampling grids. Overall, based on existing records for the MGS, it appears the species occurs in higher densities in the western and northern portions of the WTA.

Recommendation: We recommend the Army’s use of the WTA be designed to be compatible with maintaining the MGS population at a minimum, and preferably enhancing this imperiled species’ occupied habitat. We suggest maximizing the use of the WTA by aircraft and minimal use of the area by mechanized land-based vehicles. Aircraft impacts could be lessened by reducing the number of aircraft LSAs to the minimum number required to meet training needs.

Based on our review of the DEIS, it appears WTA Alternative 1, Medium-intensity Aviation Task Force, may be compatible with retaining and enhancing the MGS population and minimizing loss of its habitat. Regarding land-based vehicle use, adjusting such use to correspond with the inactive seasons of the MGS (typically July-February) may substantially reduce the potential for vehicle crushing direct impacts to MGS. Further minimizing the impacts of Alternative 1 could lead to another alternative, which we term a Low-intensity Aviation Task Force.

Comment/Joshua Trees: According to the DEIS, Joshua tree (*Yucca brevifolia*) woodland occurs in the northern portion of the WTA, with extensive stands of large or mature individual trees. The DEIS (page 3-6) states, “Although the Joshua tree is under review by CDFW for protection under CESA, it is not considered a special status species at this time.” Special Status Species are those afforded some level of federal, state, or local protection (DEIS, p. 3-1). Joshua tree woodlands are comprised of dense stands of individual Joshua trees, the latter of which occur over a substantial portion of the WTA.

The California Fish and Game Commission (CFGF) recently determined that listing the Western Joshua tree may be warranted under CESA, which automatically gave the species interim protection as a Candidate for listing under Section 2085 of the California Fish and Game Code during the remainder of the CESA listing evaluation process. At its meeting on September 22, 2020, the CFGF adopted a Special Order regarding incidental take of Western Joshua trees during the candidacy period for 15 proposed solar energy projects in Kern and San Bernardino counties. The proposed expansion of training and infrastructure at Fort Irwin was not granted incidental take for Western Joshua tree by the Fish and Game Commission in its Special Order.

Recommendation: The Western Joshua tree should be identified in the FEIS as a Special Status Species because it has been given protection as a Candidate for listing under CESA since September 22, 2020. We recommend the Army initiate consultation with the CDFW, Inland Deserts Regional Office in Ontario, California, to discuss the need and procedure for obtaining an Incidental Take Permit for the Western Joshua tree.

Within all areas proposed for ground-based training, we recommend Joshua tree woodland habitats be identified as Off Limits/Non-Maneuver areas. An appropriate buffer that will protect ecological

features associated with these special habitats should also be established for ground-based training actions.

Comment/Lane Mountain Milkvetch (*Astragalus jaegerianus*): Four populations of the endangered Lane Mountain milkvetch – Coolgardie, Paradise, Brinkman Wash, and Montana Mine – occur on and adjacent to Fort Irwin and critical habitat for this federally listed endangered plant has been designated. According to the DEIS, the WTA supports large populations of this species in the southern and eastern portions of the WTA. Mitigation for potential impacts to Lane Mountain milkvetch is not specified in the DEIS.

The Bureau of Land Management’s 2006 West Mojave Plan established two areas of critical environmental concern (ACEC); one large ACEC encompasses the entirety of the Coolgardie population of milkvetch, and a much smaller one that directly abuts one of the preserves on the NTC. Prescriptions for such actions as route reduction, withdrawal of lands from future mining and fencing and signing as necessary for public education were adopted.

Recommendation: We recommend that specific impact avoidance and minimization measures for Lane Mountain milkvetch be developed and included in the FEIS. We make this recommendation because the DEIS simply states, “...special status species [of plants] would be managed in accordance with agreements with USFWS (**Biology Mitigation-5**).”

Surveys used to document the occurrence of Lane Mountain milkvetch were not described in the DEIS. We are concerned that the sources of information used to address this species may be out of date and may not accurately account for the areas currently inhabited. Current and accurate location data for this species is needed for the Army to develop proposed impact avoidance and minimization measures.

We anticipate that the biological opinion for the proposed expanded training and infrastructure, currently in preparation by the USFWS, will provide greater detail on the occurrence and status of this species, including measures it deems necessary to avoid jeopardizing its existence and avoiding adverse modification or destruction of its critical habitat. However, we believe the Army has an obligation to disclose anticipated impacts to this species and mitigation measures to avoid and minimize those impacts in the DEIS and FEIS, and not simply rely on unspecified “agreements with USFWS.”

2. Eastern Training Area (ETA)

The ETA was added to Fort Irwin through federal legislation signed into law on December 21, 2002. It is comprised of 46,438-acres of public land withdrawn from public land laws and entry under the mining law for exclusive use by the Army.

Comment/Agassiz’s Desert Tortoise: An estimated 288 adult tortoises were determined to occupy the ETA based on field surveys performed in 2003.¹⁴ Terrain in the ETA is much more rugged than

¹⁴ United States Department of the Army. 2003. Transmittal letter and Biological Assessment for the Proposed Addition of Maneuver Training Lands at Fort Irwin, California, Document prepared by Charis Professional Services Corporation. 8 chapters plus appendices. Fort Irwin, California.

in the WTA, which limits access to many of the areas currently occupied by the desert tortoise. Based on the terrain features and limited amount of suitable habitat for the desert tortoise, we believe the DEIS adequately describes and mitigates potential impacts to the desert tortoise in the ETA.

Comment/Desert Bighorn Sheep: The DEIS is largely silent on the number, trend and habitat conditions within the ETA for desert bighorn sheep (*Ovis canadensis nelsoni*), other than, “...Nelson’s desert bighorn sheep may occur in the five mountain ranges on Fort Irwin, but its activity appears to be concentrated in the Avawatz Mountains at the extreme eastern end of the Northern Corridor.” (DEIS p. 3-20).

The estimated population of desert bighorn sheep in the entire Avawatz Mountains is 50-100 according to the CDFW.¹⁵ The ETA borders the Avawatz Mountains Wilderness to the north and the Soda Mountains Wilderness to the south, both of which form large blocks of protected habitat for bighorn sheep throughout the area.

Currently, bighorn sheep occupy the Avawatz, both within the NTC and on adjacent lands managed by BLM and National Park Service due to the presence of several key water sources. The Soda Mountains Wilderness, lacking water sources and isolated from a sizeable bighorn population in the South Soda Mountains by Interstate 15, is located to the southeast. The Soda Mountains is a priority area for restoring a protected bighorn sheep population by constructing a wildlife crossing bridge and habitat linkage over Interstate 15 and installing rainwater catchments or guzzlers in strategic locations. Discussions are underway among officials within the California Department of Transportation and CDFW to have a wildlife crossing installed as part of the mitigation for impacts of the Desert Xpress high speed railroad that would be located within the I-15 median strip.

Mitigation measures submitted by Defenders and the Council in a scoping comment letter intended to avoid and minimize impacts to bighorn sheep are not reflected in the DEIS. Thus, we resubmit them as recommendations, below.

Recommendation: We recommend the Army manage its current and planned activities in the ETA to allow for desert bighorn sheep to move freely through the area, and that any security fences currently installed or planned in the future accommodate such movements.

The Army could additionally contribute to the conservation of this species by funding the installation of rainwater catchments to provide water for bighorn sheep at strategic locations identified by the CDFW, and in coordination with the BLM if the water sources would be located on public lands.

3. Mitigation Measures

The DEIS includes seven mitigation measures that are intended to minimize the effects of the proposed action and alternatives on biological resources. Overall, the proposed measures would minimize or avoid mortality to various species of special concern through standard or best

¹⁵ Epps, C.W., V.C. Bleich, J.D. Wehausen, and S.G. Torres. 2003. Status of Bighorn Sheep in California. 2003 Bighorn Council Transactions: Volume 47. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43852&inline>.

management practices. Some mitigation measures can't be identified until the consultation with the USFWS is completed, and a biological opinion is issued to the Army (i.e., Biology Mitigation-5: Implement mitigation measures related to federally listed species in accordance with agreements made with the USFWS and as documented in a biological opinion).

We submitted impact mitigation measure recommendations in a scoping comment letter for the proposed expansion of training activities and infrastructure at Fort Irwin on September 8, 2020. Frustratingly, not even one of those recommendations was incorporated into proposed mitigation measures listed in the DEIS.

Recommendation: We recommend that additional, specific mitigation measures be developed and included in the FEIS, in addition to those included in the forthcoming biological opinion from the USFWS. Additional recommended mitigation measures include the following, which follow the numbering sequence of those in the DEIS:

Mitigation Measure 8: Minimize impacts to the desert tortoise, Mohave ground squirrel and Western Joshua trees in the WTA by restricting ground vehicle use to a minimum number of existing dirt roads and placing Aircraft LSAs in previously disturbed areas or areas with no or minor occurrence of these species.

Mitigation Measure 9: Minimize direct impacts to the desert tortoise and Mohave ground squirrel by avoiding motorized vehicle use on designated dirt roads during the months of March-May and September-October.

Mitigation Measure 10: Fund all measures and activities designed to fully protect desert tortoise relocation and translocation area(s) on BLM managed public lands, if applicable.

Mitigation Measure 11: To mitigate overall long-term adverse impacts on the desert tortoise and desert bighorn sheep, acquire the grazing permit and base property for the Ord Mountain allotment and notify the BLM that all forage previously allocated to cattle should be allocated to wildlife. (Note: The Army attempted to acquire the permit and base property for this allotment approximately 20 years ago when Fort Irwin was expanded, but was unsuccessful).

Mitigation Measure 12: Establish a desert bighorn sheep conservation and management fund to support habitat restoration and enhancement projects undertaken by the Twentynine Palms Band of Mission Indians in cooperation with BLM and the CDFW. (Note: the Twentynine Palms Band of Mission Indians is a federally recognized tribe whose ancestral land included what is now Fort Irwin, much of the High Desert and the San Bernardino National Forest. Desert bighorn sheep has high cultural significance to the tribe).

Mitigation Measure 13: Contribute to the National Fish and Wildlife Foundation/Desert Managers Group raven control fund based on acres disturbed for non-renewable energy projects or activities and specify those funds support raven control in the Superior-Cronese and Fremont-Kramer CHUs in the Western Mojave Recovery Unit.

Mitigation Measure 14: Install and maintain protective fence that allows for safe passage of wildlife around large blocks of Army-acquired Catellus and BLM-managed public lands, and close and rehabilitate vehicle routes within habitat enclosed by the fenced boundary.

Mitigation Measure 15: Fund two BLM law enforcement rangers for five years that are dedicated to enforcing OHV area and route closures in the Superior-Cronese CHU.

4. Fort Irwin INRMP

The DEIS indicates that various Special Status Species occurring within Fort Irwin will “...continue to be monitored and managed in accordance with the Fort Irwin INRMP [Integrated Natural Resources Management Plan].”

Recommendation: We recommend that all monitoring and management commitments for individual Special Status Species in the INRMP be included in the FEIS. This will allow for a comprehensive description of how these species will be managed at Fort Irwin and facilitate how this information is documented and conveyed to the public.

The INRMP for Fort Irwin was prepared in compliance with the Sikes Act (as amended), which states, in part:

“Cooperative Preparation: The Secretary of a military department shall prepare each integrated natural resources management plan for which the Secretary is responsible in cooperation with the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, and the head of each appropriate State fish and wildlife agency for the State in which the military installation or State-owned National Guard installation concerned is located. Consistent with paragraph (4), the resulting plan for the military installation or State-owned National Guard installation shall reflect the mutual agreement of the parties concerning conservation, protection, and management of fish and wildlife resources.”

The DEIS indicates that the current INRMP covers all the lands within Fort Irwin, including those additional withdrawn lands added to the installation in 2002. However, the DEIS does not describe any of the mutual agreements reached between the Army, USFWS and CDFW regarding conservation, protection and management of fish and wildlife resources within the installation. Rather the DEIS simply states, “The INRMP includes fire management prescriptions, including rapid response and effective control of fires. Further, adherence to fire safety measures during training reduces the potential for fires.”

The Army’s INRMP for Fort Irwin needs to be updated to include agreed-upon monitoring and management commitments for the Western Joshua tree, a Candidate for listing under CESA, which is protected under Section 2085 of the California Fish and Game Code.

5. Fort Irwin Blue Ribbon Panel Report

LaRue (2000)¹⁶ published the findings of a scientific panel that was assembled by the Department of Army and Department of Interior regarding the proposed expansion of Fort Irwin, which we provide herein because it is missing from or not used in preparing the DEIS. The Blue Ribbon Panel Report (Report) is particularly apropos because it specifically addresses impacts associated with Fort Irwin expansion southwards into the Alvord Mountains, which has already occurred, and expansion into the WTA, which has occurred but without the potentially intensive military training envisioned in the DEIS, depending on the selected alternative.

Whereas this Report is provided in a link in the footnote and incorporated by reference as existing information that was not included in the DEIS, a few pertinent quotes follow with regard to the importance of this area to tortoise recovery, the status of the tortoise in 2021 compared to 2000, impacts associated with use of the WTA, and proposed mitigation measures, many of which have not been implemented:

Page 1. “The current status of the tortoise [in 2000] is further from recovery than when first listed in 1990. These [1998-1999] surveys indicate that current tortoise numbers are very much lower than was estimated in 1984 on Dr. Berry's maps.” As noted above, the declines have continued since this statement in 2000, with a 51% decline in tortoise numbers from 2004 to 2014.”

Page 3. “Delays in implementing the Recovery Plan have contributed toward the direction of a jeopardy biological opinion for the southern expansion of Fort Irwin. This is one reason this panel concludes that the protection of those remaining tortoises and their habitat is even a higher priority now [in 2000] than in 1994.”

Similarly, on Page 4, “. . .it is the conclusion of this panel that the answer is ‘Yes, the [southern] expansion [of Fort Irwin] would constitute jeopardy in the West Mojave Recovery Unit.’”

Page 4. “All available data support this team's conclusion that the current southern expansion [of Fort Irwin] proposal is likely to jeopardize the tortoise. Given the above information, this panel concludes that the desert tortoise in the West Mojave Recovery Unit is more appropriately characterized as ‘endangered’ than ‘threatened,’ even if Fort Irwin does not expand.”

The panel identified the subject area, including the WTA, as important to tortoise recovery for the following reasons:

Page 5. “Most of the proposed expansion area has been identified as essential to tortoise recovery by the U.S. Fish and Wildlife Service. The southern and western portions of the proposed expansion

¹⁶ Results of the Fort Irwin Tortoise panel meeting of 18-19 January and 18 February 2000. Dated 15 March 2000, findings of the 13-member panel considering mitigation measures to offset the expansion of Fort Irwin. <https://www.dropbox.com/s/fwky2t9ax1pyo8x/Blue%20Ribbon%20Panel%20Report.LaRue.2000.pdf?dl=0>.

area, calculated to be approximately 182 mi², were designated in 1994 as tortoise critical habitat by the U.S. Fish and Wildlife Service.”

Page 5. “Most of the proposed expansion area has been identified as essential to maintaining viable desert tortoise populations by the Bureau of Land Management. Thus, of the 1,288 mi² currently designated as Category I and II habitat in the West Mojave [by the BLM, a designation that is no longer used], approximately 182 mi² (14%) would be lost to the expansion.

Page 6. “The tortoise distribution in the proposed expansion area may limit the spread of those infectious diseases important to the tortoise. The spatial distribution of tortoises within the proposed expansion area, particularly in the Paradise Valley and eastern portions of Superior Valley, is one characterized by high density pockets surrounded by lower densities.”

Page 6. “Given the limited, available data, the prevalence of upper respiratory tract disease appears not to be as pronounced in the vicinity of Fort Irwin as it is in other areas of the West Mojave, such as the Desert Tortoise Research Natural Area. If tortoises are indeed relatively disease-free in this area, it may be due to the isolation from diseased populations or resistance to the disease. In either case, these tortoises contribute significantly to the recovery potential for tortoises in the West Mojave.”

Page 7. “The proposed expansion area is comprised of relatively pristine, undisturbed habitat. As per the disturbance analysis completed by the Chambers Group in 1990, 223 of the 273 square miles (82%) in the proposed expansion area (which includes the 182 mi² of critical tortoise habitat) were characterized as "Least Disturbed" (20.7 mi² and the highest rating of habitat quality) and "Lightly to Moderately Disturbed" (202 mi² and the second highest rating). Only 0.6 mi² of the proposed expansion area was characterized as "Irretrievably Lost" (the lowest rating).”

Page 7. In the WTA, “...there are no off-highway vehicle areas open to free play in the vicinity, thus relatively little cross-country travel was noted away from existing roads; there are no utility corridors fragmenting the area (the Boulder Corridor is located just east of the proposed expansion area); no cattle allotments occur (the Cronese Lakes allotment is located just east), nor is there illegal sheep grazing as has been noted elsewhere in the West Mojave; although historic mining occurred at the abandoned Goldstone town site, no active mines are found in the area. And mainly, there is no urban interface, which presently threatens tortoises in all other DWMAAs [Desert Wildlife Management Areas].”

On pages 9 through 13, the Report includes mitigation measures in Section III: Measures Necessary to Reduce the Likelihood of Jeopardy if Expansion Occurs. Except for retiring cattle and ephemeral sheep allotments in the Superior-Cronese CHU, none of the measures identified by this panel have been implemented. We recommend that the Army reconsider these measures as still being pertinent to the current proposal to open the WTA to mechanized impacts.

Conclusion

Our comments and recommendations on the DEIS for proposed expansion of training and infrastructure at Fort Irwin identify our concerns over impacts to Special Status Species and provide recommendations for resolving those impacts. **We do not concur with the DEIS statement:**

“Because the identified cumulative activities as well as the Mission Change Alternative would be managed in accordance with the ESA and other applicable regulation and all projects on Fort Irwin would be managed in accordance with the Fort Irwin INRMP, the combined effect from these activities **is expected to be less than significant**” (emphasis added).

The relatively undisturbed conditions within the WTA (documented in LaRue 2000) and the extensive presence of Special Status Species (e.g., desert tortoise, Mohave ground squirrel and Western Joshua tree) have the potential to be significantly impacted depending on the alternative adopted.

We have offered an alternative to the Medium-Intensity Aviation Task Force designed to minimize the adverse impacts to Special Status Species within the WTA, and which may provide sufficient protection for the desert tortoise to preclude the need for the Army to capture, relocate and translocate up to 1,100 individuals off the installation and into the Superior-Cronese CHU.

Please contact us if you would like to discuss our comments and recommendations prior to preparation of the FEIS.

Sincerely,



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