



FINDING OF NO SIGNIFICANT IMPACT

Programmatic Environmental Assessment for Integrated, Adaptive Management of the Common Raven on Department of Defense Lands in the California Desert



INTRODUCTION

The Marine Air Ground Task Force Training Command (MAGTFTC), National Environmental Policy Act (NEPA) lead agency, and cooperating agencies prepared the *Final Programmatic Environmental Assessment for Integrated, Adaptive Management of the Common Raven on Department of Defense Lands in the California Desert*.

The Final Programmatic Environmental Assessment (PEA) was prepared in accordance with NEPA (42 United States Code §§ 4321-4370h), Council on Environmental Quality NEPA implementing regulations (40 Code of Federal Regulations [CFR] §§ 1500-1508) (version effective July 18, 2005), and agency-specific supplemental NEPA regulations, namely: 32 CFR Part 775 (Navy); 32 CFR Part 989 (Air Force); 32 CFR Part 651 (Army); 7 CFR Part 372 (Animal and Plant Health Inspection Service); and 43 CFR Part 46 (U.S. Fish and Wildlife Service [USFWS]). The Final PEA is incorporated by reference into this Finding of No Significant Impact (FONSI).

There is a need to resolve the ecological, economic, and health and safety impacts of the elevated and increasing Common Raven (*Corvus corax*) populations in the California desert (Final PEA, Sections 1.3.2 and 1.3.3). To resolve these issues, integrated, adaptive raven management is proposed to occur primarily at these six Department of Defense (DoD) installations: Marine Corps Air Ground Combat Center (Combat Center); Marine Corps Logistics Base Barstow; Edwards Air Force Base; Fort Irwin National Training Center; Naval Air Weapons Station China Lake; and Chocolate Mountain Aerial Gunnery Range (administered by Marine Corps Air Station Yuma) (Final PEA, Section 1.2). These installations are located in the California counties of Kern, Inyo, Imperial, Los Angeles, Riverside, and San Bernardino.

This FONSI is MAGTFTC-specific. Each cooperating agency is individually responsible for issuing separate agency decisions, obtaining any necessary permits, and completing any required consultations (Final PEA, Sections 1.8, 1.10, and 5.4).

PROPOSED ACTION AND ALTERNATIVES

The Final PEA analyzed the No-Action Alternative (current raven management actions; primarily *ad hoc* and non-lethal) and the Proposed Action (integrated, adaptive management of the raven; non-lethal and lethal raven management actions), including Resource Protection Measures and proposed discretionary monitoring protocol and mitigation. No other action alternatives were evaluated because all potential raven management actions are included in the Proposed Action. Continuing with the No-Action Alternative would not achieve the Purpose and Need (Final PEA, Sections 2.1, 2.2, 2.3, and 2.4).

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

In accordance with Council on Environmental Quality regulations, the analyses in the Final PEA focused on the potential resources that could be most affected by the No-Action Alternative and Proposed Action (Final PEA, Section 1.5 and Chapter 3 introduction), and considered the topics included within the definition of “significantly” (40 CFR §1508.27).

The Final PEA did not identify any significant adverse, beneficial, or cumulative impacts on the human environment or any resource from implementing any raven management actions under the No-Action Alternative or Proposed Action (Final PEA, Chapters 3 and 4). Implementation of non-lethal methods (No-Action Alternative) or non-lethal methods in conjunction with lethal methods (Proposed Action) to manage raven populations at lands owned or used by the DoD in the California desert would have less than significant beneficial or adverse impacts to three resource categories: *Biological Resources*, *Health and Safety*, and *Cultural Resources* (Final PEA, Sections 3.1, 3.2, and 3.3). The notable but less than significant impacts associated with the Proposed Action are as summarized below.

The effects of the No-Action Alternative are within the scope of the Proposed Action. Potential impacts to other resources were determined to be negligible or non-existent, and not warranting detailed analysis (Final PEA, Section 3.4).

- **Biological Resources.** The reduction in densities of ravens on DoD installations in the California desert would have overall beneficial impacts to wildlife populations, primarily those that experience predation pressure from increased raven populations. Once implemented and maintained, non-lethal raven management actions, in conjunction with lethal management actions, would overall provide short-term and long-term beneficial effects to the desert tortoise and other wildlife species. Lethal management under the Proposed Action would initially remove up to 11,830 to 13,293 ravens from the population on DoD lands in the California desert, followed by 1,477 to 1,715 ravens removed annually. This lethal removal of ravens would have more immediate beneficial impacts on desert tortoises, because removal of ravens, especially those directly impacting desert tortoises, would reduce predation pressure on the species. This represents a direct and indirect beneficial impact on desert tortoise populations in the California desert. The U.S. Department of Agriculture (USDA) Risk Assessment on the use of DRC-1339 (pesticide) identified potential direct and indirect adverse effects to non-target species (e.g., moderate to high toxicity to desert tortoise) and the environment (e.g., bioaccumulation and accelerated eutrophication of wetlands). These effects are considered low to unlikely based on available data and considering the Resource Protection Measures incorporated into the Proposed Action, which include following the appropriate practices and protocols for DRC-1339 use (e.g., pre-baiting, carcass retrieval, and site monitoring). The critical avoidance and prevention measures for biological resources incorporated into the Proposed Action are expressly listed as Resource Protection Measures #1, 2, 4, 5, 6, 7, 8, 9, 10, and 11. (Final PEA, Sections 2.4.1, 3.1.3.2, and 4.3.1; Appendix C; and Appendix D).
- **Health and Safety.** The reduction in densities of ravens on DoD installations in the California desert would have overall beneficial impacts to health and safety. Reduced nesting, perching, and roosting and associated build-up of raven excreta, scattering of trash, and Bird/Wildlife Aircraft Strike Hazard risk, would benefit health and safety by minimizing risk and exposure. The USDA Risk Assessment on the use of DRC-1339 identified potential direct adverse effects via worker exposure (i.e., USDA Animal and Plant Health Inspection Service personnel handling DRC-1339). These effects and risks would be avoided and minimized by following the appropriate practices and protocols for DRC-1339 handling, use, storage, and personal protective equipment. The proper use of lethal management actions by trained personnel following proper precautions would ensure public and personnel safety. The critical avoidance and prevention measures for health and safety incorporated into the Proposed Action are expressly listed as Resource Protection Measures #3, 4, 9, 10, 11, 12, 13, 14, and 17. (Final PEA, Sections 2.4.1, 3.2.3.2, and 4.3.2; Appendix C; and Appendix D).
- **Cultural Resources.** Impacts to historic properties from implementing raven management actions would be avoided or minimized to the extent possible (e.g., avoid known resources or sites), with the Section 106 process being completed in advance for management actions considered to be an “undertaking” per the National Historic Preservation Act. The Section 106 process would ensure effects are not adverse, or that adverse effects are resolved prior to implementation. Native American tribal consultation would be part of any future Section 106 process. As explained in the PEA, many of the management actions would not be considered undertakings (Table 3-5). Based on the tribal outreach conducted for this PEA, no known Native American tribal resources or rights would be affected by implementing the Proposed Action; however, continued coordination with Native American tribes is anticipated. The critical avoidance and prevention measures for cultural resources incorporated into the Proposed Action are expressly listed as Resource Protection Measures #15 and 16. (Final PEA, Sections 1.7, 2.4.1, 3.3.3.2, and 4.3.3).

Considering the Resource Protection Measures incorporated into the Proposed Action, the Final PEA analyses did not reveal any data gaps or uncertainties that suggest there could be potentially significant impacts such that additional data collection or analysis is needed to understand potential effects.

- **DRC-1339.** The USDA Risk Assessment on the use of DRC-1339 identified a data gap pertaining to lack of toxicity data for reptiles, such as the desert tortoise. In cases where data is lacking, the U.S. Environmental Protection Agency assumes that avian toxicity data is representative of reptiles, with moderately to highly toxic effects if reptiles are exposed. This bridged the disclosed data gap, informed the Endangered Species Act (ESA) Section 7 consultation, and informed the development of Resource Protection Measures, including additional explanation of prevention measures already integrated into the DRC-1339 label requirements. (Final PEA, Sections 1.8, 2.4.1, and 3.1.3.2 and Appendix D).

The Final PEA analyses did not reveal any potential significant impacts that required mitigation to reduce potential impacts to below significant levels, as explained below.

- **Resource Protection Measures.** Resource Protection Measures #1 through 17 are incorporated into the Proposed Action to ensure potential adverse effects are avoided, minimized, and/or do not rise to significant levels. (Final PEA, Sections 2.4.1, 3.1.3, 3.2.3, 3.3.3, and 3.4).
- **Discretionary Monitoring Protocol.** The USFWS recommends an annual raven monitoring protocol (e.g., *Common Raven Adaptive Conflict Management Strategy*) as part of the Proposed Action. This monitoring protocol is classified as discretionary. However, such monitoring would enhance accuracy of raven estimates, adapting management toward goals, and likely be a requirement for securing a deprecation permit from the USFWS, Migratory Bird Program (Final PEA, Sections 2.4.2 and 5.2 and Appendix E).
- **Discretionary Mitigation.** To achieve a more preferable outcome under NEPA and pursuant to ESA Section 7(a)(1), MAGTFTC proposes to fund implementation of the Recovery and Sustainment Partnership (RASP) Initiative to recover desert tortoises per the USFWS's 2011 *Revised Recovery Plan for the Mojave Population of the Desert Tortoise*. MAGTFTC funds would be used to implement agency actions outside of the Combat Center, with the expenditure of funds limited to actions that are within the scope of existing regulatory authorizations and approved by the land owner-manager. Otherwise, the expenditure of funds would be conditioned on future authorizations and approval (Final PEA, Section 2.4.3.3). If DoD installations are not able to implement the Proposed Action, funding may be available to assist these installations, subject to RASP's initial project emphasis (Final PEA, Sections 2.4.3 and 5.3). Raven management is within the scope of RASP because the 2011 Recovery Plan identifies predation as a critical concern for desert tortoise recovery (Final PEA, Section 1.3.3.1).

CONCLUSION

Based on my review of the Final PEA, I conclude that neither the No-Action Alternative nor the Proposed Action significantly impact any resources, individually or cumulatively, in the project area (DoD lands, non-DoD lands, and Western Mojave Recovery Unit). This conclusion accounts for Resource Protection Measures incorporated into the Proposed Action, extends to the proposed discretionary raven monitoring protocol, and extends to funding of RASP projects in the project area. (Final PEA, Sections 1.2 and 2.4.3 and Chapters 3 and 4).

Overall, the proposed goal of raven population reduction would affect a small percent (approximately 4 percent [%] of the total state population and approximately 13% of the California desert population) with success dependent on the efforts across the DoD installations. The reduction of overpopulated ravens would have immediate and long-term beneficial effects to its prey species, including the desert tortoise. If the Proposed Action is successfully implemented, ecosystem balance would be improved without changing the natural predator-prey dynamics. Additionally, if ecosystem balance is restored, DoD installations

would experience an immediate decrease of the negative economic and health and safety impacts caused by the overpopulation of ravens.

Therefore, MAGTFTC will not prepare an Environmental Impact Statement for implementing the Proposed Action, conducting raven monitoring, or funding RASP projects in the project area.

DECISION

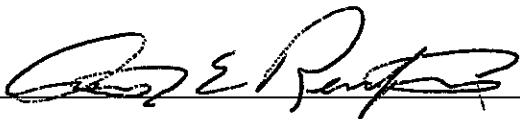
To achieve the Purpose and Need, I authorize implementation of the Proposed Action, including discretionary monitoring and mitigation in the project area, which includes: the Combat Center, non-DoD lands (as approved by land owner/manager), and the Western Mojave Recovery Unit focus areas (fund RASP projects). The Proposed Action represents a shift toward implementing more lethal means of raven management and better integration of non-lethal and lethal means. The precise mix of raven management actions will be determined by the Combat Center's Environmental Affairs Division, in coordination with appropriate agencies, to include the USFWS. The Combat Center's Integrated Natural Resource Management Plan will be updated to track specific details guiding future raven management, and be made available on the Environmental Affairs webpage, under "Environmental Documents" (<https://www.29palms.marines.mil/Staff-offices/Environmental-Affairs/>).

Pursuant to NEPA and ESA Section 7(a)(1), and subject to the availability of funds:

- I authorize the adoption of Resource Protection Measures incorporated in the Proposed Action. All persons implementing the Proposed Action at the Combat Center or on behalf of MAGTFTC on non-DoD lands are required to ensure compliance with these measures.
- I authorize adoption of the USFWS-recommended, discretionary monitoring protocol to support MAGTFTC's request for a depredation permit, and to ensure raven management is effective. The Combat Center's Environmental Affairs Division will ensure the Proposed Action is re-evaluated periodically, based on monitoring results, to determine whether continued raven management actions are warranted.
- I authorize adoption of the RASP discretionary mitigation. MAGTFTC's role is largely via contributing funds or in-kind conservation efforts, for off-site implementation. In light of this long-term commitment, MAGTFTC will re-evaluate its existing desert tortoise management at the Combat Center to determine if any changes are needed to support current and future training. MAGTFTC's commitment will be contingent on increased regulatory flexibilities that facilitate military training at the Combat Center, if needed. The Combat Center's Environmental Affairs Division will ensure compliance with these limitations.

IMPLEMENTATION

The Proposed Action, raven monitoring protocol, and funding RASP projects may be implemented any time after the FONSI is signed, subject to required permits (e.g., Migratory Bird Treaty Act), consultations (e.g., National Historic Preservation Act, Section 106), or additional NEPA analysis as explained in the Final PEA (Sections 1.8 and 5.6).



A. E. RENFORTH
Major General, U.S. Marine Corps
Commanding General
Marine Air Ground Task Force Training Command
Marine Corps Air Ground Combat Center



Date