



Final
Environmental
Assessment for
Implementation of the
Integrated Natural
Resources
Management Plan
2018-2022

Marine Air Ground
Task Force Training
Command
Marine Corps Air
Ground Combat
Center
Twentynine Palms,
California

January 2019

Prepared by:
United States
Department
of the Navy and
United States
Marine Corps



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**DEPARTMENT OF DEFENSE
UNITED STATES MARINE CORPS
FINDING OF NO SIGNIFICANT IMPACT FOR IMPLEMENTATION OF THE
INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN, FISCAL
YEARS 2018-2022,
MARINE AIR GROUND TASK FORCE TRAINING COMMAND
MARINE CORPS AIR GROUND COMBAT CENTER (COMBAT CENTER)
TWENTYNINE PALMS, CALIFORNIA**

Pursuant to the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508) implementing procedural provisions of the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [USC] §§ 4321-4370h) and the U.S. Marine Corps (USMC) procedures for implementing NEPA, as described in Marine Corps Order (MCO) P5090.2A, Change 3, dated 26 August 2013, *Environmental Compliance and Protection Manual*, the USMC gives notice that an Environmental Assessment (EA) has been prepared for the Implementation of the Integrated Natural Resources Management Plan (INRMP), fiscal years 2018-2022, Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center, Twentynine Palms, California (herein referred to as the Combat Center). Based on the analysis provided in the EA, I have selected the Proposed Action and find that it will not have a significant impact on the human environment, and, therefore an environmental impact statement is not required.

Background: The USMC has prepared this EA to address the proposed implementation of the 2018 through 2022 Combat Center INRMP (revised INRMP) and the No-Action Alternative. The No-Action Alternative would continue to use the current INRMP, which is set to expire and maintains approaches to natural resources management that do not address recent changes in the installation's land size, land use, and desired program initiatives.

Proposed Action: The Proposed Action would adopt and implement the revised INRMP for the Combat Center. The revised INRMP would be consistent with the military use of the property and the goals and objectives established in the Sikes Act (as amended), reduce encroachment on the military mission, and provide further improvement in natural resources management. This revised INRMP streamlines the Natural Resources Program and schedules tasks within a 5-year workplan. The structure and action items together continue to apply an ecosystem-based approach to natural resources conservation and meet and exceed ongoing and new installation requirements for natural resources management.

Alternatives: Under the No-Action Alternative, the proposed implementation of the revised INRMP would not occur. Instead, implementation of the existing Natural Resources Program, as outlined in the 2012-2016 INRMP, would continue.

The No Action Alternative would retain the old program structure and all natural resources objectives and management practices detailed in the existing INRMP would be continued into the future. This program and resulting projects do not address new requirements resulting from the installation's recent land expansion and would therefore, not be in compliance with the 2017 LandEx Biological Opinion, the SAIA, and MCO P5090.2a.

The Combat Center deemed this alternative not appropriate to pursue, but this alternative has been carried forward for analysis in the EA because CEQ regulations stipulate that the No-Action Alternative be analyzed to assess any environmental consequences that may occur if the Proposed Action is not implemented. The No-Action Alternative also provides a baseline against which the Proposed Action can be compared.

Summary of Environmental Impacts: The EA supports this Finding of No Significant Impact (FONSI) by examining potential effects of the proposed action and its alternative on resources and areas of environmental concern that could be affected by implementation of the revised INRMP. The proposed action has been determined not to influence or affect some resource areas and determined not to warrant further analyses. These resource areas include socioeconomic/environmental justice, public health and safety, visual resources, land use, transportation and circulation, air quality, noise, airspace management, and cultural resources. The areas of environmental concern that could potentially be affected by implementation of the revised INRMP include: topography, geology, and soils; water; and biological resources. There would be no significant environmental impacts to these resources. Beneficial impacts would occur under the Proposed Action. Planned projects, such as erosion control and habitat restoration would create long-term, beneficial impacts with minor short-term impacts related to ground disturbance. The implementation of the Proposed Action would result in management practices that directly affect flora, fauna, soil, and water resources. It includes program planning and wildlife habitat and population management actions, to include endangered species, wet areas, grounds maintenance, pest management, training land management, fire management and protection of special interest areas. Therefore, implementation of the Proposed Action would result in an overall beneficial effect to topography, geology, and soils; water; and biological resources. Implementation of the Proposed Action would extend the benefits of management plans and mitigation measures in the revised INRMP to the newly acquired training areas. Therefore, implementation of the Proposed Action would not contribute to cumulatively significant impacts to topography, geology, and soils; water; and biological resources.

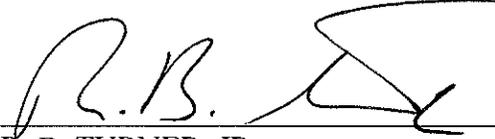
Findings: Based on the results of the EA, which completed two 30-day public review notifications (one on 31 May 2018 and one on 6 December 2018), the USMC has determined that implementation of the proposed action, as defined and executed in accordance with the procedures described, will have no significant direct, indirect, or cumulative impacts on the quality of the natural or human environment. A FONSI is thus warranted.

The requirements of NEPA and CEQ have been satisfied and an environmental impact statement is not required and will not be prepared.

The EA and FONSI addressing this action are on file and interested parties may obtain a copy from: Environmental Affairs, Building 1418, MAGTFTC, MCAGCC, Twentynine Palms, California, 92278. Direct telephone inquiries to Mr. Scott Kerr at (760) 830-8190. A limited number of copies of the EA are available to fill single-copy requests.

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Date

A handwritten signature in black ink, appearing to read "R. B. Turner, Jr.", written over a horizontal line.

R. B. TURNER, JR

Brigadier General, United States Marine Corps

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ACRONYMS AND ABBREVIATIONS

AMZ	Aerial Maneuver Zones
BLM	Bureau of Land Management
BMP	Best Management Practice
BO	Biological Opinion
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
Combat Center	Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center
CRPR	California Rare Plant Ranks
DRECP	Desert Renewable Energy Conservation Plan
DOD	Department of Defense
DON	Department of Navy
DOPAA	Description of the Proposed Action and Alternatives
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
EMUA	Exclusive Military Use Area
FONSI	Finding of No Significant Impact
FY	Fiscal Year
INRMP	Integrated Natural Resources Management Plan
LUPA	Land Use Plan Amendment
MAGTFTC	Marine Air Ground Task Force Training Command
MCAGCC	Marine Corps Air Ground Combat Center
MCO	Marine Corps Order
MILCON	Military Construction
MW	Megawatt
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
PV	Photovoltaic
ROI	Region of Influence
ROD	Record of Decision
SAIA	Sikes Act Improvement Act
SCM	Special Conservation Measure
SEIS	Supplemental Environmental Impact Statement
SHPO	State Historic Preservation Office
UPA	Unusual Plant Assemblage(s)
USC	United States Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USMC	United States Marine Corps

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ENVIRONMENTAL ASSESSMENT

Lead Agency: United States Marine Corps

Title of Proposed Action: Implementation of the 2018-2022 Integrated Natural Resources Management Plan for the Marine Air Ground Task Force Training Command and Marine Corps Air Ground Combat Center in Twentynine Palms, California

Project Location: San Bernardino County, California

Document Type: Description of Proposed Action and Alternative for the Environmental Assessment

Abstract

This Environmental Assessment (EA) has been prepared to analyze the potential impacts of projects associated with the proposed implementation of the Integrated Natural Resources Management Plan (INRMP) at the Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center (Combat Center), located in Twentynine Palms, California, for Fiscal Years (FY) 2018 through 2022 (Proposed Action). The purpose of the Proposed Action is to implement the natural resources program on the Combat Center to conserve federally managed lands and natural resources and ensure compliance with all applicable environmental laws and regulations. The INRMP supports the Combat Center's military mission by providing 5 years of sustainable management for these federal lands, ensuring natural resources conservation measures and military mission activities are integrated and consistent with Federal stewardship requirements. The INRMP also provides technical guidance for integrating natural resources management with issues and concerns into facilities and operational planning at the Combat Center. The current INRMP period of coverage is concluding and this required Plan update is considered a major revision because it has reorganized the existing program structure and integrated additional planning considerations, including the natural resources-related requirements of the 2012 Environmental Impact Statement (EIS), 2017 Supplemental EIS (SEIS) and 2017 USFWS Biological Opinion, which are associated with the establishment of large-scale training range facilities at the Combat Center. The revised INRMP also includes the addition of an outdoor education program (to include hunting), and diversifies planned tasks under the existing conservation strategy. This EA includes a thorough analysis of potential impacts to individual environmental resource areas including Topography, Geology, and Soils; Water Resources; and Biological Resources. The analysis determined no significant impact would be incurred on any environmental resources.

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January, 2019

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EXECUTIVE SUMMARY

The U.S. Marine Corps (USMC) is proposing to finalize and implement a revised Integrated Natural Resources Management Plan (INRMP) for the Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center (Combat Center) located in Twentynine Palms, California. This Environmental Assessment (EA) analyzes the proposed implementation of the revised INRMP, as well as a No-Action Alternative. The No-Action Alternative would continue the use of the current INRMP, which is set to expire and only maintains approaches to natural resources management that do not address recent changes in the installation's land size, land use, and desired program initiatives.

This EA identifies and evaluates the potential environmental consequences associated with the proposed implementation of the revised INRMP, in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [USC] 4321 et. seq.) and guidelines within Marine Corps Order P5090.2A (*Marine Corps Environmental Compliance Protection Manual*). This EA discusses the potential environmental impacts of two alternatives associated with the proposed implementation of natural resource management actions and projects described in Chapter 4 of the revised INRMP. There are two types of projects that are not covered by this EA. These include actions already analyzed in other NEPA documents (such as the Land Expansion 2012 EIS and 2017 SEIS), and those which include actions specifically identified in the INRMP as requiring NEPA analysis closer to the date of project implementation. Consequently, the only additional NEPA analysis required to fully support the implementation of this INRMP revision will be for those specific management actions or projects already identified in the proposed INRMP as requiring a future analysis, unless the existing environmental setting changes substantially or the INRMP is modified to include new management actions.

Purpose and Need

The current 2012 INRMP has been revised using a prescribed planning process to update and diversify the Combat Center's Natural Resources Management Program, which supports military mission readiness by ensuring quality military training lands are sustained for ongoing use. The INRMP revisions meet statutory requirements under the Sikes Act Improvement Act (SAIA), Public Law 105-85, Div. B Title XXIX, Nov. 18, 1997, 111 Stat 2017-2019, 2020-2033. This Act requires the Secretaries of the Army, Air Force and Navy to prepare and implement INRMPs for each military installation, unless exempted due to the absence of significant natural resources.

Revisions to the existing INRMP include the reorganization of the Natural Resources Management Program, the incorporation of conservation requirements outlined in the existing NEPA analyses for the expansion of the large-scale range training facility, and the addition of new program initiatives such as an outdoor education program. NEPA analyses were already performed to address the environmental impacts of expanding the Marine training program onto additional training lands, therefore in regards to land expansion, the revised INRMP serves as a scheduling tool, ensuring conservation measures from the earlier

NEPA analyses are identified and included within the Natural Resources Program's 5 year workplan.

Alternatives Analyzed

Under NEPA, reasonable alternatives to the Proposed Action must be assessed in an EA. The range of reasonable alternatives in this EA were identified by evaluating their ability to meet the purpose and need for action and their ability to meet the following criteria:

- Be based on the principles of ecosystem management;
- Provide for sustainable multipurpose use of natural resources;
- Maintain compliance with relevant environmental regulations;
- Provide for public access for use of natural resources subject to safety and military security considerations;
- Establish specific natural resources management objectives and timeframes for the Proposed Action; and
- Prevent loss in the capability of military lands to support the military mission of the installation.

NEPA requires that agencies consider a No-Action Alternative because it provides a baseline condition against which the other alternatives may be evaluated. The two alternatives considered in this EA include the Proposed Action and the No-Action Alternative, as they were the only alternatives deemed reasonable based on the screening factors.

Proposed Action Alternative/Preferred Alternative – Implementation of the 2018 through 2022 INRMP.

No Action Alternative – Continue implementation of the Natural Resources Program as outlined in the 2012 through 2016 INRMP, including natural resource management strategies and projects that no longer meet the training needs of the installation. The Natural Resources Program would not integrate required conservation measures for training in the western and southern EMUAs, would employ a less efficient program structure and reporting framework would be employed, and lack additional activities which strengthen and diversify the program.

Summary of Environmental Effects from the Proposed Action and No Action Alternatives

The NEPA Council on Environmental Quality regulations and Navy NEPA procedures specify that an EA should include an analysis of resource areas with the potential to be impacted by one or more of the alternatives. Three resource areas were identified as being potentially affected by the Proposed Action including: Topography, Geology, and soils; Water Resources; and Biological Resources. Table ES-1 presents a summary of the potential environmental impacts that would occur from implementation of the Proposed Action and

No Action Alternative. No significant impacts to any of these resources were identified for either the Proposed Action or the No Action alternatives.

Table ES-1. Summary of Environmental Effects from the Proposed Action and No Action Alternatives		
Resource Area	No Action Alternative	Proposed Action Alternative
Topography, Geology, and Soils	The No Action Alternative would result in the continuation of the current INRMP and would result in beneficial impacts on topography, geology, and soils resources. Management strategies would not be implemented within the newly acquired training areas. Minor short-term impacts to soils would result from natural resources management activities that involve ground disturbance.	Beneficial impacts on topography, geology, and soils would occur under the Proposed Action. Planned projects, such as erosion control and habitat restoration, would create long-term, beneficial impacts to soil resources. There would be no significant impacts to topography, geology, and soil resources. Minor short-term impacts to soils would result from natural resources management activities that involve ground disturbance.
Water Quality	The No Action Alternative would result in the continuation of the current INRMP and would result in beneficial impacts on water resources. Water resources management strategies would not be implemented within the newly acquired training areas.	No significant impacts on water resources would occur under the Proposed Action. Planned projects, such as erosion control and habitat restoration, would create long-term, beneficial impacts to water resources. There would be no significant impacts to water resources.
Biological Resources	The No Action Alternative would continue to implement the current INRMP and would also implement natural resource management plans. However, beneficial management practices outlined in the INRMP would not extend to the newly acquired training areas: Bessemer Mine, Galway Lake, Cleghorn Lakes, and Means Lake. As a result, implementing the No Action alternative would have less beneficial effects on biological resources compared to the Proposed Action Alternative.	The implementation of the Proposed Action would result in management practices that directly affect flora, fauna, soil, and water resources. It includes overall program planning, and wildlife habitat and population management to include threatened species, wet areas, grounds maintenance, pest management, training land degradation minimization, fire management and protection of special interest areas. Therefore, implementation of the Proposed Action would result in an overall beneficial effect to biological resources. Implementation of the Proposed Action would extend the benefits of management plans and mitigation measures in the revised INRMP to the expansion areas.

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**ENVIRONMENTAL ASSESSMENT
IMPLEMENTATION OF THE 2018-2022 INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN FOR THE MARINE AIR GROUND TASK FORCE TRAINING
COMMAND AND MARINE CORPS AIR GROUND COMBAT CENTER IN
TWENTYNINE PALMS, CALIFORNIA**

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All maps were compiled by MultiMAC Joint Venture, except if noted, using data believed to be accurate at the time of publication. However, a degree of error is inherent in all maps. The maps are distributed "AS-IS," without warranties of any kind, either, expressed or implied, including, but not limited to, warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of the maps to define the limits or jurisdiction of any Federal, state, or local government. The maps are intended for use only at the published scale. Detailed on-the-ground surveys and historical analyses of sites may differ from the maps.

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CHAPTER 1

PURPOSE OF AND NEED FOR ACTION

1.1 INTRODUCTION

This Environmental Assessment (EA) has been prepared to evaluate the potential environmental impacts associated with implementing the revised Integrated Natural Resources Management Plan (INRMP) for the Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center, located in Twentynine Palms, California. (hereafter referred to as the “Combat Center” or the “installation”).

This EA has been prepared by the United States Marine Corps (USMC) in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [USC] §§ 4321-4370h); Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of the Navy (DON) procedures for implementing NEPA (32 CFR Part 775); and Marine Corps Order (MCO) P5090.2A, Change 3, dated 26 August 2013, Environmental Compliance and Protection Manual.

Two Actions are evaluated in this EA: the Proposed Action and the No-Action Alternative. Under the Proposed Action the 2018-2022 INRMP will be implemented; this Planning document presents a streamlined framework for the Natural Resources Program and a new, 5 Year Workplan for monitoring and reporting progress. The new program structure and associated workplan accomplish the following: 1) incorporates conservation requirements outlined in the 2012 Environmental Impact Statement (EIS), 2017 Supplemental EIS (SEIS), and 2017 Biological Opinion (BO) into the program’s workplan (all of which are associated with the land expansion and desert tortoise translocation), 2) adds an outdoor recreation program, and 3) diversifies tasks under the existing Program strategy which aims to reduce conflicts between natural resources management requirements and the sustainment of military mission readiness. The No-Action Alternative would continue the existing program structure, without an implementation schedule or defined tasks over the next period of INRMP coverage, and without including conservation requirements associated with military training in the expansion lands.

1.2 PROJECT LOCATION DESCRIPTION

The Combat Center is located in the Mojave Desert within San Bernardino County in Southern California (Figure 1-1, Regional Location). The base is approximately five miles north of the city of Twentynine Palms, 54 miles northeast of Palm Springs, and 150 miles east of Los Angeles. Several small communities are located in the Morongo Basin, south and west of the base. In addition to Twentynine Palms, these communities include Joshua Tree, Yucca Valley, Morongo Valley, and Landers. The Combat Center's northern boundary lies three miles south of Interstate 40; the southern boundary is located roughly six miles north of Highway 62 (Figure 1-2, Site Vicinity).

Figure 1-1. Regional Location

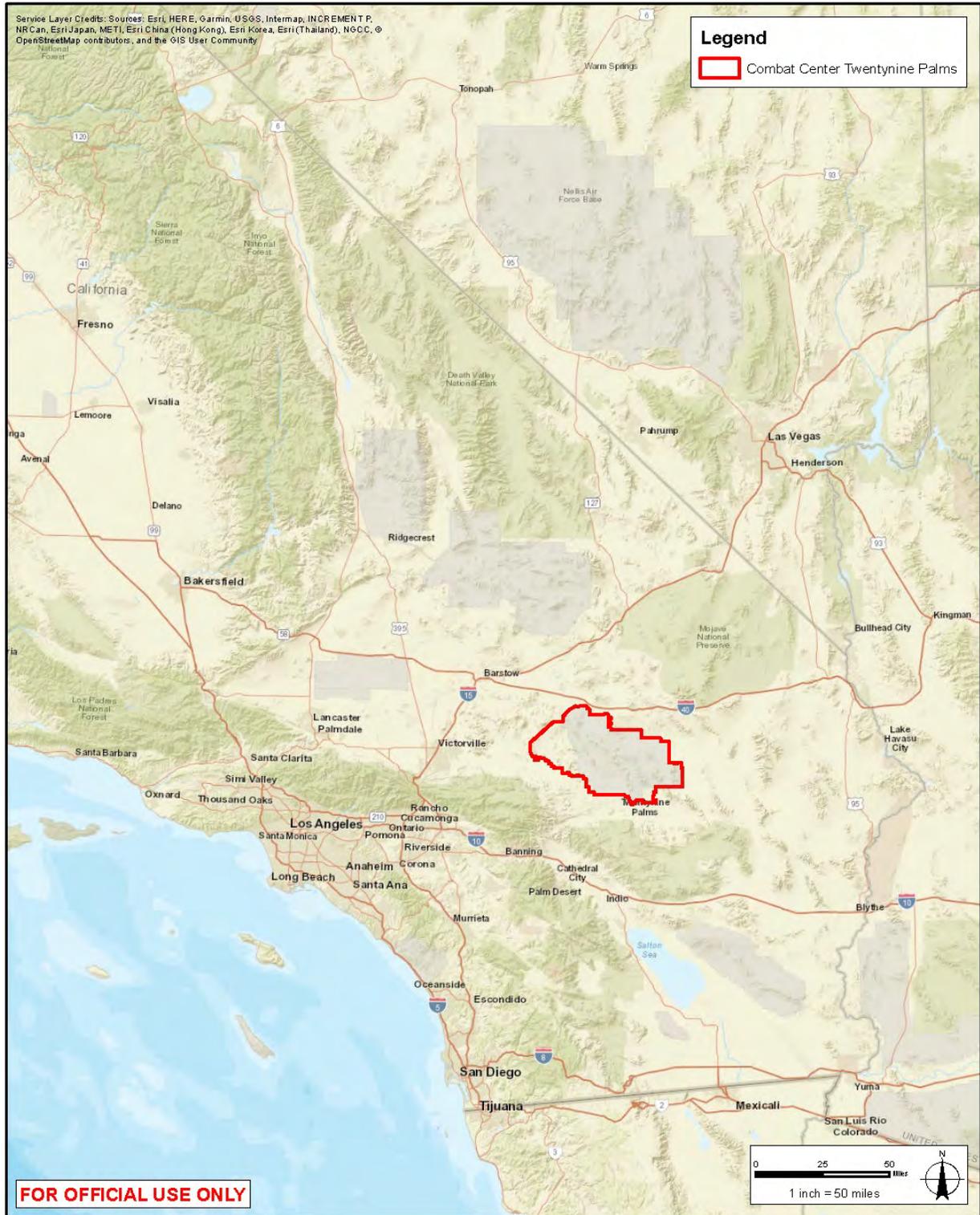
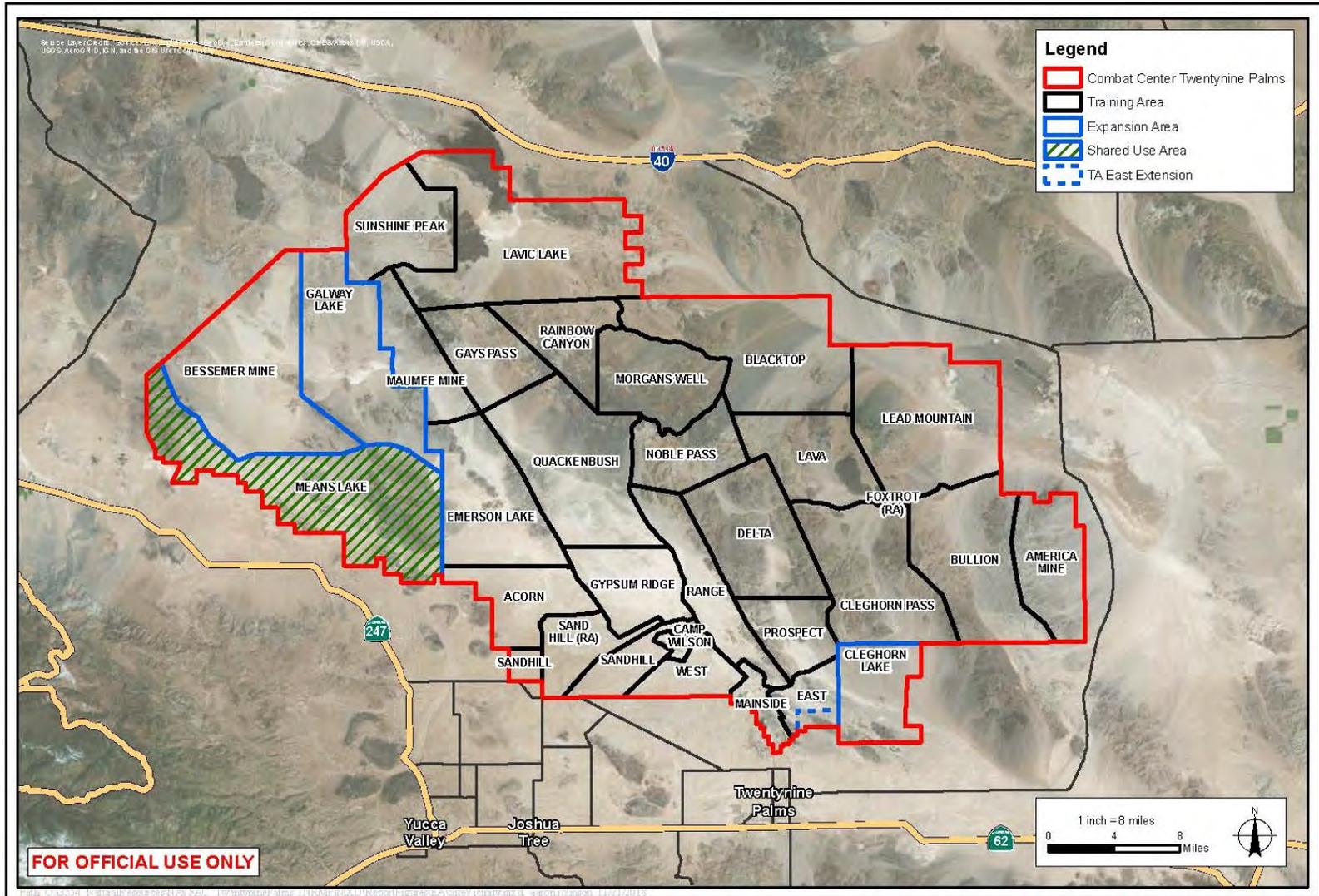


Figure 1-2. Site Vicinity



1.3 PURPOSE AND NEED

The purpose of the Proposed Action is to implement the revised INRMP, which addresses legacy lands as well as expansion areas of the installation, streamlines and diversifies the Natural Resources Program at the Combat Center, reduces encroachment of natural resources management on the military mission, and ensures high-quality natural resources are sustained aboard Marine Corps training lands. This Proposed Action is needed to meet statutory requirements under the Sikes Act Improvement Act (SAIA), Public Law 105-85, Div. B Title XXIX, Nov. 18, 1997, 111 Stat 2017-2019, 2020-2033. This Act requires the Secretaries of the Army, Air Force, and Navy to prepare and implement INRMPs for each military installation unless exempted due to the absence of significant natural resources.

INRMPs are 5-year planning documents that guide Department of Defense (DOD) installations in conserving and sustaining natural resources in order to maintain realistic, high-quality training environments over time. The Combat Center INRMP presents current information about the environmental conditions aboard the installation, reviews major military training activities, and presents the goals, objectives and elements of the Natural Resources Program. INRMPs further ensure that natural resources conservation measures and Marine Corps activities on mission lands are integrated and consistent with federal stewardship requirements outlined in the Sikes Act (as amended).

The current 2012-2016 INRMP was revised in accordance with DOD requirements. Changes proposed under this revision were substantial enough to designate the revision as “significant,” and therefore the Combat Center determined the draft INRMP warranted an Environmental Analysis level of NEPA review.

The revised INRMP details the natural resources management program and guides implementation for Fiscal Years (FY) 2018 - 2022.

1.4 SCOPE OF ANALYSIS

The NEPA CEQ regulations and Navy NEPA procedures specify that an EA should include an analysis of resource areas with the potential to be impacted by one or more of the alternatives. Three resource areas were identified as being potentially affected by the Proposed Action including: Topography, Geology, and Soils; Water Resources; and Biological Resources.

The following resource areas do not warrant detailed analysis in this EA as there would be no effects, or only minimal effects, to these resource areas from the proposed alternatives: Socioeconomic and Environmental Justice, Public Health and Safety, Visual Resources, Land Use, Transportation and Circulation, Air Quality, Noise, Airspace Management, and Cultural Resources. Table 1.1 briefly describes the basis for such exclusions.

Table 1-1. Resource Areas Minimally or Not Impacted

Resource Area	Reason Minimally or Not Impacted
Socioeconomic/ Environmental Justice	The Proposed Action and No Action Alternative would not adversely affect socioeconomic conditions. Implementation of the Proposed Action would comply with Executive Order (EO) 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations</i> . The Proposed Action specifies projects requiring site improvements, construction of facilities, or an increase in personnel will require future NEPA analysis and are not covered under this EA. Also, the Proposed Action would occur within the boundaries of the Combat Center. Therefore, no impacts to schools, children, or minority populations would occur and the Proposed Action would have no direct or indirect effects to the economy. As no permanent population centers, low-income communities, or minority communities exist in the project vicinity, no communities would be susceptible to socioeconomic or environmental justice impacts. Therefore, this resource area is not carried forward for detailed analysis.
Public Health and Safety	The Proposed Action and No Action Alternative would not adversely affect public health and Safety. The majority of the management actions and projects included in the Proposed Action would involve natural resource surveys or monitoring that would not generate health and safety risks, or actions are identified as requiring a future NEPA analysis. Therefore, this resource area is not carried forward for detailed analysis.
Visual Resources	The Proposed Action and No Action Alternative would not adversely affect visual resources. The Proposed Action specifies those projects involving site improvements, construction of facilities, or an increase in personnel will require future NEPA analysis and are not covered under this EA. In addition, implementation of the Proposed Action would not adversely affect visual resources as the Proposed Action would be conducted within the boundaries of the Combat Center. The visual character of individual training areas at the Combat Center would not change. Therefore, this resource area is not carried forward for detailed analysis.
Land Use	The Proposed Action and No Action Alternative would not change any land use patterns or land ownership in the area. Implementation of the Proposed Action would have long-term positive effects on the natural environment at the Combat Center and would ensure the sustainability of the Combat Center’s lands to support mission requirements and training activities (i.e., no net loss in training land). Due to the integration of mission requirements in the creation of this plan, no negative impacts to training activities (current land use) would be anticipated. The activities associated with the Proposed Action would continue to use the Combat Center as it is currently used and no changes to existing land use would occur. Therefore, this resource area is not carried forward for detailed analysis.
Transportation and Circulation	The Proposed Action and No Action Alternative would not adversely affect transportation and circulation. The Proposed Action specifies those projects involving site improvements, construction of facilities, or an increase in personnel will require future NEPA analysis and are not covered under this EA. Therefore, this resource area is not carried forward for detailed analysis.
Air Quality	The Proposed Action and No Action Alternative would not adversely affect air quality. The majority of the management actions and projects included in the Proposed Action would involve natural resource surveys or monitoring that would not generate emissions, those projects involving site improvements, construction of facilities, or an increase in personnel will require future NEPA analysis and are not analyzed in this EA. While minor restoration projects analyzed here may result in short-term increases in dust, emissions would be addressed by developing and adhering to Best Management Practices (BMPs) that conform to installation SOPs (e.g., soil watering, soil stockpiling, etc.). Additionally, restoration projects would result in increased vegetative cover that would reduce the long-term potential for dust generation. Regarding the General Conformity rule under the Federal Clean Air Act, none of the management actions or projects within the proposed INRMP would be expected to result in measurable air emissions increases. Emissions associated with projects within the proposed INRMP would have a negligible effect on air quality in the region. Therefore, this resource area is not carried forward for detailed analysis. A Record of Non-Applicability (RONA) for Clean Air Act conformity is attached in Appendix A.
Noise	No additional points of interest would be affected under the Proposed Action and the No Action Alternative. Noise generated by site improvements and the construction and operation of facilities under the Proposed Action will be analyzed under project-specific NEPA analysis conducted at a future time, and the noise generated from implementing the remainder of the Proposed Action is associated with natural resource management activities that would generally be of a negligible level.

Table 1-1. Resource Areas Minimally or Not Impacted

Resource Area	Reason Minimally or Not Impacted
	A small amount of noise could result from the short-term use of mechanical equipment and motor vehicles. Since human noise receptors on the Combat Center and immediate vicinity would notice little difference between the noise created from these actions and the much louder background noise from the existing ambient noise levels, this resource area is not carried forward for detailed analysis.
Airspace Management	The Proposed Action and No Action Alternative would not use or modify airspace and would not result in hazards to air navigation. All management actions in the Proposed Action are fully integrated with the installation’s Federal mission and would not adversely impact the use of airspace at the Combat Center. Therefore, this resource area is not carried forward for detailed analysis.
Cultural Resources	Neither the Proposed Action nor the No Action Alternative would result in substantial ground disturbing activities. If an inadvertent discovery of cultural resources or human remains are exposed during natural resources management activities, as per INRMP Chapter 4 Cultural Resources section, work would cease immediately, the Cultural Resources Manager shall be notified, and work would not resume until the CRM determined how to ensure compliance with Section 106 of the National Historic Preservation Act (NHPA) and provided written authorization for work to resume. Therefore, this resource area is not carried forward for detailed analysis.

1.5 REGULATORY SETTING

Preparation of this EA is a procedural requirement, in accordance with NEPA and CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508). Preparation of an EA is intended to ensure that federal agencies evaluate the potential for significant environmental impacts prior to making decisions or implementing Proposed Actions. This EA is compliant with the following policies and procedures:

- (1) NEPA of 1969 (42 USC §§ 4321-4370h), which requires an environmental analysis for major federal actions that have the potential to significantly impact the quality of the human environment;
- (2) CEQ regulations (40 CFR Parts 1500-1508), which implement the requirements of NEPA;
- (3) DON regulations for implementing NEPA (32 CFR Part 775), which provides DON policy for implementing the CEQ regulations and NEPA; and
- (4) MCO P5090.2A, Change 3, Chapter 12, dated 26 August 2013, *Environmental Compliance and Protection Manual*, which establishes USMC procedures for implementing NEPA.

1.6 PUBLIC PARTICIPATION

During development of this EA the USMC solicited input from interested parties on the Description of Proposed Action and Alternatives and on the Draft INRMP. The USMC considered comments received on these documents when writing the EA and revising the INRMP. The USMC then solicited additional public comments on the Draft EA and INRMP; no comments were received on these documents. See Appendix B for more detail about the public participation process, and for response to comments received during EA development.

1.7 AGENCY CONSULTATIONS

The Combat Center has cooperated with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for the EA and revised INRMP to reflect the mutual agreement of these parties on regulatory requirements concerning the conservation, protection, and management of natural resources at the Combat Center. Copies of correspondence are included in Appendix C.

Government to government consultation also occurred with sovereign tribal nations in order for the EA and revised INRMP to reflect their interests in the Combat Center's Natural Resources Management Program. Eleven tribal governments participated in this process, including the Torres-Martinez Desert Cahuilla Indians, Augustine Band of Cahuilla Indians, Twentynine Palms Band of Mission Indians, San Miguel Band of Mission Indians, Morongo Band of Mission Indians, Fort Mohave Indian Tribe, Colorado River Indian Tribes, Chemehuevi Indian Tribe, Agua Caliente Band of Cahuilla Indians, Cabazon Band of Mission Indians, and the Cahuilla Band of Mission Indians of the Cahuilla Reservation. A tribal stakeholder meeting was held 25 June 2018, in which the program was discussed, and written comments were received from two tribes at a later date. Copies of correspondence are included in Appendix C.

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CHAPTER 2

PROPOSED ACTION AND ALTERNATIVES

The two alternatives considered in this EA include the Proposed Action (Alternative 1) and the No-Action Alternative (Alternative 2). These were the only alternatives identified during the INRMP planning process. The Proposed Action is to implement the revised INRMP for the Combat Center in compliance with the Sikes Act Improvement Act (SAIA, 16 U.S. Code [USC] § 670 et seq., as amended) and MCO P5090.2A (Marine Corps Environmental Compliance Protection Manual). This Chapter describes the two alternatives (Sections 2.2 and 2.3) evaluated.

2.1 REASONABLE ALTERNATIVE CRITERIA

Only alternatives that would reasonably meet the defined need for the Proposed Action require detailed analysis in the EA. The range of reasonable alternatives in this EA were identified by evaluating their ability to meet the purpose and need for action and their ability to meet the following criteria:

- Be based on the principles of ecosystem management;
- Provide for sustainable multipurpose use of natural resources;
- Maintain compliance with relevant environmental regulations;
- Provide for public access for use of natural resources subject to safety and military security considerations;
- Establish specific natural resources management objectives and timeframes for the Proposed Action; and
- Prevent loss in the capability of military lands to support the installation's military mission.

2.2 DESCRIPTION OF PROPOSED ACTION (ALTERNATIVE 1)

The Proposed Action would adopt and implement the revised INRMP for the Combat Center. The revised INRMP is consistent with military use of the property as well as the goals and objectives established in the SAIA (as amended), reduce encroachment on the military mission, and provide further improvement in natural resources management.

This revised INRMP streamlines the Natural Resources program and schedules tasks within a 5-year Workplan (Appendix D). The structure and action items together continue to apply an ecosystem-based approach to natural resources conservation and meet and exceed ongoing and new installation requirements for natural resources management. Specific changes made to the NR program under the recent INRMP revision include the following:

- Reorganization of the program structure through a formal process that included:
 - Review and acceptance of existing program drivers;

- Removal of duplicative or otherwise unclear program goals;
- Reorganization of Natural Resources Program Elements and ongoing tasks underneath a more linear program structure defined by goals, objectives, elements, and tasks;
- Identification and addition of new tasks which:
 - Augment strategies that minimize encroachment of natural resources management requirements on the military mission (incorporated under Goal 1 of Plan);
 - Incorporate conservation requirements for desert tortoise and desert tortoise habitat, as outlined in the EIS, SEIS and BO (incorporated largely under elements of Goals 1 and 3 of the Plan) as required under Section 7(a)(1) of the Endangered Species Act;
 - Develop an Outdoor Recreation Program (under Goal 4);
 - Identify further planning and reorganizational efforts for management and monitoring of non-listed species and associated habitats covered under this INRMP (under Goal 2).

Details on proposed management practices and proposed projects are addressed in the revised INRMP, in Chapter 4, Natural Resources Management Program, and Appendix D.

The revised INRMP contains resource management objectives and strategies for the following areas:

- Reducing Encroachment on the Military Mission
 - Aligning Natural Resource Management and Military Mission Sustainment
 - Degradation Minimization of Training Lands
 - Ensuring Installation Compliance with the NEPA Program
- Supporting Natural Systems on the Landscape
 - Coordinating Ecosystem Management with Regional Initiatives and Issues
 - Landscape-Level Planning/Climate Change
 - Habitat Management
 - Wildlife Management
 - Wet Area Management
 - Invasive Management
 - Wildfire Management
 - Mainside Grounds Management

- Management of Protected Species
 - Desert Tortoise Management
 - Other Sensitive Species Management
- Supporting Other Uses and Engagement
 - Outdoor Education Program
 - Conservation Law Enforcement
 - Public Awareness Program

Besides meeting the project's purpose and need, the Proposed Action would have additional benefits that include: (1) better integration of the INRMP with other installation planning documents, (2) explicit goals and objectives under which ongoing and future natural resources projects would be implemented, and (3) facilitating a systematic approach to integrated natural resources management by presenting a workplan format that allows tracking of program implementation.

2.3 NO-ACTION ALTERNATIVE (ALTERNATIVE 2)

Under the No-Action Alternative the proposed implementation of the revised INRMP would not occur. Instead, implementation of the existing Natural Resources Program, as outlined in the 2012-2016 INRMP, would continue (Appendix E). The No Action Alternative would retain the old program structure and all natural resources objectives and management practices detailed in the existing INRMP would be continued into the future. This program and resulting projects do not address new requirements resulting from the installation's recent land expansion, and would therefore not be in compliance with the SAIA and MCO P5090.2a. The Combat Center deemed this alternative not appropriate to pursue. This alternative has been carried forward for analysis in the EA because CEQ regulations stipulate that the No-Action Alternative be analyzed to assess any environmental consequences that may occur if the Proposed Action is not implemented. The No-Action Alternative also provides a baseline against which the Proposed Action can be compared.

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

A third alternative which was eliminated from the analysis extended the existing INRMP and associated natural resources program onto expansion lands without incorporating the new program structure, workplan, or activities. This alternative was not carried forward because it would not achieve the purposes of the Proposed Action. In addition, without an implementation schedule with defined task list, it would be difficult to track and measure conservation benefits associated with the natural resources program. This alternative therefore presents less capacity to ensure high-quality natural resources are sustained aboard training lands.

2.5 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This EA focuses on three resources with the potential to be affected by the Proposed Action: Topography, Geology, and Soils; Water Quality; and Biological Resources. No significant impacts to any of these resources were identified for either the Proposed Action or the No Action alternatives. Table 2-1 summarizes how these resources would be affected by both alternatives.

Table 2-1. Summary of Environmental Effects from the Proposed Action and No Action Alternatives		
Resource Area	No Action Alternative	Proposed Action Alternative
Topography, Geology, and Soils	The No Action Alternative would result in the continuation of the current INRMP and would result in beneficial impacts on topography, geology, and soils resources. Management strategies would not be implemented within the newly acquired training areas. Minor short-term impacts to soils would result from natural resources management activities that involve ground disturbance.	Beneficial impacts on topography, geology, and soils would occur under the Proposed Action. Planned projects, such as erosion control and habitat restoration, would create long-term, beneficial impacts to soil resources. There would be no significant impacts to topography, geology, and soil resources. Minor short-term impacts to soils would result from natural resources management activities that involve ground disturbance.
Water Quality	The No Action Alternative would result in the continuation of the current INRMP and would result in beneficial impacts on water resources. Water resources management strategies would not be implemented within the newly acquired training areas.	No significant impacts on water resources would occur under the Proposed Action. Planned projects, such as erosion control and habitat restoration, would create long-term, beneficial impacts to water resources. There would be no significant impacts to water resources.
Biological Resources	The No Action Alternative would continue to implement the current INRMP and would also implement natural resource management plans. However, beneficial management practices outlined in the INRMP would not extend to the newly acquired training areas: Bessemer Mine, Galway Lake, Cleghorn Lakes, and Means Lake. As a result, implementing the No Action alternative would have less beneficial effects on biological resources compared to the Proposed Action Alternative.	The implementation of the Proposed Action would result in management practices that directly affect flora, fauna, soil, and water resources. It includes overall program planning, and wildlife habitat and population management to include threatened species, wet areas, grounds maintenance, pest management, training land degradation minimization, fire management and protection of special interest areas. Therefore, implementation of the Proposed Action would result in an overall beneficial effect to biological resources. Implementation of the Proposed Action would extend the benefits of management plans and mitigation measures in the revised INRMP to the expansion areas.

CHAPTER 3 AFFECTED ENVIRONMENT

In compliance with CEQ regulations, this section describes relevant existing environmental conditions for resource areas potentially affected by the Proposed Action or No Action Alternative, which are identified in Chapter 2.5 and Table 2-1 to include Topography, Geology, and Soils; Water Resources; and Biological Resources. The description of the existing conditions for these resources at the Combat Center summarizes the detailed descriptions provided in the revised INRMP.

3.1 TOPOGRAPHY, GEOLOGY, AND SOILS

3.1.1 Definition of Resource

Topography describes the surface features of land or a given area, including, elevation, slope, and physical features, such as mountains, hills, valley, and creeks. Geology describes the materials of which an area is comprised, on the surface and subsurface, the structure of those materials, and the processes acting upon them. Soil refers to unconsolidated earthen materials overlying bedrock or other parent material. Soils are described in terms of their type, slope, and physical characteristics.

3.1.2 Existing Conditions

Topography. The Combat Center is located in the Mojave Desert, a part of the larger Basin and Range Physiographic Province, at the western base of the Bullion Mountain Range. Its terrain is characterized by alternating rocky uplands with slopes up to 90 percent, and low valleys with broad alluvial plains, washes, and dry lakebeds. Ancient lava fields are significant features of some training areas. Most of the terrain lies on the intermountain basin between 1,500 and 3,000 feet above mean sea level.

Geology. The Combat Center is located within the Mojave Desert Geomorphic and Tectonic Province, often interchangeably called the Mojave Bedrock, a name that reflects the geologic and tectonic framework of the province. Mojave Bedrock consists of low mountain ranges and isolated rock outcrops separated by narrow to broad alluvial bases and lava flows. The Combat Center geological basin was formed by the West Bullion Mountain Fault and the Mesquite Lake Fault. Layers of blown sand, called sand ramps, contribute to lower elevation soils of mountains adjacent to Mainside. The Combat Center geological make-up consists of tertiary basement rock with overlying quaternary alluvial deposits. The basement rock is nearly impermeable except where it has been fractured or weathered.

Soils. The Natural Resources Conservation Service (Lato *et al.* 1999) completed the Soil Survey and reported nine major types of soils classes occurring within the Combat Center. Many subtypes exist across varying levels of slope and elevation. The soils in the western and southern Exclusive Military Use Areas (EMUA) are the same as the soils identified in Lato *et al.* 1999 on the Combat Center. Descriptions for these soils classes can be found in section 3.2.2 of the 2018-2022 INRMP.

3.2 WATER QUALITY

3.2.1 Definition of Resource

Water resources include surface water and groundwater resources. Surface water resources include features such as lakes, rivers, streams, playas, ponds, seeps, springs, and wetlands, which are important to a variety of ecological, economic, recreational, aesthetic, and human health considerations. Groundwater comprises subsurface hydrologic resources that occur in alluvium-filled basins that are separated by faults and bedrock outcrops and are of essential value to many areas. Groundwater is commonly used for potable water consumption, agricultural irrigation, and industrial applications. Groundwater characteristics are often described in terms of depth to aquifer, aquifer or well capacity, water quality, and surrounding geologic composition.

3.2.2 Existing Conditions

The Combat Center has 17 watersheds ranging in size from 2,819 acres to 52,178 acres. Quackenbush Lake and Upper Emerson watershed are the only watersheds that lay entirely within the Combat Center boundary (traditional boundary and EMUAs). Watersheds within the Combat Center contain surface and subsurface water features including playas, dry washes, seeps, springs, groundwater aquifers, and man-made water bodies.

Surface Water. There are no naturally occurring, permanent sources of surface water aboard the Combat Center (Lato *et al.*, 1999), all permanent surface waters are manmade ponds. Seasonal bodies of water occur in the form of playas (dry lake beds) and small tinajas (rocky basins), which fill and dry in response to isolated precipitation events. Most surface drainage at the Combat Center is internal, with runoff flowing inward and collecting on playas (Lato *et al.* 1999). There are 14 playas throughout the Combat Center traditional boundary and five playas within EMUA West; no playas occur within EMUA South. There are another five playas along the installation boundary. The two most prominent and heavily impacted playas at the Combat Center include Mesquite Lake (located near Mainside) and Deadman Lake (located within Sand Hill, Gypsum Ridge, and West Training Areas). Unlike Mesquite Lake, Deadman Lake does not have any appearance of uplifted and tufted soils, suggesting that the water table is near the surface.

There are 289 dry washes totaling 50,471 acres throughout the Combat Center, but only 12 are considered major washes. The largest dry washes are located in the three largest watersheds (Deadman Lake, Bristol Lake, and Dry Lake). Approximately 25 percent of all dry washes occur in the Bristol Lake watershed (USACE 1994).

Seeps and springs are a valuable biological resource, particularly when standing or flowing water is available for wildlife. The U.S. Army Corps of Engineers (USACE) found four wells and two springs recorded from U.S. Geological Survey topography maps (USACE 1994). Seasonal seeps are located in the Imperial Lode mining area, Lead Mountain area, and several mine shafts throughout the Combat Center. The study also indicated a potential for other seeps to exist seasonally depending on precipitation and exposed bedrock in the wash.

Man-made water bodies at the Combat Center include stormwater retention ponds to the northeast of Mesquite Lake, golf course ponds, the Wildlife Viewing Pond at Mainside, and several sewage lagoons located on Mainside proper and near the Ocotillo golf course. None of these waters are regulated under Section 404 of the Clean Water Act. Manmade water bodies are utilized by wildlife, most often migrating birds.

Ground Water. The groundwater basins within or partially within the Combat Center traditional boundary include Deadman Valley (Surprise Spring and Deadman Lake subbasins), Twentynine Palms Valley, Bristol Valley, Ames Valley, Lavic Valley, and Dale Valley. The groundwater basins in the EMUA West are the Johnson Valley Basin, Means Valley Basin, Ames Valley Basin, Bessemer Valley Basin, and the Este Subarea of the Adjudicated Mojave Basin Area. The groundwater basins in EMUA South is the Dale Valley Basin.

The main water-bearing materials in the EMUA West are alluvial deposits that are part of the Johnson Valley Basin, Means Valley Basin, Ames Valley Basin, Bessemer Valley Basin, and the Este Subarea of the Adjudicated Mojave Basin Area. Water-bearing materials in the EMUA South are part of the Dale Valley Basin. The principal source of recharge to these basins is infiltration of run-off from the surrounding mountains in the washes and alluvial fans.

3.3 BIOLOGICAL RESOURCES

3.3.1 Definition of Resource

Biological resources include native or naturalized (i.e., non-native species that have become established) plants and animals and the habitats in which they exist. The following biological resources are present, or supposed present aboard the Combat Center:

- Endangered Species Act (ESA)-listed species (threatened or endangered) and those candidate species proposed for ESA-listing as designated by the USFWS (terrestrial and freshwater species) or National Marine Fisheries Service (NMFS) (marine species).
- Species that are state-listed by the CDFW as endangered, threatened, or candidates under the California Endangered Species Act (CESA).
- Other floral and faunal species with special status designations (excluding state CESA listings), including CDFW species of special concern, California Native Plant Society (CNPS) rare plants, CDFW fully protected species, and species of special tribal interest.
- Species that have significance to local tribes.
- Migratory birds, protected under the Migratory Bird Treaty Act of 1918, as amended, and Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds.

- Bald and Golden Eagles protected under the Bald and Golden Eagle Protection Act of 1940, as amended.
- Natural communities (vegetation assemblages) that through the application of standardized rarity and threat parameters are determined to be sensitive natural communities by CDFW. The CDFW maintains a List of California Terrestrial Natural Communities and identifies which of these natural communities are considered sensitive. Communities considered sensitive are selected due to a limited distribution either statewide, within a county or region. These communities may or may not contain special status plants or their habitat and are often vulnerable to environmental effects of projects.

3.3.2 Existing Conditions

3.3.2.1 Ecosystems

A total of 14 ecosystems with species-ecosystem associations were described for the Combat Center (MAGTFTC MCAGCC 2018). These include creosote/bursage scrub: valleys, gentle bajadas; creosote/bursage scrub: disturbed; creosote/bursage scrub: mountains; creosote/bursage scrub: sand dunes; creosote/bursage scrub: lava flows; yucca woodlands: joshua trees and/or mojave yucca; saltbush scrub: playa and uplands; blackbrush scrub; desert riparian (xeroriparian); desert wash with ephemeral flows; springs and seeps; dry lake beds (playas); wet areas/ponds/riparian: perennial; and caves, mines, and rock crevices. Detailed information on each of the ecosystems found on the Combat Center is included in Section 3.5.1 of the INRMP.

3.3.2.2 Flora and Plant Communities

Although the vegetation at the Combat Center is predominantly creosote bush scrub and saltbrush scrub, elements more typical of the Sonoran Desert are also present. Over 440 native and naturalized vascular plants have been recorded for the Combat Center. Of these, 391 are native and 52 are non-native (MAGTF 2013). Two types of Unusual Plant Assemblages (UPAs) are known to occur in the western EMUA, including creosote rings and yucca rings.

The main plant communities that occur across the Combat Center, western EMUA, and southern EMUA as classified by the Holland code include creosote bush scrub, Mohave yucca, saltbush scrub, and big galleta (Agri-Chemical & Supply 2008). A recent vegetation mapping effort concluded in 2016 using the California Manual of Vegetation (revision 2) identified a total of 18 plant communities occurring across the legacy base (MCAGCC 2016). The 2016 Vegetation Map established a standard protocol for subsequent remapping of the installation, and methods are currently being applied to map plant communities in the western and southern EMUAs, however data are not yet available from this effort. More information on plant communities known to occur at the Combat Center can be found in Section 3.6.2 of the INRMP.

3.3.2.3 Sensitive Plant Communities

Of the 18 vegetation communities identified within the legacy boundary of the Combat Center, seven communities are considered sensitive by CDFW. These include Smoketree association, Big Galleta Association, Desert Lavender Association, Desert Willow Association, White Bursage Association, Honey Mesquite Association, and Desert Tea Association. Information on these sensitive plant communities may be found in Section 3.6.2 of the INRMP.

3.3.2.4 Special Status Flora

Thirty-nine special-status plant species have been detected during surveys on the Combat Center including the western and southern EMUAs (Table 3-1). None of these are listed as endangered or threatened by the federal government. In addition, two rare plant species have potential to occur on the Combat Center but have not been detected during surveys. These include: puffcalyx gilia (*Gilia aliquanta* spp. *aliquanta*; CRPR 3) and Chinese lantern (*Quincula lobata*; CRPR 2). Twelve other species that were included in this list in the previous INRMP have now been confirmed present (MAGTFTC MCAGCC 2018). Detailed information on each of the flora found on the Combat Center, including a list of plant species observed, is included in Section 3.6 and Appendix C of the INRMP.

Scientific name	Common Name	Special Status*
<i>Allium parishii</i>	Parish's Onion	CRPR 4.3
<i>Androstephium breviflorum</i>	Small-flowered Androstephium	CRPR 2B.2
<i>Castela emoryi</i>	Emory's Crucifixion-thorn	CRPR 2B.2
<i>Chilopsis linearis</i> ssp. <i>arcuata</i>	Desert Willow	T1
<i>Chorizanthe spinose</i>	Mojave Spineflower	CRPR 4.2
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Riverside Spineflower	CRPR 1B.2
<i>Cryptantha costata</i>	Ribbed Cryptantha	CRPR 4.3
<i>Cryptantha holoptera</i>	Winged Cryptantha	CRPR 4.3
<i>Cymopterus multinervatus</i>	Purple-nerve Cymopterus	CRPR 2B.2
<i>Cylindropuntia wigginsii</i>	Wiggin's Cholla	CRPR 3.3
<i>Datura wrightii</i>	Wright's Jimsonweed	T1
<i>Dudleya saxosa</i> ssp. <i>saxosa</i>	Panamint Liveforever	CRPR 1B.3
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's Evening-primrose	CRPR 2B.3
<i>Eriophyllum mohavense</i>	Mojave Woolly Sunflower	CRPR 1B.2
<i>Eriastrum harwoodii</i>	Harwood's Eriastrum	CRPR 1B.2
<i>Eriastrum sparsiflorum</i>	Few-flowered Eriastrum	CRPR 4.3
<i>Euphorbia abramsiana</i>	Abram's Spurge	CRPR 2B.2
<i>Euphorbia parryi</i>	Parry's Spurge	CRPR 2B.3
<i>Euphorbia revolute</i>	Revolvate Spurge	CRPR 4.3
<i>Funastrum utahense</i>	Utah Vine Milkweed	CRPR 4.2

Table 3-1 Sensitive Status Plants Present		
Scientific name	Common Name	Special Status*
<i>Galium angustifolium</i> spp. <i>gracillimum</i>	Slender Bedstraw	CRPR 4.2
<i>Larrea tridentata</i>	Creosote Bush	T1
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's Goldfields	CRPR 1B.1
<i>Matelea parvifolia</i>	Spearleaf	CRPR 2B.3
<i>Monardella robisonii</i>	Robison's Monardella	CRPR 1B
<i>Muilla coronate</i>	Crowned Muilla	CRPR 4.2
<i>Nicotiana obtusifolia</i>	Desert Tobacco	T1
<i>Penstemon albomarginatus</i>	White-margined Beardtongue	CRPR 1B.1
<i>Penstemon pseudospectabilis</i>	Desert Beardtongue	CRPR 2B.2
<i>Penstemon thurberi</i>	Thurber's Penstemon	CRPR 4.2
<i>Physalis lobate</i>	Lobed Ground-cherry	CRPR 2B.3
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont's Cottonwood	T1
<i>Portulaca halimoides</i>	Desert Portulaca	CRPR 4.2
<i>Prosopis glandulosa</i> var. <i>torreyana</i>	Honey Mesquite	T1
<i>Salvia columbariae</i>	Chia	T1
<i>Sclerocactus polyancistrus</i>	Mohave (Red-spined) Fishhook Cactus	CRPR 4.2
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	CRPR 2B.2
<i>Simmondsia chinensis</i>	Jojoba	T1
<i>Wislizenia refracta</i> ssp. <i>refracta</i>	Jackass-clover	CRPR 2B.2

*Definitions:

Tribes

T1 Species of interest/concern as identified by tribes.

California Rare Plant Ranks (CRPR)

Inventory of Rare and Endangered Vascular Plants of California:

- 1B Rare or endangered in California and elsewhere.
- 2 Rare or endangered in California, but more common elsewhere.
- 3 Need more information (a review list).
- 4 Plants of limited distribution (watch list).

CRPR Threat Ranks

- .1 - Seriously endangered in California
- .2 - Fairly endangered in California
- .3 - Not very endangered in California

3.3.2.5 Fauna

Wildlife species at the Combat Center are typical of Mojave Desert fauna with the exception of a wide variety of non-desert-adapted species inhabiting Mainside, particularly manmade water areas (Cutler *et al.* 1999). Most wildlife species on the installation (except those found only at Mainside) are adapted to desert scrub habitats that provide little cover and xeric conditions. Detailed information on wildlife species occurring at the Combat Center, including a list of wildlife species detected, is included in Section 3.14 and Appendix D of the INRMP.

A terrestrial invertebrate survey conducted by University of California Riverside in 2005 identified more than 1,500 species, none of which were listed. An investigation of nine dry lakes found the presence of six species of fairy shrimp, clam shrimp, and tadpole shrimp (MAGTFTC MCAGCC 2018). The introduced mosquito fish (*Gambusia affinis*) inhabits some of the manmade treatment ponds and is the only fish known to occur on the Combat Center.

Five amphibians, more than 40 reptile species, and more than 215 bird species have been detected in the Combat Center. In general, the Combat Center lacks high-quality habitat for migratory and resident bird species. As a result, most bird sightings occur in developed areas, including the golf course and wastewater treatment ponds.

Almost 60 mammal species have been observed at the Combat Center. Cutler *et al.* (1999) found small mammal species richness to be greater at high elevation sites than all other types of sites except washes. In November 1992, 20 bighorn sheep (*Ovis canadensis*) (five rams and 15 ewes) were introduced onto the Combat Center near the Bullion and Cleghorn Pass training areas' boundary north of Cleghorn Lakes (UCR 1993). This population is considered an experimental population.

3.3.2.6 Special Status Fauna

In total, 39 species with some level of special status have been detected on the Combat Center and an additional 6 bat special status species have their presence assumed. This is comprised of 2 reptile, 27 bird, and 10 mammal species (Table 3-2). Four of these are federally listed as threatened or endangered. It is important to note that three of the federally listed species are nonresident species (willow flycatcher [*Empidonax traillii*], Bell's vireo [*Vireo bellii*], and snowy plover [*Charadrius nivosus*]) for which the subspecies observed on the Combat Center were unknown (MCAGCC 2012). Thus federal-listed endangered or threatened bird species are not known to occur. The desert tortoise is the only federally listed resident faunal species known to occur on the Combat Center. Peninsular bighorn sheep (*Ovis canadensis nelson*) are listed as federally endangered in other areas of their range; however, the population at the Combat Center is only considered a Bureau of Land Management (BLM) Sensitive species (MAGTFTC MCAGCC 2018).

Table 3-2 Sensitive Status Fauna Present		
Scientific Name	Common Name	Special Status
Reptiles		
<i>Uma scoparia</i>	Mojave Fringe-toed Lizard	CSC
<i>Gopherus agassizii</i>	Desert Tortoise	FT, ST, T1
Birds		
<i>Aythya americana</i>	Redhead	CSC
<i>Pelecanus erythrorhynchos</i>	American White Pelican	CSC
<i>Haliaeetus leucocephalus</i>	Bald Eagle	BGEPA; SE
<i>Circus cyaneus</i>	Northern Harrier	CSC

Table 3-2 Sensitive Status Fauna Present

Scientific Name	Common Name	Special Status
<i>Aquila chrysaetos</i>	Golden Eagle	BGEPA, FP
<i>Charadrius nivosus</i>	Snowy Plover	#, CSC
<i>Numenius americanus</i>	Long-billed Curlew	BCC
<i>Chlidonias niger</i>	Black Tern	CSC
<i>Geococcyx californianus</i>	Greater Roadrunner	T1
<i>Athene cunicularia</i>	Burrowing Owl	BCC, CSC
<i>Asio otus</i>	Long-eared Owl	CSC
<i>Asio flammeus</i>	Short-eared Owl	CSC
<i>Chaetura vauxi</i>	Vaux's Swift	CSC
<i>Calypte costae</i>	Costa's Hummingbird	BCC
<i>Selasphorus sasin</i>	Allen's Hummingbird	BCC
<i>Colaptes chrysoides</i>	Gilded Flicker	SE
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	FP
<i>Contopus cooperi</i>	Olive-sided Flycatcher	CSC
<i>Empidonax trailii</i>	Willow Flycatcher	#, SE
<i>Lanius ludovicianus</i>	Loggerhead Shrike	BCC, CSC
<i>Vireo bellii</i>	Bell's Vireo	#
<i>Riparia riparia</i>	Bank Swallow	ST
<i>Toxostoma lecontei</i>	LeConte's Thrasher	CSC
<i>Oreothypis luciae</i>	Lucy's Warbler	CSC
<i>Setophaga petechia</i>	Yellow Warbler	BCC, CSC
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed Blackbird	CSC
	All raptors	CSC, FP
Mammals		
<i>Macrotus californicus</i>	California Leaf-nosed Bat	CSC
<i>Lasiurus xanthinus</i>	Western Yellow Bat	CSC
<i>Corynorhinus townsendii</i> (= <i>Plecotus townsendii</i>)	Townsend's Big-eared Bat	CSC
<i>Antrozous pallidus</i>	Pallid Bat	CSC
<i>Nyctinomops femorosaccus</i>	Pocketed Free-tailed Bat	CSC
<i>Eumops perotis californicus</i>	Western Mastiff Bat	CSC
<i>Chaetodipus fallax pallidus</i> (= <i>Perognathus fallax pallidus</i>)	Pallid San Diego Pocket Mouse	CSC
<i>Canis latrans</i>	Coyote	T1
<i>Vulpes macrotis marsipus</i>	Desert Kit Fox	FP
<i>Taxidea taxus</i>	American Badger	CSC
<i>Ovis canadensis nelsoni</i>	Bighorn Sheep	BLM-S, FP

Not able to determine subspecies on the Combat Center. Listing depends on subspecies.

*Definitions:

Federal categories per the Endangered Species Act, administrated by the USFWS.

FT Threatened - any species officially listed by the USFWS that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

BGEPA Bald and Golden Eagle Protection Act of 1940.

BLM-S Bureau of Land Management Sensitive

BCC Bird of Conservation Concern

Tribes

T1 Species of interest/concern as identified by tribes.

State categories per the 1984 California Endangered Species Act

SE Endangered - any species officially listed by the California Fish and Game Commission that is in danger of extinction throughout all or a significant portion of its range.

ST Threatened - any species officially listed by the California Fish and Game Commission that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

CSC California Species of Special Concern.

FP Fully Protected

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CHAPTER 4 CONSEQUENCES

4.1 TOPOGRAPHY, GEOLOGY, AND SOILS

Impacts to topography, geology, or soils would be considered significant if they directly or indirectly result in erosion causing sedimentation that leads to potential violation of applicable Federal and/or state water quality regulations or other damage that precludes intended land use at the installation.

4.1.1 No-Action Alternative

The No Action Alternative would continue to implement the current INRMP and would also implement habitat restoration projects which would have short-term, adverse impacts and long-term, beneficial impacts on soil resources. However, beneficial management practices outlined in the current INRMP would not extend to the new acquired training areas designated as EMUA West and EMUA South.

4.1.2 Proposed Action

No significant impacts on topography, geology, or soils would occur from implementation of the Proposed Action. Implementation of habitat restoration projects would potentially have short-term, adverse impacts and long-term, beneficial impacts on soil resources. The use of vehicles and mechanical equipment for rehabilitation activities may cause increased erosion on roads and in areas being restored. However, Best Management Practices (BMPs) would be used to minimize these impacts. These impacts would be considered minor, short-term, and localized. Long-term, beneficial impacts from habitat restoration activities would result in the long-term reduction of soil erosion. Therefore, implementation of the Proposed Action would not have a significant impact to topography, geology, and soil resources.

4.2 WATER QUALITY

Impacts to water resources associated with implementation of the Proposed Action would be considered significant if the Proposed Action could cause unpermitted deposition of dredged or fill material into wetlands or other “Waters of the U.S.”; a net loss of wetlands within installation boundaries (unmitigated); a violation of state water quality criteria; a violation of Federal or state discharge permits; and/or potential degradation of an aquifer.

4.2.1 No-Action Alternative

The No Action Alternative would continue to implement the current INRMP and installation water resources management plans. However, beneficial management practices outlined in the current INRMP would not extend to the new acquired training areas: EMUA West and EMUA South.

4.2.2 Proposed Action

Implementation of the Proposed Action would involve implementation of programs outlined in the revised INRMP. Individual management actions and projects listed in the Water Resources Management section, as well as other habitat management actions or projects, would each be designed and evaluated to protect and enhance water resources and wetlands. In addition, BMPs to control potential erosion and sedimentation would be implemented during all future ground disturbance activities.

The Proposed Action would improve the facility's long-term natural resource values. Consequently, the proposed implementation of the INRMP would result in beneficial impacts to water resources.

4.3 BIOLOGICAL RESOURCES

Federal and state listed species, species with other special status designations, sensitive habitats and those species identified by tribes to be of particular importance are monitored, managed and conserved to some degree under the Combat Center Natural Resources Management Program. However, the installation does claim federal sovereignty from state law as it pertains to listed species and therefore includes only the potential for impacts to species listed under the federal ESA when analyzing potential impacts discussed in this EA, as well as the INRMP. However, the Combat Center has not relinquished sovereignty with regard to threatened and endangered species.

Under the ESA Section 7(a)(2), federal agencies are required to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species, or adversely modify or destroy designated Critical Habitat.

Therefore, for this analysis, impacts to biological resources would only be deemed significant if federally listed species or their habitats were adversely affected over relatively large areas, or if disturbances reduced the population size, reproductive rate, or spatial distribution of a special-status species. This section analyzes the potential for impacts to biological resources from implementation of the No-Action Alternative and the Proposed Action.

4.3.1 No-Action Alternative

The No Action Alternative would continue to implement the current INRMP and would also implement natural resource management plans. However, beneficial management practices outlined in the INRMP would not extend to the new acquired training areas: EMUA West and EMUA South. As a result, implementation of the No Action would have reduced overall beneficial effects on biological resources.

4.3.2 Proposed Action

The implementation of the Proposed Action would result in management practices that directly affect flora, fauna, soil, and water resources. It includes overall program planning, and wildlife habitat and population management to include endangered species, wet areas, grounds maintenance, pest management, training land degradation minimization, fire management, and protection of special interest areas. Therefore, implementation of the Proposed Action would result in an overall beneficial effect to biological resources. Implementation of the Proposed Action would extend the benefits of management plans and mitigation measures in the revised INRMP to the EMUA West and EMUA South.

Measures included in the INRMP would protect and conserve plant and wildlife species, including special status species, by implementing management practices outlined in Section 4.0, Natural Resources Management, of the INRMP.

The NEPA program would be used to evaluate all projects planned outside the scope of the Natural Resources Program's workplan to ensure compliance with all applicable biological laws.

Special conservation measures (SCMs) would be implemented as part of the Proposed Action Alternative to offset impacts to desert tortoise and their habitat. These are outlined in detail in the 2017 BO (USFWS 2017). SCMs from the 2017 BO apply to all activities except routine construction and maintenance activities, which fall under SCMs from the 2002 BO, and will be applied as appropriate.

Long-term, beneficial effects on special status, threatened, and endangered species would occur from implementation of the Proposed Action. While the peninsular population of desert bighorn sheep are listed as federally endangered, desert bighorn sheep at the Combat Center are well outside of this population. The population on the Combat Center is fully protected by the state, and federally identified as a BLM Sensitive species. Under the Proposed Action additional management measures would be exercised, including but not limited to, studying existing and potential corridors for bighorn sheep; investigating where improvements in bighorn sheep habitat resources would minimize conflicts with training exercises and maintaining adequate genetic flow across the installation under an altered climate regime. The Proposed Action would also call for the mapping of suitable Mojave Fringe-Toed Lizard habitat on base and identification of survey gaps. Long-term, beneficial effects on several non-listed species would occur from implementation of the Proposed Action (Appendix D).

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CHAPTER 5 CUMULATIVE IMPACT ANALYSIS

The analysis of cumulative impacts (or cumulative effects) follows the objectives of NEPA and CEQ regulations (40 CFR Parts 1500-1508) that provide the implementing procedures for NEPA. The CEQ regulations define cumulative impacts as:

“the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” (40 CFR § 1508.7)

The CEQ also provides guidance on cumulative impacts analysis in *Considering Cumulative Effects under NEPA* (CEQ 1997). Noting that environmental impacts result from a diversity of sources and processes, the CEQ guidance observes that “no universally accepted framework for cumulative effects analysis exists,” while noting that certain general principles have gained acceptance. One such principle provides that “cumulative effects analysis should be conducted within the context of resource, ecosystem, and community thresholds—levels of stress beyond which the desired condition degrades.” Thus, “each resource, ecosystem, and human community must be analyzed in terms of its ability to accommodate additional effects, based on its own time and space parameters.” Therefore, cumulative effects analysis normally would encompass geographic boundaries beyond the immediate area of the Proposed Action, and a time frame including past actions and foreseeable actions, to capture these additional effects. Bounding the cumulative effects analysis is a complex undertaking, appropriately limited by practical considerations. Thus, CEQ guidelines observe, “[i]t is not practical to analyze cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.”

Boundaries, or the region of influence (ROI), for analyses of cumulative impacts in this EA vary. Delineation of the ROI is based upon proximity to the Proposed Action and which resources are affected. The cumulative impacts analysis focuses on projects that directly overlap with the proposed alternatives (i.e., occur in similar locations and potentially impact similar resources). Section 5.1 identifies the projects considered in the cumulative analysis. Section 5.2 provides an analysis of potential cumulative impacts for each of the environmental resources discussed in this EA.

5.1 PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS

Identifiable effects of other past, present, and reasonably foreseeable future actions are analyzed and evaluated to the extent they may contribute to impacts of the Proposed Action. As part of the evaluation of cumulative impacts, a review of other projects near the action alternatives was conducted. Projects that are older than 5 years have been considered within the baseline of this analysis and are not considered below. Projects that are considered reasonably foreseeable future actions are projects that would occur by or in 2022. Projects

that would occur after 2022 are highly uncertain and thus do not meet the criteria of being reasonably foreseeable. The geographic distribution, intensity, duration, and historical effects of similar activities were considered when determining whether an activity may contribute cumulatively to the impacts of the Proposed Action on the resources identified in this EA. The following discussion lists the past, present, and reasonably foreseeable future projects assessed in this section, along with any NEPA or environmental analysis that has been prepared or is anticipated to occur. Other activities at the Combat Center that do not have the potential to cumulatively interact with the Proposed Action are not addressed in this EA.

5.1.1 Past Projects

5.1.1.1 Desert Tortoise Captive Rearing Facility (“Head Start”) at the Combat Center

An EA was prepared in September 2005 to evaluate the environmental impacts associated with the construction and operation of a desert tortoise captive rearing (“head start”) facility at the Combat Center. The facility would aid in the recovery and eventual delisting of the desert tortoise. The Proposed Action would allow the protection of hatchling and juvenile desert tortoises from predation and allow for their release and natural reproduction in the wild. Resources that were analyzed for impact included biological resources, air quality, water resources, cultural resources and public health and safety. Based on the results of the analysis, it was determined that there would be no significant environmental impacts with implementation of the action. A Finding of No Significant Impact (FONSI) was signed on 12 October 2005.

5.1.1.2 Permanent Facilities Bed-Down of Increased End-Strength

An EA was completed in September 2009 to evaluate the environmental impacts associated with construction of permanent facilities and infrastructure at the Combat Center to support the USMC’s Grow the Force Initiative (USMC 2009). The development footprint for this project is located within the Mainside area of the Combat Center and would consist of 43 Military Construction (MILCON) projects.

Notable examples of the Grow the Force MILCON projects include:

- P-924 Marine Air Ground Task Force Training Command (MAGTFTC) Simulation Training Facility
- P-182 Battalion Operations Center
- P-990 Range Control Facility
- P-954 MAGTFTC Operations Center
- P-923 Electrical and Communications Maintenance Storage
- P-109 Tactical Vehicle Wash Platform
- P-156 Construction Maintenance and Storage Hangar (Marine Unmanned Aerial Vehicle Squadron)
- P-168 SELF Utilities Installation

- P-155 Squadron Headquarters and Maintenance Complex (Marine Unmanned Aerial Vehicle Squadron)
- P-160 Expeditionary Training Support
- P-504 Consolidated Community Support Facility

Based on the results of the analysis, it was determined that there would be no significant impacts to the environment with implementation of the Proposed Action. A FONSI was signed for the Permanent Facilities Beddown of Increased End-Strength on 29 September 2009.

5.1.1.3 Proposed Changes to the Permanent Facilities Bed-down and Infrastructure Project

A Supplemental EA was completed in August 2014 to evaluate the environmental impacts associated with changes to the footprint and scope of some of the projects within the 2009 EA (P-221, P-504, and P-159) as well as the addition of two new projects (P-930 and P-558). The Proposed Action would occur primarily in two areas of the Combat Center: Mainside and the Camp Wilson/SELF. Based on the results of the analysis, it was determined that there would be no significant impacts to the environment with implementation of the Proposed Action (USMC 2014a). A FONSI was signed for the Proposed Changes to the Permanent Facilities Bed-down and Infrastructure Project on 22 August 2014 (USMC 2014b).

5.1.1.4 Aerial Maneuver Zones for MV-22 and Rotary-Wing Training

An EA was prepared to evaluate the potential environmental impacts associated with the use of Aerial Maneuver Zones (AMZ) by MV-22 Osprey tilt-rotor (MV-22) aircraft and rotary-wing aircraft at the Combat Center (USMC 2010). Specifically, the Proposed Action would use five different types of AMZs to integrate the MV-22 airframe into the existing rotary-wing tactical and ground training exercises. The EA identifies the environmental consequences of establishing 48 AMZs (Alternative 1) and 73 AMZs (Alternative 2) at various locations within the Combat Center. These AMZs are distributed throughout the Combat Center. Based on the results of the analysis, it was determined that there would be no significant impacts to the environment with implementation of the Proposed Action. A FONSI was signed for the AMZs for MV-22 and Rotary-Wing Training on 21 May 2010 (USMC 2010).

5.1.1.5 West Coast Basing of the F-35B

An EIS was prepared to analyze the potential impacts from the west coast basing of the F-35B aircraft. The F-35B would replace legacy F/A-18A/B/C/D Hornet and AV-8B Harrier aircraft in the Third and Fourth Marine Air Wings. The Proposed Action addressed in the EIS includes:

- basing of 11 operational F-35B Joint Strike Fighter squadrons (176 aircraft), and 1 F-35B Operational Test and Evaluation squadron (8 aircraft) on the West Coast of the U.S.;
- construction and/or renovation of airfield facilities and infrastructure necessary to accommodate and maintain the F-35B squadrons;
- changes to personnel to accommodate squadron staffing; and
- conducting F-35B readiness and training operations to attain and maintain proficiency in the operational employment of the F-35B and special exercise operations.

This EIS addresses six basing alternatives, none of which are at the Combat Center. However, the Proposed Action includes occasional use of airspace overlaying the Combat Center: Restricted Area 2501 North, South, East, and West; Bristol Air Traffic Controlled Assigned Airspace and Military Operations Area; and Sundance Military Operations Area. The frequency of airspace use would be equivalent to or less than current use by the aircraft that the F-35B is replacing. A Record of Decision for the West Coast Basing of the F-35B was signed on 9 December 2010 (DON 2010).

5.1.1.6 Ocotillo Marine Mart

In March 2012, NAVFAC Southwest prepared an EA to evaluate the environmental consequences associated with construction of a new location exchange, gas station, and ancillary improvements (DON and USMC 2012). The development footprint for this project is located within the Ocotillo Heights area of Mainside and does not overlap the ROI of the Proposed Action. Based on the results of the analysis, it was determined that there would be no significant impacts to the environment with implementation of the Proposed Action. A FONSI for the Ocotillo Marine Mart was signed on 19 March 2012 (DON and USMC 2012).

5.1.1.7 P-128 Electrical Infrastructure Upgrades, 34.5kV to 115kV

An EA was prepared to evaluate the potential environmental impacts associated with P-128, Electrical Infrastructure Upgrades, which would construct and extend utilities to the new substation constructed by P-127 in support of planned facilities in the North Mainside build-out area. The project would construct the Leatherneck substation and upgrades to the Hi-Desert and Carodean substations off installation. The new transmission substation would be constructed with three regulated transmission substation transformers (115-kV & 34.5-kV). Also, 115-kV and 38-kV switching and protective devices would be constructed at Building 3083J in the vicinity of the existing Ocotillo switching station. Existing substation upgrades include upgrading the existing SCE dedicated 34.5-kV medium voltage distribution system to a 115-kV high voltage transmission system and adding a new 115-kV high voltage transmission loop. In addition, a new 3-phase, 3-wire, 34.5kV medium voltage distribution line on 60-foot (18-meter) class I poles would be extended. Supporting facilities include utility easements for the new utility corridor off-installation. Based on the results of the analysis, it was determined that there would be no significant impacts to the environment with implementation of the Proposed Action. A FONSI for the P-128 Electrical Infrastructure Upgrades was signed on 24 March 2011.

5.1.1.8 5.1.1.8 Adult Medical Care Clinic Replacement

An EA was prepared to evaluate the potential environmental impacts associated with the proposed construction and operation of a replacement Adult Medical Care Clinic at the Combat Center. The Proposed Action involved the construction and operation of a replacement Adult Medical Care Clinic after the demolition of the existing Adult Medical Care Clinic buildings as well as the relocation of all personnel associated with the Adult Medical Care Clinic. Based on the results of the analysis, it was determined that there would be no significant impacts to the environment with implementation of the Proposed Action. A FONSI was signed for the Adult Medical Care Clinic Replacement on 22 February 2013 (USMC 2013b).

5.1.1.9 MW Photovoltaic (PV) Project at the Combat Center

In 2011, a 6.5 acre (2.6 hectare) Morongo Basin Municipal Advisory Council, 1.1 MW solar photovoltaic (PV) project was constructed along the northeastern side of Truax Drive, near 4th Street, at Mainside. This single-axis tracking project was expected to provide approximately 2.5% of the Combat Center's annual electrical needs (DoD 2012). A Categorical Exclusion was prepared on 24 August 2011 for a 10 acre (4 hectare), 1.0 MW solar PV project located immediately southeast of the water retention ponds. The Categorical Exclusion decision was revalidated on 27 February 2012 and again on 2 June 2014 (USMC 2014c).

5.1.1.10 Cascade Solar Farm

The Cascade Solar Farm was developed and held by Cascade Solar, LLC a subsidiary of Axio Power Holdings, LLC. The project application was submitted mid-2011 and began construction early 2013. The 19 MW project was built on approximately 150 acre (60 hectare) using PV technology and is located in the unincorporated community of Joshua Tree approximately 11.5 miles (18.5 kilometers) southwest of Mainside. In addition, the project is located on Cascade Road north of Highway 62, less than 1 mile east of the proposed Joshua Tree Solar Farm. The project was completed and placed into operation in April 2014.

5.1.1.11 Lone Valley Solar Project

The Lone Valley Solar Project consists of two separate permitted projects known as Agincourt Solar project and Marathon Solar project. The project is located south of State Route 247 on Camp Rock Road approximately 48 miles (77 kilometers) northwest from Mainside. EDP Renewables purchased the shovel-ready properties in February 2014. Construction on the 30MW PV project began in March 2014 on approximately 230 acre (93 hectare) (combined). The project was completed in January 2015.

5.1.1.12 Highland Solar I Project (SEPV8)

Solar Electric Solutions submitted an application early 2011 to develop a 12-MW, 100-acre (40-hectare) project originally named "SEPV8." The project is located approximately 6.5

miles (10.5 kilometers) from Mainside on Lear Avenue, north of Highway 62. Solar Electric Solutions started construction in mid-2011 and later sold the project to SolarWorld in May 2012. The project was completed and placed into operation in December 2012. In early 2013, the project was sold to Duke Energy and renamed to Highland Solar I.

5.1.2 Present Projects

5.1.2.1 Land Acquisition/Airspace Establishment to Support Large-Scale Marine Air Ground Task Force Live-Fire and Maneuver Training

An EIS was prepared to evaluate the impacts from the proposed extension of existing installation operating areas through acquisition of additional training lands, modification and establishment of military special use airspace, and implementation of Marine Expeditionary Brigade-level sustained, combined-arms, live-fire, and maneuver training exercises within current and proposed operating areas at the Combat Center. Proposed training activities would occur within existing training areas and within proposed land acquisition areas located along the border of the Combat Center. The expansion areas are located to the west, south, and east of the Combat Center. Major resource areas of concern included biological resources, cultural resources, air quality, socioeconomics, recreation, land use, health and safety, and airspace management. A Final EIS was published in July 2012 (MCAGCC 2012).

The Record of Decision (ROD) concluded that there would be a significant, unmitigable impacts to land use (as a result of incompatibility with the Johnson Valley Off Highway Vehicle Area Management Plan), recreation (as a result of loss of access to and the use of 57% of the Johnson Valley Off Highway Vehicle Area), airspace management (as a result of the adverse effects of the proposed new and modified Special Use Airspace on Victor airway and jet route instrument flight rules air traffic within or adjacent to the airspace), and air quality (as a result of nitrous oxide emissions). The Proposed Action would also result in significant and unmitigable impacts to biological resources due to the potential adverse effects of training activities on desert tortoises including total potential take of between 154 and 714 federally threatened desert tortoises over the life of the project (between 121 and 189 in the acquisition study areas); however, it would not result in jeopardy of the species (USMC 2013b). Upon completion of ESA section 7 consultations, the USFWS concluded in the BO that take would occur due to military operations and concentrated off-highway vehicle usage in the Johnson Valley area (USFWS 2012).

5.1.2.2 241-acre Solar Photovoltaic System

An EA was prepared in 2015 to evaluate the potential environmental impacts associated with the construction, operation, maintenance, and eventual decommissioning of a 241-acre (98-hectare) solar PV system at Mainside, west of Adobe Road and a transmission line to transmit the energy to the civilian grid (MCAGCC 2015). The PV site consists of disturbed vacant land that was previously used as an airfield. Depending on the type of PV panel selected by the operator/lessee, the proposed project could produce 25-57 megawatts of power. Based on the results of the analysis, it was determined that there would be no

significant impacts to the environment with implementation of the Proposed Action. A FONSI was signed for the EA on 16 November 2015.

5.1.2.3 Desert Tortoise Translocation Required for Land Acquisition/Airspace

Establishment to Support Large-Scale Marine Air Ground Task Force Live-Fire and Maneuver Training Since the 2012 Final EIS and 2013 ROD (USMC 2013b) for Land Acquisition/Airspace Establishment to Support Large-Scale Marine Air Ground Task Force Live-Fire and Maneuver Training, the USMC conducted detailed studies and coordinated with USFWS, CDFW, and the BLM on alternative translocation plans for the desert tortoise, as required in the 2017 Biological Opinion (USFWS 2017). Considering new information gained from these efforts, the DON elected to prepare a SEIS focusing on the evaluation of potential impacts of alternative tortoise translocation plans (DON 2017). The SEIS analyzed the potential environmental impacts of two action alternatives (Alternative 1 and Alternative 2) addressing different methodologies and locations for implementing a Desert Tortoise Translocation Program in support of large-scale Marine Air Ground Task Force live-fire and maneuver training. Potential impacts were analyzed for biological resources, land use (including recreation), air quality, and cultural resources. With the implementation of proposed SCMs, neither action alternative would result in significant impacts to any resource on a project-level basis. However, the past, present, and reasonably foreseeable future actions would result in potentially significant cumulative impacts to biological resources (i.e., vegetation (including rare plants), wildlife, the desert tortoise), Land Use (i.e., recreation and off-highway vehicle use, grazing), and Cultural Resources (i.e., cultural and spiritual landscape).

5.1.2.4 Water Treatment Plant at the Combat Center

An EA is being prepared to evaluate the potential environmental impacts associated with a proposed drinking water treatment plant and installation of three groundwater wells at the Combat Center. The Proposed Action would: (1) provide drinking water to the Combat Center personnel which meets the federal and State of California standards for drinking water; and (2) allow for the longevity of quality drinking water from drinking water sources within the Combat Center boundary. The EA addresses five action alternatives and the No-Action Alternative. Potential impacts were analyzed for geological resources, biological resources, water resources, cultural resources, aesthetics, air quality, electrical utilities, socioeconomic, and public health and safety. No significant environmental impacts are expected to result from any of the action alternatives, which differ in treatment methods. A FONSI is expected in 2017, and it is expected that the water plant would be constructed in approximately 1 year.

5.1.2.5 Mojave Trails National Monument

The Mojave Trails National Monument was designated by Presidential Proclamation in February 2016 and encompasses approximately 1.6 million acres (647,500 ha) of federal lands currently managed by the BLM between Barstow and Needles, California. The Mojave Trails National Monument is located north and east of the Combat Center and contains

approximately 358,000 acres (145,000 hectares) of established wilderness areas and 84,400 acres (34,200 hectares) currently managed by the BLM as the Cady Mountains Wilderness Study Area. The monument also protects irreplaceable historic resources including ancient Native American trading routes, World War II-era training camps, and the longest remaining undeveloped stretch of Route 66. The designation preserves and enhances public access, for activities such as hunting and fishing, which continue to be managed by the State of California. Motorized vehicle use is limited to roads existing as of the date of this proclamation. The Presidential Proclamation – Establishment of the Mojave Trails National Monument – notes that “the area contains some of the Mojave Desert’s best habitat for the threatened desert tortoise and provides important corridors for the fragile species.” Therefore, the desert tortoise is considered by BLM to be one of the values for which the monument was determined. The BLM is currently developing a Mojave Trails National Monument Management Plan.

5.1.2.6 Desert Renewable Energy Conservation Plan

The Desert Renewable Energy Conservation Plan (DRECP) is a collaborative, interagency landscape-scale planning effort covering 22.5 million acres (9.1 million ha) in seven California counties: Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego. The plan was conceived and developed through a collaborative effort by the Renewable Energy Action Team Agencies, which consists of the BLM, USFWS, California Energy Commission, and CDFW. Recognizing the diverse values and resources found in the Mojave and Colorado/Sonoran desert regions, the Renewable Energy Action Team Agencies’ vision for the DRECP was to:

- 1) Advance federal and state natural resource conservation goals and other federal land management goals.
- 2) Meet the requirements of the federal ESA and Federal Land Policy and Management Act.
- 3) Facilitate the timely and streamlined permitting of renewable energy projects.

The planning effort is focused on the desert regions in the seven California counties identified above. As part of Phase I, the BLM issued a September 2016 ROD approving its Land Use Plan Amendment to the California Desert Conservation Area Plan, and Bishop and Bakersfield Resource Management Plans. The Land Use Plan Amendment represents the public-lands component of the DRECP, identifying areas appropriate for renewable energy development, as well as areas important for biological, environmental, cultural, recreation, social, and scenic conservation, consistent with the Federal Land Policy and Management Act multiple-use and sustained yield requirements. The amendments have been designed to result in an efficient and effective biological conservation and mitigation program providing renewable energy project developers with permit streamlining and cost containment while at the same time conserving, restoring, and enhancing natural communities and related ecosystems. Phase II of the DRECP is pending and focuses on better aligning local, state, and federal renewable energy development and conservation plans, policies, and goals. It includes building off the Renewable Energy Conservation Planning Grants that were awarded by the California Energy Commission to counties in the plan area. The BLM released the Final EIS for the Land Use Plan Amendment in November

of 2015 (BLM 2015) and the public comment period ended on 9 May 2016; the related ROD was signed 14 September 2016 (BLM 2016).

5.1.2.7 West Mojave Plan and West Mojave Route Network Project and Plan Amendment

The purpose of the West Mojave Plan (BLM 2006) is to develop management strategies for the desert tortoise, Mohave ground squirrel and over 100 other sensitive plants and animals that would conserve those species throughout the western Mojave Desert, while at the same time establish a streamlined program for compliance with the regulatory requirements of the Federal ESA and the California ESA. Agencies, local jurisdictions and others with a stake in the future of the western Mojave Desert have collaborated in the development of this Plan.

In January 2018, the BLM published the Draft Supplemental EIS for the West Mojave Route Network Project and Plan Amendment (BLM 2018a). The West Mojave Route Network Project is a travel management planning effort covering 9.24 million acres (3.74 million ha) in the West Mojave area of the California desert that supplements the 2006 West Mojave Plan (BLM 2006). The public comment period for the Draft EIS closed in June 2018 (BLM 2018ab). The BLM has requested an extension of the planning schedule to include the publication of a new Draft SEIS to conform with the DRECP land use amendment with the ROD expected in October 2019.

5.1.3 Reasonably Foreseeable Projects

5.1.3.1 General Military Construction (MILCON) Projects

The remaining projects listed in Table 5-1 are construction projects that are programmed for the Mainside area of the Combat Center between the 2012 and 2022 timeframe (*Note:* projects listed from 2012 to 2016 have not yet been funded). These projects are currently not well-defined, and very little information is available to characterize the potential effects of each project.

Table 5-1. Construction Projects at the Combat Center		
Project Number	Project Title	Date (FY)
P177	MULTI-USE OPERATIONAL FITNESS AREA	2012 ⁻¹
P105	TRACKED VEHICLE MAINTENANCE COVER	2012 ⁻¹
P184	ADULT MEDICAL CARE CLINIC	2013 ⁻¹
P159	CAMP WILSON INFRASTRUCTURE UPGRADE	2014 ⁻¹
P1232	MICROGRID EXPANSION	2016 ⁻²
P192	POTABLE WATER TREATMENT / BLENDING FACILITY	2018
P1231	WASTEWATER TREATMENT PLANT	2021
P221	MCTOG/MCLOG/INTEL COMPLEX	2021
P1233	CENTER MAGAZINE AREA SAFETY UPGRADES	2022
P924	BATTLE SIMULATION TRAINING CENTER	2018

P988	COMBAT CENTER GATE RECONFIGURATION	2021
P558	SUBSISTENCE STORAGE FACILITY	2023
P900	MCCES CLASSROOM	2022
P990	RANGE CONTROL FACILITY	2022
P926B	LIBRARY / LIFELONG LEARNING CENTER, PHASE II	2022
P216	CAMP WILSON TRAINING OPS FUELING FACILITY	2023
P989	AT/FP PERIMETER FENCE	2022
P954	MAGTFTC OPERATIONS CENTER	2022
P194	CONVERT BUILDING 2025 TO WHEELED VEHICLE MAINTENANCE FACILITY	2024
P193	MTU/RTAMS MULTI-PURPOSE CLASSROOM	2021
P617	WASTE HANDLING AND RECOV FACILITY	2024
P109	GROW THE FORCE - TACTICAL VEHICLE WASH RACK	2024
P191	ADDITION TO CAMP WILSON GYM	2024
P602	TRAINING INTEGRATION CENTER	2024
P927	MCCES CLASSROOM	2023
P902	MCCES VEHICLE MAINTENANCE & SUPPLY FACILITY	2025
P928	MCCES CLASSROOM	2021
P603	MCCES EQUIPMENT FACILITY	2025
P929	MCCES CLASSROOM	2025
P903	MCCES CONSOLIDATED RADAR CLASSROOM	2025
P911	MCCES CLASSROOM	2025

Legend: AT/FP = Anti-Terrorism/Force Protection; HQ = headquarters; MCCES = Marine Corps Communication and Electronic School; MCLOG = Marine Corps Logistics Operations Group; MCTOG = Marine Corps Tactics and Operations Group; MTU = Marksmanship Training Unit; PWD = Public Works Division; ROICC = Resident Office in Charge of Construction; RTAMS = Range Training Area Maintenance Section.

Note: - 1 - Projects have been completed; 2 - Projects have been put under contract.

Source: Pers Comm, PWD August 2018.

5.1.3.2 Development within the City of Twentynine Palms and the Surrounding Area

General community development and growth is expected to occur in all local and regional areas. Therefore, projects such as redevelopment of existing commercial areas, commercial and residential growth, and road maintenance projects are expected to occur in all areas surrounding the Combat Center. A majority of the future planned or proposed projects for the City of Twentynine Palms are located along Adobe Road. These projects consist primarily of standard commercial development. In addition, there are residential housing projects proposed for development east and southeast of Twentynine Palms. All projects are proposed to occur within the next 5 to 10 years as part of standard planning and community growth. The City of Twentynine Palms is required to implement CEQA for any projects that are determined not to be exempt from CEQA. Therefore, any project that is determined to have significant environmental effects would be required to mitigate these impacts to a level of insignificance. The following commercial and residential projects are near the Proposed Action and have been approved or are pending:

- **80-acre Commercial Development Project** – Project to develop 80 acres (32 hectares) for retail businesses, multi-family housing, and restaurants. Located on the northeast corner of Adobe Road and Valle Vista, just outside of the main gate of the Combat Center. The project was approved by the City of Twentynine Palms, but no construction was initiated, and the application expired.
- **35-acre Residential Development Project** – Proposed development of 35 acres (14 hectares) for 135 lots. Located on Amboy Road west of Adobe Road and south of the south study area. The tentative tract map was approved 4 October 2005, but the project is currently on hold.
- **10-acre Residential Development Project** – Pulliam Construction proposal to develop 10 acres (4 hectares) for four lots. Located on the northwest corner of Utah Trail and Indian Trail, southwest of the south study area. The tentative tract map was approved 15 May 2005; project currently on hold.
- **5-acre Residential Development Project** - Sunwest Development proposal to develop 5 acres (2 hectares) for 17 lots. Located on Amboy Road west of Adobe Road, and south of the south study area. Project pending.

5.1.3.3 Palen Solar Project and Land Use Plan Amendment

The BLM announced the availability of the Final Supplemental Environmental Impact Statement and Environmental Impact Report and California Desert Conservation Area Land Use Plan Amendment for a proposed solar project in Riverside County. The Final SEIS/EIR provides a comprehensive analysis of potential environmental impacts for the proposed 500 megawatt Palen Solar Project and Land Use Plan Amendment (LUPA) on public lands in eastern Riverside County.

A major component will be a change in the previously proposed technology to the pending right-of-way application that proposes solar photovoltaic technology, not the previously proposed power tower configuration. The Palen Solar Project would now include a main generation area, on-site substation, switchyard, site security, a 230 kV generation-tie line, and an operations and maintenance facility potentially onsite.

The Notice of Availability for the Final SEIS/EIR and proposed LUPA was published in the Federal Register on 2 May 2018 which opened a 30-day protest period as well as a governor's consistency review. The BLM is the lead federal agency for the National Environmental Policy Act review, and Riverside County is the lead agency for the California Environmental Quality Act review. Pending the outcome of those processes, the BLM will issue a ROD.

5.2 CUMULATIVE IMPACTS

This section addresses potential cumulative impacts of the No-Action Alternative and Proposed Action to implement the Combat Center INRMP through 2022 in conjunction with the aforementioned cumulative projects for each resource discussed in this EA.

5.3 TOPOGRAPHY, GEOLOGY, AND SOILS

Implementation of either the No-Action Alternative or Proposed Action, in conjunction with identified cumulative projects, would not result in significant cumulative impacts to topography, geology, and soils. None of the cumulative projects or the Proposed Action and no action alternative would impact soils. Appropriate design measures, erosion control plans, and standard construction practices would be implemented for all projects involving new construction to reduce the potential for cumulative impacts. Therefore, in conjunction with other past, present, or reasonably foreseeable projects, the No-Action Alternative and the Proposed Action would not result in significant cumulative impacts to geological resources.

5.4 WATER QUALITY

Implementation of either the No-Action Alternative or Proposed Action, in conjunction with identified cumulative projects, would not result in significant cumulative impacts to water quality. None of the cumulative projects involving construction (primarily at Mainside) would impact surface water in the same manner or in the same areas as ongoing or the Proposed Action. Appropriate design measures, erosion control plans, and standard construction practices would be implemented for all projects involving new construction to reduce the potential for water resource impacts. Therefore, in conjunction with other past, present, or reasonably foreseeable projects, the No-Action Alternative and the Proposed Action would not result in significant cumulative impacts to water resources.

5.5 BIOLOGICAL RESOURCES

Implementation of either the No-Action Alternative or the Proposed Action would not result in localized disturbances to Mojave Desert habitats, associated vegetation, nor wildlife. There would be no new construction activities, ground disturbance, nor removal of vegetation. For the No-Action Alternative, the existing Combat Center INRMP, the Combat Center's Head Start program, and regional conservation plans such as the West Mojave Plan (BLM 2006) and the DRECP (BLM 2015), would continue to be implemented to minimize potential cumulative impacts to regional biological resources. The implementation of SCMs like those described in the 2017 BO (USFWS 2017), have been and would continue to be a component of projects affecting Mojave Desert biota. While individual plants and animals including special-status species may be affected by any project, the lack of ground disturbance or construction activities coupled with the conservation of higher sensitivity habitats, assures that the Proposed Action would not contribute to cumulative effects on the overall distribution or abundance of populations, habitats, and ecosystem functions and values. The environmental consequences of past projects are reflected in existing biological conditions, including the identification of special-status species by the USFWS and CDFW. Additionally, the Proposed Action and other regional conservation plans such as the Desert Tortoise Recovery Plan (USFWS 2011) and the DRECP (BLM 2015) highlight the environmental consequences of past projects and provide avoidance and minimization measures.

Cumulative species-wide impacts are considered during NEPA analyses and ESA section 7 consultations (e.g., Biological Opinions), and appropriate mitigation measures are applied to avoid, minimize, or compensate for any potential impacts to biological resources (particularly special-status species). Reasonably foreseeable projects that have not yet undergone environmental reviews under NEPA and ESA section 7 consultation would continue to follow required procedures to ensure that significant biological resource impacts are avoided, minimized, and/or compensated to the extent practicable. Therefore, neither the No-Action Alternative nor the Proposed Action would significantly add to cumulative impacts to biological resources.

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CHAPTER 6

LIST OF AGENCIES CONTACTED

The following agencies were consulted during either or both of the Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment (EA) preparations.

- U.S. Fish and Wildlife (USFWS)
- California Department of Fish and Wildlife (CDFW)
- Bureau of Land Management (BLM)
- State Historic Preservation Officer (SHPO)
- Joshua Tree National Park
- Torres-Martinez Desert Cahuilla Indians
- Augustine Band of Cahuilla Indians
- Twenty-nine Palms Band of Mission Indians
- San Miguel Band of Mission Indians
- Morongo Band of Mission Indians
- Fort Mohave Indian Tribe
- Colorado River Indian Tribes
- Chemehuevi Indian Tribe
- Agua Caliente Band of Cahuilla Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Mission Indians of the Cahuilla Reservation
- Preservation Ranch
- Society for the Conservation of Bighorn Sheep
- Desert Tortoise Council

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CHAPTER 7

LIST OF PREPARERS AND CONTRIBUTORS

7.1 LIST OF PREPARERS

This Environmental Assessment was prepared for, and under the direction of, the United States Marine Corps (USMC) by MultiMAC Joint Venture.

Kylie Fischer, Project Manager (24 years)
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7.2 LIST OF CONTRIBUTORS

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CHAPTER 8

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APPENDIX A

RECORD OF NON-APPLICABILITY (RONA)

FOR CLEAN AIR ACT CONFORMITY

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DEPARTMENT OF DEFENSE

DEPARTMENT OF NAVY

**RECORD OF NON-APPLICABILITY (RONA)
FOR CLEAN AIR ACT CONFORMITY**

**Marine Air Ground Task Force Training Command Marine Corps Air Ground
Combat Center (Combat Center), Twentynine Palms, California**

Integrated Natural Resources Management Plan

Pursuant to Section 176(c) of the Clean Air Act, as amended by the 1990 amendments; the General Conformity Rule at 40 Code of Federal Regulations parts 51 and 93; and the Chief of Naval Operation Interim Guidance on Compliance with the Clean Air Act Conformity Rule, the Department of Navy determined that the potential actions and management practices outlined in the Combat Center Integrated Natural Resources Management Plan are exempt from conformity requirements in accordance with Sections 40 Code of Federal Regulations 93.153 (c)(2)(ii), (iv), (vii), (viii), (ix), (x), and (xiii). The Integrated Natural Resources Management Plan outlines many routine and continuing activities for the Combat Center, which would result in no emission increase or an increase that is clearly de minimis. Development of projects and future implementation of planning guidelines would primarily include natural resource surveys or monitoring, which would not generate emissions. While minor restoration projects may result in short-term increases in dust these would be addressed with Best Management Practices (BMPs) (e.g., soil watering, etc.). Additionally, restoration projects would result in increased vegetative cover that would reduce the long-term potential for dust generation. Specific analyses would be performed to verify that emissions do not exceed de minimis levels when specific actions are proposed. Consequently, the Proposed Action is exempt from the conformity determination requirements of the U.S. Environmental Protection Agency's conformity rule.

To the best of my knowledge, the information contained in this RONA is correct and accurate and I concur in the finding that the proposed action is not subject to the General Conformity Rule.

Date

R. B. TURNER, JR
Brigadier General, United States Marine Corps

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APPENDIX B

PUBLIC INVOLVEMENT

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OUTLINE OF THE PUBLIC INVOLVEMENT PROCESS

Introduction

The U.S. Marine Corps (USMC) has conducted a public participation process to provide the public with the opportunity to participate in developing the Environmental Assessment (EA) and Integrated Natural Resources Management Plan (INRMP). The purpose of the public participation process is to notify and inform interested and potentially affected stakeholders and the general public about the Proposed Action and solicit their input on the environmental analysis. The National Environmental Policy Act (NEPA), and regulations for implementing NEPA as set forth by the Council on Environmental Quality (CEQ), requires federal agencies make diligent efforts to involve stakeholders in the development of environmental documents and stipulates public involvement during various stages of the environmental review process (42 U.S. Code § 4321, as amended; CEQ Regulations for Implementing NEPA, 40 Code of Federal Regulations Part 1500, as amended). The proposed project by submitting comments on the adequacy and accuracy of the Description of Project Actions and Alternatives (DOPAA), for the revised Integrated Natural Resources Management Plan (INRMP).

Public Involvement Overview

The public participation process commenced with the publication of a Notice of Preparation (NOP) of the EA in two local newspapers (the Hi-Desert Star and the Desert Trail). These newspapers published the NOP once per week per newspaper for two weeks, for a total of four publications (publications occurred on 31 May and 7 June 2018). The Draft DOPAA and INRMP were made available at two local libraries (the Twentynine Palms Branch Library and the Yucca Valley Branch Library) and online, on the Marine Corps Air Ground Combat Center (MCAGCC) website. Letters identifying the website for electronic versions of the documents and providing hard copies of the documents were also sent to special-interest stakeholders. The public comment period for the Draft DOPAA and INRMP ran from 30 May 2018 through 29 June 2018. The USMC considered all comments received during this public comment period. Comments received and the USMC response to those comments are provided below.

The USMC provided another opportunity for public involvement with the Notice of Availability (NOA) of the Preliminary Final Environmental Assessment and INRMP. This notice was published in two local newspapers (the Hi-Desert Star and the Desert Trail). These newspapers published the NOA once per week per newspaper for two weeks, for a total of four publications (publications occurred on 6 December and 13 December 2018). The documents were also made available at two local libraries (the Twentynine Palms Branch Library and the Yucca Valley Branch Library) and online, on the Marine Corps Air Ground Combat Center (MCAGCC) website. Letters identifying the website for electronic versions of the documents and providing hard copies of the documents were also sent to special-interest stakeholders. The public comment period for these documents ran from 6 December 2018 through 11 January 2019. No comments were received during this comment period.

The public participation process will conclude with publication of a NOA for the Final EA and Finding of No Significant Impact (FONSI). This NOA will be published in two local newspapers, and the documents will be made available in local libraries and the MCAGCC website, as described above for the Draft EA.

Summary of Comments Received During the DOPAA and Draft INRMP Public Comment Period

Comments were received on the DOPAA and INRMP from the Desert Tortoise Council, California Department of Fish and Wildlife, Twentynine Palms Band of Mission Indians, Agua Caliente Band of Cahuilla Indians, and San Manuel Band of Mission Indians.

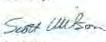
This Appendix contains all comments received during the public comment period. All received comments were assessed and considered both individually and collectively during development of this Final EA. Written responses were prepared for all comments and are also included in this Appendix. Certain substantive comments prompted additional data collection, impact analysis, and text changes or additions that were incorporated into this Final EA.

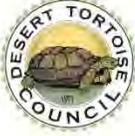
The directory below (see Table A-1) provides a listing of commenters by last name or organization. The third column in Table A-1 provides the comment number for each comment letter, which is also found in the upper left-hand corner of the comment letter, below. The fourth column Table A-1 provides the page number in this appendix where the comment and associated response appears in this appendix.

Table A-1 Index of Commenters			
Commenter	Organization	Comment Number	Page Number
Scott Wilson	California Department of Fish and Wildlife	1	B-5
Edward L. LaRue, Jr	Desert Tortoise Council	2	B-6
	Multi Tribe Consultation Meeting	3	B-20
Anthony Madrigal, Jr	29 Palms Band of Mission Indians	4	B-21
Lee Clauss	San Mission Band of Indian's	5	B-22

Responses to Public Comments on the DOPAA and Draft INRMP

Comments and associated responses are provided on the following pages.

Comment 1	Received 29 June 2018	Response to Comment
 <p>State of California - Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Inland Deserts Region 3602 Inland Empire Blvd., Suite C-220 Ontario, CA 91764 (909) 854-6469 www.wildlife.ca.gov</p> <p>EDWARD S. BROWN, Jr., Governor CHARLTON H. BONHAM, Director</p> <p>June 29, 2018</p> <p>Department of the Navy Naval Facilities Engineering Command Southwest Attn: Aaron Hebshi 1220 Pacific Highway San Diego, CA 92132-5190 aaron.hebshi@navy.mil</p> <p>Subject: Draft Integrated Natural Resources Management Plan Fiscal Years 2018-2022 for the Marine Air Ground Task Force Training Command/Marine Corp Air Ground Combat Center Twentynine Palms, CA</p> <p>Dear Mr. Hebshi:</p> <p>The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Integrated Natural Resources Management Plan- Fiscal Years 2018-2022 (INRMP) for the Marine Air Ground Task Force Training Command (MAGTF/TC) and Marine Corp Air Ground Combat Center (MCAGCC). Pursuant to the Sikes Act Improvement Act of 1997, the INRMP is to be prepared in cooperation with the appropriate Federal and State Fish and Wildlife Agencies (i.e., U.S. Fish and Wildlife Service, USFWS; CDFW). CDFW is providing comments on this draft INRMP as the state agency which has the statutory responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by CDFW (Fish & Game Code section 711.7). CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish & Game Code section 1902). CDFW's fish and wildlife management functions are implemented through its administration and enforcement of the Fish and Game Code (Fish & Game Code section 702). CDFW is responsible for the conservation, protection, and management of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA).</p> <p>CDFW would like to thank the Marine Corps for the annual implementation reports and the work on desert tortoise, bighorn sheep, and other wildlife on the installation. The survey work for both plants and animals provides valuable information for managing California's wildlife.</p> <p><i>Conserving California's Wildlife Since 1870</i></p>	<p>Thank you for your comments.</p>	
<p>Draft Integrated Natural Resources Management Plan Fiscal Years 2018-2202 for the Marine Air Ground Combat Center Twentynine Palms, CA June 29, 2018 Page 2 of 2</p> <p>Following are our specific comments:</p> <p>Page 1-9 Lines 20-23 – While MCAGCC holds a California Endangered Species Act (CESA) Memorandum of Understanding (MOU) for desert tortoise (<i>Gopherus agassizii</i>), research, the CESA MOU does not currently cover the translocation project. CDFW recommends MCAGCC obtain an amendment to the CESA MOU for this action. CDFW-1</p> <p>Page 1-17 Lines 30-40 – CDFW appreciates that annual Progress Reports will be submitted and developed in coordination with CDFW. CDFW-2</p> <p>Page 3-30 Table 3-8 – Special Status Species– Birds - Golden Eagle is state fully protected species as identified in California Fish and Game Code section 3511. Not all raptors are fully protected species, but are protected under California Fish and Game Code section 3503.5 which prohibits take of raptors, their nests and eggs. CDFW-3</p> <p>Page 3-30 Table 3-8 – Special Status Species–Mammals – CDFW recommends addition of desert kit fox (<i>Vulpes velox</i>) to the Special Status Fauna list. Though desert kit fox is not a Species of Special Concern, it is protected under Title 14 CCR 490 Division 1 Sub-division 2 Chapter 5 which states "Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time." CDFW therefore recommends addition of this species to the list. CDFW-4</p> <p>Page 4-26 – Lines 20-25. CDFW requests an invitation to participate in the desert tortoise population augmentation strategies meetings. CDFW-5</p> <p>Appendix D- Page D-5 Ringed-tailed Cat (<i>Bassariscus astutusis</i>) is a fully protected species in California. CDFW-6</p> <p>CDFW appreciates the opportunity to comment on the INRMP. If you have any questions pertaining to this letter, please contact Rebecca Jones, Environmental Scientist at Rebecca.Jones@wildlife.ca.gov or (661) 285-5967.</p> <p>Sincerely,  Scott Wilson Environmental Program Manager Inland Deserts Region</p> <p>Cc: CORR</p>	<p>CDFW-1: In accordance with the Sikes Act, this INRMP was prepared in cooperation with CDFW and addresses management of all natural resources aboard the installation. However, the federal government has not relinquished sovereignty with regard to threatened and endangered species.</p> <p>CDFW – 2; The Combat Center appreciates input into the progress of their program.</p> <p>CDFW – 3: The Final INRMP and EA were modified as a result of this comment. The special status code for the golden eagle was corrected to Fully Protected.</p> <p>CDFW – 4: A specific prohibition of the taking of Desert Kit Fox will be addressed during the implementation of task 4.1.1-A, identify game management priorities for a hunting program. At this time, the Final INRMP and EA were modified to include the addition of Desert Kit Fox as a Sensitive Status Species.</p> <p>CDFW-5; The Final INRMP was modified as a result of this comment. The text was reworded to include CDFW.</p> <p>CDFW-6: The Final INRMP was modified as a result of this comment. The status for Ringtail was corrected to Fully Protected.</p>	

Comment 1	Received 27 June 2018	Response to Comment
 <p>DESERT TORTOISE COUNCIL 4654 East Avenue S #257B Palmdale, California 93552 www.deserttortoise.org info@deserttortoise.org</p> <p>Via email only</p> <p>27 June 2018</p> <p>Attention: Dr. Aaron Hebshi, Project Manager Naval Facilities Engineering Command Southwest 1220 Pacific Coast Highway San Diego, CA 92132 aaron.hebshi@navy.mil</p> <p>RE: Environmental Analysis of the 2018-2022 Integrated Natural Resources Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California</p> <p>Dear Dr. Hebshi,</p> <p>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.</p> <p>We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely occupied by Agassiz's desert tortoise (<i>Gopherus agassizii</i>) (synonymous with "Mojave desert tortoise"), our comments pertain to enhancing protection of this species during activities authorized by the U.S. Marine Corps (USMC) as they pertain to the current Integrated Natural Resources Management Plan (Draft INRMP) at the Marine Corps Air Ground Combat Center (MCAGCC) in Twentynine Palms, California.</p> <p>As per the Notice of Preparation, the USMC encourages comments on this Proposed Action, along with supporting rationale that the responsible official should consider in reaching a decision. Comments will help USMC prepare an environmental assessment on the Proposed Action. The assessment will be used to determine whether to prepare an environmental impact statement (EIS) or a finding of no significant impact. Following this cover letter are our specific concerns that we expect will be addressed in the future Environmental Assessment (EA) or EIS.</p> <p><small>Desert Tortoise Council Comments 29 Palms MCAGCC 2018-2022 INRMP Final Comments 6-27-2018</small></p>	<p>Thank you for your comments.</p>	
<p>In the attached table, the first section pertains to the "Draft Description of the Proposed Action and Alternatives for Implementation of the Integrated Natural Resources Management Plan 2018-2022" (DOPAA) followed by the second section pertaining to the actual "Integrated Natural Resource Management Plan, Fiscal Years 2018 through 2022" (herein referred to as "Draft INRMP," implying there will be a revised final INRMP). Throughout the table, we reference the applicable page, section, figure, and table numbers followed by quotes from the text, a statement of our concern, and action items given in red font separated by a space from the stated concerns. So, importantly, the red-font items comprise our specific recommendations for information that should be included in the subsequent environmental document for the Draft INRMP.</p> <p>We appreciate this opportunity to provide input and trust that our comments will further protect tortoises during USMC project activities. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other USMC projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above.</p> <p>Regards,</p> <p>Edward L. LaRue, Jr., M.S. Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson</p> <p><small>Desert Tortoise Council Comments 29 Palms MCAGCC 2018-2022 INRMP Final Comments 6-27-2018</small></p>		

Draft Integrated Natural Resources Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resources Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
5	2-4	2.3	DTC-5	2.3	Resource Areas. Under Biological Resources, the phrase, "training land management," should be clarified in the Final INRMP.
6	2-2	2.2	DTC-6		Alternative 1 would "Address management and monitoring requirements for Mojave desert tortoise and desert tortoise habitat, as outlined in the STS and RO." This sentence implies that the biological opinion is management and monitoring requirements for the tortoise and tortoise habitat. The purpose of a biological opinion is to minimize take, not to manage for desert tortoise and tortoise habitat. We suggest that you clarify this statement that refers to the biological opinion, explain that USMC's authority to manage AN/AGV for the tortoise and tortoise habitat is required under Section 7(a)(1) of the Endangered Species Act, and describe implementation of recovery actions identified in the recovery plan for the desert tortoise.
7	4-1		DTC-7		Clarify that Council states its support for the goals and initiatives identified in the Draft INRMP.
8	4-5	3.1	DTC-8		"Other pertinent laws and regulations applicable to natural resources management actions aboard the Combat Center are listed below in Table 1-4." We note that the Federal Water Pollution Control Act is included in the list but CERCLA, RCRA, and PIFRA are not included. The Department of Defense has a history of being a major polluter of the environment and this pollution in the past has adversely affected natural resources. We also note that the California Endangered Species Act is not mentioned. We suggest that the Final INRMP add these laws and regulations, or provide justification as to why they are not applicable, including how pollution generated by the Combat Center is managed so that it is, or is not, affecting natural resources.
9	4-8	1.4	DTC-9		"The USFWS Pacific Southwest region (Region 8), field office at Ventura, California, provides technical advice and regulatory guidance for the management endangered and threatened species aboard the Combat Center." The beginning of the Draft INRMP has a signatory page for USFWS Calhoun, not USFWS Ventura.

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DTC-5: Training Lands Management is a carryover term from the previous NR program structure. The concept of this element was retained but renamed to "Training Lands Degradation Minimization," and the term training land management was moved to INRMP section 2.5.3, which discusses how the military training program is structured, reviewing topics such as land use designations and training activities.

Therefore, both the Final INRMP and EA were modified as a result of this comment. In the INRMP, Training Lands Management is now referred to as Training Lands Degradation Minimization and Table 2-1 in the EA was updated to remain consistent.

DTC-6: The Combat Center has a variety of authorities to manage natural resources aboard the installation. Desert Tortoise recovery actions are described in the INRMP primarily under Goal 3 Element 1. Language was also added to Chapter 4, goal 3, element 1 that states the INRMP includes a variety of recovery actions consistent with the USFWS Recovery Plan for Desert Tortoise.

DTC-7: The Combat Center appreciates the Desert Tortoise Council's interest in and support of the goals and initiatives identified in the INRMP.

DTC-8: This table was modified to include CERCLA, RCRA, and FIFRA. However, CESA was not included as the federal government has not relinquished sovereignty with regard to threatened and endangered species.

DTC-9: Final signatories were identified after the first comment period. This information has now been updated.

Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
					We suggest that you update this information.
10	1-8, 1-9	1.4.2, 1.7		DTC-10	Although the "West Mojave Habitat Conservation Plan" (which more accurately should be "West Mojave Coordinated Management Plan") is cited on page 1-8, discussion of this plan is missing from the discussion on pages 1-12 and 1-13. Whereas the NREMP and NRCO plans are summarized on pages 1-12 and 1-13, MCAAGC is physically unsummarized within the WDMO planning area.
11	1-80 (see 1)	1.2		DTC-11	We recommend that Section 1.7 of the Draft INRMP be modified to include discussion of the West Mojave Coordinated Management Plan (WDMO) Plan, which is the most pertinent TLM management plan for the MCAAGC.
12	1-11	1.6		DTC-12	The Council supports the director's that the INRMP is "the primary vehicle to implement biodiversity protection" at the Combat Center, and that the INRMP employs accurate management principles and an adaptive management framework to guide the Natural Resource Program" at the Combat Center.
13	1-14	1.8.1		DTC-13	"Environmental stewardship involves the management of natural resources in a way that protects and values the intrinsic value of those resources to meet the needs of present and future generations. Environmental stewardship is critical for range sustainability because when properly implemented, it provides a means to meet ongoing training requirements through the maintenance of environmental quality over time. Section 1.8.1 instructions require an environmental stewardship plan to be incorporated into natural resource management plans." The Council supports the Combat Center incorporating environmental stewardship in this INRMP especially for the Mojave desert tortoise.

DTC-10: The Final INRMP was modified as a result of this comment. A reference to the Western Mojave Plan was included in the appropriate section and a discussion of this Plan was also provided. The Plan was also considered in the cumulative impacts discussion of the EA.

DTC-11: The Combat Center appreciates the Desert Tortoise Council's support of the ecosystem management and biodiversity protection identified in the INRMP.

DTC-12: The Combat Center appreciates the Desert Tortoise Council's support of the ecosystem stewardship identified in the INRMP.

DTC-13: In accordance with the Sikes Act, this INRMP was prepared in cooperation with CDFW and addresses management of all natural resources. However, the federal government has not relinquished sovereignty with regard to threatened and endangered species.

Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
14	3-2	3.2		DTC-14	"The Combat Center has grown over time to reach the approximately 703,667 acres, or 1,102 square miles of land it encompasses today. Major acquisition and growth events are identified below: • Public Land Order (PLO) No. 983 with over 200 acres of public land for the Department of Navy to use as "an artillery and anti-aircraft weapons training area" (thought to be the area now occupied by Mainridge)..." This section does not provide a chronology of these land acquisition events and gives the impression that they all occurred since the last INRMP.
15	3-4, 2			DTC-15	In the Final INRMP, please provide dates next to these land acquisitions.
16	3-8	3.5.5		DTC-16	In the Final INRMP, please provide this caption.
17	3-9	3.5.2		DTC-17	In the Final INRMP, please ensure that the narrative matches the figure. We suggest adding "Sandhill Training Area (Sandhill East and Sandhill West) on the map on page 2-2."
18	3-8	3.5.5		DTC-18	"Off-road travel in this area is predominantly 21-50 animals per square mile. The Special Use Area is temporarily off-limits to some types of military operations, and off-road travel is not authorized."

DTC-14: The Final INRMP identifies dates associated with various Public Land Orders to clarify the periods under which acquisitions occurred. Dates were not included for major acquisitions from individual landholders; however these events occurred well-between various PLOs, and the list is organized in a chronological order, alleviating the potential for any misunderstanding.

DTC-15: The requested acreages are now provided in the text of the INRMP and the TAs are clearly defined in Figure 2.2.

DTC-16: The figure in the Final INRMP was corrected to show the full extent of the Sandhill RTA. There has never been an East and West Sandhill RTA.

DTC-17: The Final INRMP was modified as a result of this comment. The language presented in the original version of the INRMP was updated to reflect current policies. Off-road travel has been and continues to be permanently unauthorized within the Sandhill Restricted Area.

DTC-18: The Final INRMP was modified as a result of this comment. The reference of Woodman et al. 2001 was confirmed and added to the sentence.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resource Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
19	24 and 25	2.4.1		11F-19	"Restricted Areas - Restricted Areas are designated as no impact, no mechanized movement, no biomass, no off-road vehicles, and no training involving vehicle activity. The Combat Center maintains approximately 3% of its training lands as a Restricted Area; a very small amount when compared to the overall size of the Combat Center." In the Final INRMP and Draft EA, please provide information on why restricted areas comprise only 3% of the Combat Center's lands. "Environmentally Sensitive Areas - Environmentally Sensitive Areas do not have limitations to training, however military units are cautioned to be aware of sensitive natural and cultural resources. The CCO 3090 ID cautions that improper utilization may result in future environmental constraints." In the Final INRMP and Draft EA, please provide information on the acreages of these areas. In the Draft INRMP, it is difficult to determine where various types of military use areas are in relation to Natural Resource Management Areas. Without this information, it is difficult to see the potential management conflicts and opportunities among these land uses which means it is difficult to determine whether the INRMP elements and tasks are adequate/appropriate or not. We suggest that the Final INRMP include a map that overlays the training areas with Natural Resource Management Areas and find ranges and this information be included in Chapter 2. "Traffic and Movement - Military training activities that employ tractive and ground resources represent the most major source of natural resource disturbance at the Combat Center. These activities avoid ignites or kill wildlife, disturb or damage soil structure and vegetation, and generate considerable dust." and "Potential effects of the military mission on wildlife include possible death or injury from direct contact with vehicles or munitions." This section describes some of the direct impacts to wildlife. In the Final INRMP and Draft EA, please include information on all indirect impacts to wildlife and their habitats such as

Source: Defense Council Comments 29 (Date: 06/06/2018) 2018-2022 INRMP Final Comments 27 25: 8

DTC-19: The mission of the Combat Center is to train Marines. Category 1 and Category 2 SUAs are designated when necessary to support that mission and meeting the Combat Center's statutory requirements.

DTC-20: The Final INRMP and EA were modified as a result of this comment. Restricted and Environmentally Sensitive SUAs have been updated and associated acreages provided in the documents.

DTC-21: The Final INRMP was modified as a result of this comment. The Figure was modified and Task 1.1.1-E was added to the workplan in Appendix A.

DTC-22: The Final INRMP and EA were modified as a result of this comment. Language has been changed to acknowledge indirect impacts on natural resources from military training operations, and additional references provided. However, a full recitation of all possible indirect impacts from military training is outside the scope of this INRMP.

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Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
18	3-28	2.0.2		11E-24	"Reduced cover however animals vulnerable to overgrazing and predation, etc." "Benefits from the Military Mission" In the Final INRMP and Draft EA, we suggest that you add additional benefits that include, no livestock grazing, recreational (RV) activities, energy development, and the enforcement of orders, policies, regulations, and laws by the military and beyond on the benefits of no development by listing the associated direct and indirect impacts to wildlife from various types of human development. "A pending Military Operations Area for the Gunn Rock restricted airspace adjacent to the Combat Center to the west would result in increased use." This is a very general description. Please show the location of this Area on a map in the Final INRMP and include the site. "The Mainside containment area is built out to contain a full range of facilities, infrastructure and services that support an almost completely self-sufficient human development, with industrial, military, housing, and commercial elements. The sanitary system and infrastructure are currently adequate for Mainside. Draft utilities and roads have been expanded since the base's initial development. Utilities include distribution systems for non-potable water, potable water, sanitary sewer, sewer disposal, electricity, high temperature water, and natural gas." In Section 4 of the Final INRMP and in the Draft EA, please indicate how the functions of managing waste water and utility poles are reduced by present from subsidizing benefits/activities such as common areas or services. "Remnants of old jeep trails that are no longer used can be seen throughout the Combat Center." Depending on their location, these old jeep trails should be worked to provide thermal cover and protection from predators, to limit the proliferation of non-native plants, and return native forage to wildlife. In the Final INRMP, please consider this as a management task that is implemented and funded in Appendix A.

Source: Defense Council Comments 29 (Date: 06/06/2018) 2018-2022 INRMP Final Comments 27 24: 8

DTC-23: The Final INRMP was modified as a result of this comment. Language has been added to speak to the presence of the military excluding other land uses that could impact the natural resources, and an additional reference was provided. However, a full recitation of all possible benefits from military presence is outside the scope of this INRMP.

DTC-24: The Final INRMP was modified as a result of this comment. Outdated information was removed and the discussion was changed to more generally review the subject.

DTC-25: The Final INRMP was modified as a result of this comment. The statement that facilities and utilities are adequate for Mainside was removed. The subsidy reduction program is currently administered under Goals 1 & 3 and are identified in the Workplan Objective 1.1.5 - Minimizing Wildlife Conflicts (tasks 1.1.5-D/E/F), Objective 3.1.2 - Inventory and Monitor to Identify Threats to Desert Tortoises (task 3.1.2-C), and Objective 3.1.4 - Minimize Tortoise Injury and Mortality Aboard the Combat Center (tasks 3.1.4-A/B).

DTC-26: The Combat Center has identified habitat restoration as Objective 2.4.4 in the INRMP.

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Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
37	5.28	5.3.3		1710-27	"Retention ponds contribute to biodiversity of wildlife species at the Combat Center (Section 29.3.3.1), and are heavily used by migratory birds." Please include in Section 4 and Appendix A of the Final INRMP the tasks that the Combat Center is implementing to successfully deter ravens from using these waters. If unknown, USMC should consider the use of these surface waters by ravens so these birds will fly several miles from water sources to hunt wildlife including Marine desert tortoises. "Ground Water" Numerous ground water basins are described in the document but there is not map of their locations. In the Final INRMP, please include a map or figure in this section on ground water that shows where these basins are located. We would like recent and proposed groundwater withdrawal near the Combat Center (e.g., Cadiz, etc.) have affected or would affect availability of ground water for the future operations of the Combat Center. We request that you include information on this subject in the Draft EA and Final INRMP. In the Final INRMP and Draft EA, please provide information on the population attributes of the desert tortoise at the Combat Center and expansion areas. Is there information on the size classes for tortoises so we can determine if reproduction/recruitment is occurring? Is there information on the trend of the population of tortoises at the Combat Center and whether expansion areas? Are the populations increasing, decreasing, remaining stable? Were the results of the population surveys analyzed statistically? If so, what were the results? We referenced that studies by both Woodman (2001) and LaRue (2013), which are cited in this section but not included in Section 3.0, also performed disturbance analysis along the transect survey. Since both studies employed the same methodology, there is an opportunity to see how military impacts have changed both in distribution and density during the intervening years. We ask that Section 3.7.6 be augmented in the Final INRMP to report the changes in military impacts that are documented in Woodman (2001) in the Late 1990s and LaRue (2013) in 2011. These references, and any others that may be missing, should be added to Section 3.0 of the Final INRMP.

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DTC-27: The Combat Center does not currently deter ravens from accessing retention ponds. The Natural Resources Program employs volunteer-based monitoring to document use by all avian species, including ravens.

DTC-28: The Final INRMP was modified as a result of this comment, and a map of the groundwater basins was added to Chapter 3 as FIGURE 3-3.

DTC-29: The Final INRMP has been modified as a result of this comment. Additional information explaining changes in the Combat Center desert tortoise population attributes over time have been added to section 3.7.6.

DTC-30: For the development of this INRMP, the Combat Center will not compare disturbance data collected during the Woodman (2001) and LaRue (2013) studies and does not anticipate significant changes in military tempo and impacts occurred over the time period mentioned. However, analysis of military impacts is a priority under in objectives 2.3.2 and 3.1.2 of the workplan and has added task 2.3.2-C to address the concern identified in this comment.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resource Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
31	3.26-36 3.27	3.7.6		1107-51	Whereas there is an adequate documentation of tortoise abundance in MCAACC's expansion areas in this region, there is no documentation, whatsoever, on the subsequent translocation efforts within these areas. This information is available and recently made public at the Management Oversight Group in Las Vegas, NV on 01/16/2017 by Walter Christensen, who is listed in Section 6.9. Mr. Christensen indicated that 971 large tortoises and 130 small tortoises, for a total of 1,101 tortoises, were translocated. About 20% of the translocated tortoises were translocated, or about 200. In total, 35 of 200 tortoises fitted with radio died. 15 translocated tortoises (that compared to only 3 recipients, 8 tortoises died in the control population, no tortoises < 160 mm died post translocation. We ask that Section 3.7.6 in the Final INRMP be modified to document and publish the specific information (data that provided by Mr. Christensen to the MOG on 01/16/2017) available on the short-term efficacy of the translocation effort from the expansion area. As given above, since these translocated tortoises were placed on public lands managed by the BLM, we believe that the legal status and authorized uses of these lands (e.g., U.S. Fish and Wildlife Service (USFWS)-designated critical habitat, BLM Areas of Critical Environmental Concern, etc.) be published in the final EA section of the Draft EA that will be provided in the Final INRMP based on our request for additional information and analysis. "MAGTTC also cooperates with the regional, Intermountain Raven Project team led by USFWS Ventura Field Office." In the Final INRMP, please update this information to indicate the Palm Springs USFWS Field Office leads the Raven Project Team. Please continue to manage open water areas so they are not available for ravens, a predator of the Mojave tortoise and a species that prey on increased human habitations in the California desert with associated anthropogenic subsidies of water and food (Forsman et al. 2005), was a non-resident of the California desert. From the 1920s to the 1990s, common ravens changed from a summer resident to a permanent resident (JRM 1999a). The USFWS Migratory Bird Treaty Office (MBTO) - Region 8 in Sacramento has issued MAGTTC MCAACC a Special Purpose Permit. This permit allows the limited removal of nests of Mourning Dove (Zenaidura macroura), Greater
32	3.28	3.7.7		1107-53	
33	3.27 3.28	3.7.7		1107-53	

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DTC-31: The Final INRMP was modified as a result of this comment. Initial translocation results were provided.

DTC-32: The Final INRMP was modified as a result of this comment. The Field Office was updated to Palms Springs.

DTC-33: In January of 2018, the Combat Center requested authorizations under the existing Special Purpose Permit #MB053740-3 be modified to include the common raven on the list of species for which nests may be moved or destroyed; the request further clarified that the take level, or total number of active nests previously authorized, was not requested to increase. No response has been given to date, so the request will be resubmitted during the next permit reporting period.

The Combat Center has also submitted a depredation permit application to the MBTA office to support lethal control of ravens as part of an integrated raven control strategy, as discussed in the INRMP. An Environmental Analysis will be performed separately from the INRMP EA and is currently funded and scheduled to begin in the fall of FY 19.

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Comment ID	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
					Roadrunner (<i>Geococcyx californianus</i>), Common Raven, Mallard (<i>Anas platyrhynchos</i>), House Finch (<i>Corpuscoxa mexicana</i>), Great Horned Owl (<i>Bubo virginianus</i>), and Barn Owl (<i>Tyto alba</i>). "When nests are built on or near tactical vehicles, pose a health or safety threat or the nests are in a location where birds are in danger."
34	3-25	3.7.7		DTC-34	We request that MAFTRIC/MCAGCC amend their permit to include removal of crosses and roost areas where there is evidence that crosses are nesting on desert tortoise and suggest using non-lethal means whenever possible. We also request that MAFTRIC/MCAGCC implement non-lethal measures to prevent roosts from nesting and foraging in desert tortoise habitat within the boundary of the Combat Center and that these changes be analyzed in the Draft EA and added to the Final INRMP. "A similar survey in 2010 by Hutton (2014) indicated the similar patterns of high Raven numbers near subsides at Miraflores, and high numbers near units training at some training areas."
35	3-25	3.7.8		DTC-35	Same as Comment 33. "The desert tortoise is the only federally listed resident faunal species known to occur on the Combat Center."
36	3-30			3.8	In the Final INRMP, please add that it is a state-listed threatened species under the California Endangered Species Act. Only the Pacific Coast population of the western snowy plover is federally listed as threatened. This population does not occur at the Combat Center.
37	4-1	4.2		10-1-37	In the Final INRMP, we suggest that you clarify the snowy plover's regulatory status and indicate that the plover at the Combat Center is not federally listed. Townsend's pipit is no longer a candidate for state listing. "Goal 1: Reduce Environmental Impact on the Military Mission - Activities performed under this goal maintain, that natural resources management efforts will ensure no net loss in the capability of installation lands to support existing and projected military training and operations."

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DTC-34: Please see the response to comment DTC-33.

DTC-35: The Final INRMP was modified as a result of this comment. The text was modified to include the State.

DTC-36: The Final EA and INRMP were modified as a result of this comment. Table 3-8 was revised to include the “#” symbol, which indicates that a particular subspecies was unknown. Section 3.7.8 discusses the subspecies at the Combat Center is undocumented and plovers observed aboard the installation are not an ESA listed species.

DTC-37: The Final INRMP was modified as a result of this comment. A new objective was added under Element 3.1 to improve desert tortoise population numbers aboard the installation and support recovery of the population in adjacent recovery units.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resource Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment ID	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
					We understand and appreciate the Combat Center's need to have that as its first goal. However, it seems that areas where the military mission is not fully implemented to the potential detriment or decline of desert tortoise populations and habitats should be managed intensively and proactively to reduce population increases and improvement of habitat quality and quantity. We suggest that this be added to the Final INRMP as a goal with corresponding elements and objectives and be analyzed in the Draft EA.
38	4-2	4.2		DTC-38	We appreciate under "Disturbance Maintenance" in Section 4.2 that USMC "... will emphasize the use of already disturbed lands..." for new pre-vegetated Range Training Support Sites (RTSS) and "... new range projects..." Two bullet items are then given, including maintaining and delineating road access and ensuring proper drainage. We see, too, that the USFWS is identified as an "Extreme Stakeholder" on page 1-8 of the Draft INRMP.
39	4-3	4.2		DTC-39	On page 4-2, we suggest that a third bullet be added to this section, read as: "USMC will require USFWS (2017) protocol surveys for all new RTSS and range projects that may affect the desert tortoise, and using those data, select sites with the minimal impact to tortoises and their habitats. We believe this addition will help USMC achieve Goals 2 and 3 of its Goals and Management Initiatives given on page 1 in the Draft INRMP."
40	4-3	4.2		DTC-40	"Revegetation generally involves modifying the ground surface to decrease soil compaction and increase the amount of natural precipitation captured at the site. The greatest challenge to the success of revegetation projects is providing adequate supplemental water to ensure seedlings establishment." In the Final INRMP, please add that the goal of successful revegetation is establishment of native species of plants. We appreciate that USMC understands creation of berms may create entrapment potential for juvenile desert tortoise, and recommend the following, additional measures to minimize impacts to tortoises. We recommend that the following wording (or similar) be added to the Final INRMP: "Insofar as possible, non-emergency road maintenance will occur when tortoises are relatively inactive, during non-rainy periods in July-August or during cold weather between November and January of a given year. Only heavy equipment operators who have

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DTC-38: The Combat Center currently reviews and authorizes all proposed land disturbances during NEPA analyses. When new roadways, roadway repair work, and new PRSS sites are proposed, these actions are reviewed by Subject Matter Experts and avoidance and minimization measures are prescribed before the project scope of work is finalized and work is authorized to commence. Therefore, specific requirements for desert tortoise conservation measures, to include USFWS protocol surveys, are determined during the NEPA analysis for a project. Depending on the location and type of activity proposed, either the 2002 BO or 2017 SEIS special conservation measures would be applied.

DTC-39: The Final INRMP was modified as a result of this comment. The text was modified as suggested. The intent of revegetation efforts is the establishment of native plant species.

DTC-40: The Combat Center appreciates the Desert Tortoise Council's concern regarding potential impacts to desert tortoise from road maintenance activities and the use of these roads by heavy machinery. However, road maintenance, even when non-emergency, cannot be restricted to a particular season. All staff and contractors entering RTAs are already required to have a desert tortoise briefing.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resource Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form				
Comment #	Page Number	Section Number	Figure Number	Table Number
50	4-7	4.5	(1)(5)	
51	4-1	4.2	(1)(7)(1)	
52	4-2	4.2	(1)(5-52)	
53	4-3	4.5	(1)(5-53)	

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DTC-50: The Combat Center will use the most up to date population viability information available from USFWS.

DTC-51: The Combat Center does not have any reports of feral horses or burros occurring on the installation. The INRMP is an adaptive document, which updates annually. The Combat Center will adapt to changing conditions as necessary.

DTC-52: The Final INRMP was modified as a result of this comment. The text was modified as suggested. Negative data for target species (such as declines in population size or numbers of populations, changes/declines in behavior, etc.) will be used to develop and implement management.

DTC-53: The Final INRMP was modified as a result of this comment to identify that there have been no tortoise mortalities detected at/in the guzzler sites aboard the installation to date.

The Combat Center monitors and reports all desert tortoise mortalities aboard the installation and would report any detected at the guzzler sites if found. The Combat Center would also determine appropriate management responses should desert tortoise impacts from guzzler sites be detected.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resources Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
61	4-20 and 21	4.5	4	DTT-61	<p>Please circulate the wildlife management plan the public review when it is available. We suggest that you add this action to the Final INRMP.</p> <p>"Translocation - Areas identified as recipient areas for translocated tortoises (see Figure 4-1) should be protected from future human development and use in perpetuity. Translocation is a mitigation measure to minimize future take." However, if tortoises are placed in areas that can be impacted in the future from human use or development (directly or indirectly), the translocation mitigation accomplishes nothing for the long-term survival and recovery of the tortoise.</p> <p>The Combat Center should enter into agreements with the landowners of recipient areas to place permanent conservation easements on these properties and to fund their management as tortoise conservation areas. From the information provided in Figure 4-1, the landowners appear to be the USMC and BLM.</p> <p>"Tortoise Mortality Mitigation - Injury or death of desert tortoises can occur as a result of training activities." This discussion addresses only direct mortality from crushing vehicles. It does not address indirect mortality from human actions such as collection of water, removal of forage biomass or surface disturbance that prevents the establishment of invasive annual plants or the tracking of these plants throughout the Combat Center by tracked and tracked military and contractor vehicles or OUV activities other than for military training at the Combat Center, etc.</p>
63	4-24	4.5		DTT-62	<p>Please add to the Final INRMP a description of all the indirect sources of mortality to the desert tortoise and the actions that will be implemented to reduce or eliminate them.</p> <p>Tortoise Mortality Mitigation - This section does not address how the Combat Center is securing its race and crossing borders from unauthorized human encroachment (e.g., OUV, zoning, mining, etc.) where there is tortoise habitat. Such encroachment (historically a problem on the Combat Center's south border with Twentynine Palms, Joshua Tree, and Yucca Valley) that results in habitat degradation of the tortoise and mortality from impacts with vehicles and equipment, collecting, and vandalism.</p>

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DTC-61: The adequacy of recipient sites, including potential future land uses, was specifically considered in the 2017 Supplemental Environmental Impact Statement for Land Acquisition and Airspace Establishment to Support Large-Scale Marine Air-Ground Task Force Live-Fire and Maneuver Training, Marine Corps Air Ground Combat Center, Twentynine Palms California and the associated 2017 Biological Opinion for Land Acquisition and Airspace Establishment, Twentynine Palms California (SB-8-8-11-F-65R).

DTC-62: Regarding the first half of DTC-62, the Final INRMP and EA were modified as a result of this comment. Language has been changed to acknowledge indirect impacts on natural resources from military training operations. However, a full recitation of all possible indirect impacts from military training is outside the scope of this INRMP.

Regarding the second part of DTC-62, the INRMP identifies enforcement of its borders under Element 2.3 (tasks 2.3.3-E and 2.3.3-F), and Element 4.2 (tasks 4.2.1-C and 4.2.1-D).

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Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
63	4-24	4.2		DTT-63	<p>In the Final INRMP, please include a description of these unauthorized activities as sources of mortality for the tortoise and actions that the Combat Center will implement to reduce or eliminate these sources of mortality. We strongly urge the Combat Center to secure its borders with signal fencing that will keep people, vehicles, and equipment out of the Combat Center.</p> <p>Although no portions of SRM/MAU are within desert tortoise critical habitat, we understand that tortoises translocated off the western expansion area were placed in the Ord-Rookman Critical Habitat Unit.</p> <p>Given that USMC placed translocated tortoises into critical habitats, the Council notes that the critical habitat statement at the bottom of page 4-23 be expanded to indicate how many tortoises were translocated into critical habitat, how many resident tortoises received health assessments and radio transmitters, what the results of the translocation efforts into critical habitat have been so far, and what is being done to ensure the viability of those tortoises from human caused mortality.</p> <p>We thank the Combat Center for its management activities to reduce predator subsidies and deer roan use around the installation. However, we believe the Combat Center can do more.</p>
64	4-23	4.2		DTT-64	<p>The Final INRMP should identify efforts to reduce perch, roost, and nest sites on all utility poles. One way to mitigate for the regional and cumulative effects from power substations and tortoise predation is for the USMC to contribute to the Raven Management Fund, which is managed by the Bureau of Fish and Wildlife Conservation for this purpose. We urge the Combat Center to include measures that will mitigate for these regional and cumulative effects and to include these measures in the Final INRMP.</p> <p>Special Use Areas (for desert tortoise) - These areas are being fenced and signed to prevent military vehicle transit into Special Use Areas.</p>
65	4-26	4.2		DTT-65	<p>In the Final INRMP, please add that these areas (and Natural Resources Management Areas) will be fenced, signed, and</p>

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DTC-63: The Final INRMP was modified as a result of this comment. Text was added to Chapter 4, Element 3.1, acknowledging adjacent critical habitat and its use for translocation.

DTC-64: The Combat Center considers and implements a variety of ways to contribute to the recovery of the desert tortoise both on and off base. Regarding the specific comment, under the NEPA Program all construction and maintenance, in particular as it pertains to power poles and other perching and roosting habitat, is reviewed by Natural Resources Subject Matter Experts prior to installation, and for power poles, barrier devices are required as a part of the subsidy reduction program. Generally, the Combat Center stresses that a fundamental underpinning of the Natural Resources Program is that it continues to seek out new ways to positively affect desert tortoise populations both on and off the installation by strategically targeting the minimization of population stressors and supporting population drivers.

DTC-65: The Final INRMP was modified as a result of this comment. Text was added to clarify that fences will be maintained. Fencing and signage are already identified in Task 2.3.3-F in Appendix A.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resource Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
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					the fencing maintained to prevent unauthorized human access and use (e.g., recreation from adjacent BLM lands). "Population augmentation strategies would be developed with USFWS and would be integrated with translocation and monitoring efforts to provide a comprehensive population sustenance and recovery strategy." In the Final INRMP, please add CDFW to this sentence.
65	4-76	4.1	DTC-56		"A Conservation Law Enforcement Officer (CLEO) is a Federal uniformed Conservation Law Enforcement Officer that conducts a wide range of complex law enforcement activities to enforce state and federal environmental laws and regulations." In the Final INRMP, please clarify if a CLEO has the authority to arrest or detain a person suspected of violating law or regulations.
67	4-29	4.2	DTC-63		"Ultimately, environmental awareness prevents damage to the natural resources base, and violations of environmental laws." In the Final INRMP, please add the following bold wording to this sentence: "Ultimately, environmental awareness and enforcement of environmental regulations prevents damage to the natural resources base, and violations of environmental laws." We believe that the Natural Resource Management Program is inadequately staffed.
68	4-29	4.2	DTC-68		Given the expansion of the Combat Center, the decline in the tortoise population in the western Mojave Desert (USFWS 2013), and measures to be successfully implemented in this INRMP, the Combat Center should increase its staff by at least one above the recently lost GS 7511 Natural Resource Specialist position, and the vacant GS 7519 Biological Sciences Technician. If staff is added to administer contracts, the increase in staffing level should be raised to three.
69	4-53	4.3	DTC-69		

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DTC-66: The Final INRMP was modified as a result of this comment. The text was reworded to include CDFW.

DTC-67: CLEO job duties are not fully outlined in the INRMP, however CLEO authorities are defined by "USFWS reference for MOA between USFWS and USMC," and arrest and detention authorities are identified in this MOA.

DTC-68: The Final INRMP was modified as a result of this comment. The suggested text "and enforcement of environmental regulations" was inserted into the sentence.

DTC-69: The Combat Center appreciates the Desert Tortoise Council's interest in appropriate staffing levels. The final INRMP was modified as a result of this comment.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resource Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
					DTC-70: We hope the following suggestions will help remedy some of the grammatical and spelling errors in the document: Throughout document: In the Final INRMP, the use of apostrophes when using plural nouns should be removed. The spelling of scientific names for some plant species is incorrect (e.g., Chlospas, not Chlospas; holakanta, not holakanta; farinosa, not farinosa, etc.). P. 4-27 "During the months of October through January, streamflow without a root-block is generated as it will not be impact the nesting and breeding cycle." Suggest removing "or" from the Final INRMP. 1.1.6-D. Littered introduction of the Desert Tortoise Council's Habitat Workshop is included in all NR individual development plans.
70					
71	A-4		DCC-71	A-1	In the Final INRMP, we suggest you change this wording to be broader as there may be other relevant workshops by the Council that you may want staff to participate. You may consider the following: "Provide attendance at relevant Desert Tortoise Council workshops is included in all NR individual development plans."
72	A-4		DTC-72	A-1	"1.2.2-C. Identify and add road design elements to existing and planned roads to minimize erosion and facilitate safe passage of Desert Tortoise across the Landscape." This should be funded and should be a minimization measure in a biological opinion. If it is not funded and is not discussed in the biological opinion, this means that any take associated with this situation currently or in the future is not covered under the biological opinion. We urge you to fund this task.
73	A-5		DTC-73	A-1	"1.2.3-A. Develop a uniform conservation marking system for signage to support requirements of military training." In the Final INRMP, please change this to say, "Develop and implement a uniform conservation marking system for signage and boundary delineation (e.g., fencing) to support requirements of military training."
74	A-5		DTC-74	A-1	"1.2.3-B. Identify sensitive areas where damage will trigger future avoidance." In the Final INRMP, please change this to say, "Identify and monitor sensitive areas where damage will trigger future

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DTC-70: The Final INRMP was modified as a result of this comment and the document checked by a contractor prior to finalization.

DTC-71: The Final INRMP was modified as a result of this comment and the suggested text was added to the Workplan, task 1.1.6-D.

DTC-72: The Combat Center appreciates the Desert Tortoise Council's comment regarding Task 1.2.2-C. The Combat Center intends to fund all identified tasks.

DTC-73: The Final INRMP was modified as a result of this comment. The location of the task has changed during the course of addressing other public comments, is now presented in Workplan task 1.2.3-A, and reads as follows "Develop and implement a uniform conservation marking system for signage and boundary delineation (e.g. fencing) to support requirements of military training."

DTC-74: The Combat Center will appropriately manage sensitive areas based on the unique circumstances of each area.

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					unreached."
75	A-5		DTC-75	A-1	"2.1.1-D. Work with BLM to develop a cooperative resources management strategy for the SIA." Once this is developed, how will it be implemented and funded? If there is no funding or implementation commitment, there is no need to develop a strategy document that will be filed. We suggest that you add language in the Final INRMP that will commit USMC to implement/ fund the strategy or remove it from the list of tasks.
76	A-8		DTC-76	A-1	"2.2.2-D. Collect baseline data at monitoring locations." In the Final INRMP, please add "Collect baseline data at monitoring locations and at control locations."
77	A-9		DTC-77	A-1	"2.3.4-B. Install new guzzlers to support wildlife transit across the full extent of nonnative on base, and monitor new guzzlers to confirm wildlife usage." The Council emphasizes the importance of this task as there are accounts of tortoises becoming trapped or drowning in guzzlers. We want to ensure that existing and new guzzlers do not result in tortoise mortality either directly or indirectly. "2.3.4-B. Maintain existing and install new fencing and signage in presidential areas to reduce encroachment and enforce management prescriptions."
78	A-9		DTC-78	A-1	"This task should be expanded in the Final INRMP to include desert tortoise and possibility of take; and that mini enclosures included ash, shells, tortoise, and pup."
79	A-9		DTC-79	A-1	"2.3.4-B. Maintain existing and install new fencing and signage in presidential areas to reduce encroachment and enforce management prescriptions."

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DTC-75: The cooperative resources management strategy will include a discussion of funding.

DTC-76: The Final INRMP was modified as a result of this comment.

DTC-77: Aboard the Combat Center, guzzlers are annually monitored and desert tortoise impacts including mortality are evaluated. There have been no desert tortoise mortalities associated with these systems to date. Please see updated text in Chapter 4, Element 2.4 - Wildlife Management, Desert Bighorn Section, for additional details on guzzler management for desert tortoises.

DTC-78: The Final INRMP was modified as a result of this comment.

DTC-79: The Final INRMP was modified as a result of this comment.

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Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
					This task should be expanded in the Final INRMP to include the Combat Center's boundary especially where tortoise habitat is present. The fence should impede human encroachment but allow the passage of desert tortoise (with and away from the Combat Center).
80	B-17		DTC-80	A-1	"2.4.4-B. Develop recommendations for any needed restoration efforts at higher value locations, and include climate change considerations as applicable." In the Final INRMP, please add implementation language to this task so that higher value locations are funded to implement restoration of topography, soils, and vegetation.
81	A-11		DTC-81	A-1	"2.5.1-C. Annually monitor the use of natural and artificial water sources." This task includes guzzlers. As we mentioned in our comments above, in the Final INRMP, the Combat Center should add and fund a management task that those similar devices will be monitored for use by desert tortoise and will be inspected frequently (e.g., annually) for the presence of wildlife, species including tortoises. If desert tortoise or other wildlife remains are found, the device devices will be modified and monitored as to their success in preventing future mortality to ensure that they do not trap or drown tortoises or other wildlife. Again this is a PTSA and CTS-A compliance issue regarding incidental take.
82	B-24 B-25 B-26		DTC-82	A-1	Under Element 3.1 - Desert Tortoise Management: The Council believes the USMC should add an element and appropriate objectives and tasks in the Combat Center's Final INRMP that addresses the management of the Ord-Rodman Critical Habitat Unit. We note the following: "The U.S. Fish and Wildlife Service expects that proposed actions that are inconsistent with land management recommendations for DWHMA in the Draft Recovery Plan would likely be considered to adversely modify critical habitat sensitive elements. Thus, livestock grazing and other activities would likely result in destruction or adverse modification of critical habitat, because such activities preclude the development of large, contiguous blocks of habitat (SI FR 45758 - USFWS critical habitat designation for the Mojave desert tortoise)."

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DTC-80: The INRMP identifies the need to evaluate methods, costs, and locations for restoration efforts and develop a "toolbox" of recommendations for higher value sites warranting treatment (see tasks 2.4.4-A and 2.4.4-B). The Combat Center emphasizes that all future restoration work depends on the outcome of these two tasks.

DTC-81: Please see response to comment DTC-77 and updated text in Chapter 4, Element 2.4 - Wildlife Management, pertaining to Desert Bighorn Management.

DTC-82: The effects from the land expansion were considered in the 2012 EIS. The BLM manages the Ord-Rodman Area of Critical Environmental Concern (ACEC), thus defining the management framework is outside the scope of this INRMP. However, the Combat Center is funding and implementing management actions supporting this critical habitat unit supporting the recovery of the Desert Tortoise.

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					<p>because the expansion of the Combat Center may affect the Ord-Rookman Critical Habitat Unit and this was the second smallest unit in California and isolated from other critical habitat units by major highways and human development, it is important that the USMC facilitate recovery of tortoises in this adjacent critical habitat unit. The Council believes the Marine should provide sufficient management actions to secure the Ord-Rookman critical habitat unit and adjacent areas to provide for the long-term viability and persistence of the tortoise population in this area using conservation biology as the scientific framework. As such, the Final INRMP needs to ensure that the Ord-Rookman Critical Habitat Unit is managed at the reserve level (conservation biology) for the benefit of the Mojave desert tortoise. Funding and implementation of any special management actions are needed.</p>
83	A-14		ETC-43	A-1	<p>"Objective 3.1.4 - Minimize tortoise injury and mortality around the Combat Center."</p> <p>There are only two tasks identified and they are for ravens: "Develop a Raven Management Plan" and "Apply for and maintain a MHTA deprecation permit for ravens." The implementation of the raven management plan is not a task and no funding for implementation is included. If the Combat Center is serious about conserving the desert tortoise, it needs to address all forms of mortality and it needs to fund tasks that reduce the forms of mortality.</p>
84	A-14		DTC-64	A-1	<p>In the Final INRMP, please revise the task and/or the objective to reflect the USMC's commitment to manage for the desert tortoise by implementing funding tasks that reduce tortoise mortality.</p> <p>"3.1.5-D. Develop a population augmentation initiative with USFWS."</p>
85	A-17		DTC-8	A-1	<p>In the Final INRMP, please add California Department of Fish and Wildlife to this task and include funding in FY21 or FY 22.</p> <p>"4.2.1-C. Monitor for natural and cultural resources degradation and exploitation, and reduce illegal trespass, OCV activity, and trespass in range training areas."</p>

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DTC-83: The Natural Resources Program emphasizes desert tortoise mortality minimization in many ways, most of which are identified outside of Objective 3.1.5. For example other Objectives and tasks meeting this requirement include Objective - 1.2.2 Design roads to benefit both military use and conservation, 1.2.3 - Prevent damage to sensitive areas, 3.1.2 - Inventory and monitor to identify threats to desert tortoise, 3.1.6 - Implement the following required provisions from the Biological Opinions for Desert Tortoise: General Conservation Measures, Reasonable and Prudent Measures, Terms and Conditions, Conservation Recommendations; and required provisions from the 2017 SEIS (specifically task 3.1.6-D and 3.1.6-G), 4.2.1 - Operate a Conservation Law Enforcement Program to prevent exploitation of the natural and cultural resources from occurring on the installation, 4.3.1 - Encourage awareness of natural resources for internal stakeholders, and 4.3.2 - Encourage awareness of natural resources for external stakeholders (specifically task 4.3.2-B). The Combat Center has budgeted funding to implement all tasks identified in this INRMP.

DTC-84: The Final INRMP was modified as a result of this comment and task 3.1.7 - A was added to the work plan, to develop a population augmentation initiative with USFWS and CDFW.

DTC-85: This monitoring occurs throughout all parts of the installation.

Draft Integrated Natural Resource Management Plan and Environmental Assessment Environmental Analysis of the 2018-2022 Integrated Natural Resources Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California Comment Tracking Form					
Comment #	Page Number	Section Number	Figure Number	Table Number	Comment and/or Reference
86	A-17		DTC-36	A-1	<p>In the Final INRMP, please add other range training areas "special use areas, natural resources management areas, and any areas managed for the Mojave desert tortoise."</p> <p>"4.2.1-1. Send CLEOs to the Desert Tortoise Lending Workshop."</p>
87	A-18		DTC-87	A-1	<p>In the Final INRMP, please change this to say, "Send CLEOs to the Desert Tortoise Council's retreat workshops."</p> <p>"4.2.1-1. Develop an agreement with BLM regarding patrol of translocation recipient sites."</p> <p>In the Final INRMP, please add task 4.2.1-1 Find and Implement the agreement with BLM regarding patrol of translocation recipient sites" and have the funding occur in FY19, FY20, FY21, and FY 22.</p>

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DTC-86: The Final INRMP was modified as a result of this comment and the suggested text was inserted into the sentence.

DTC-87: The Final INRMP was modified as a result of this comment. This comment was incorporated into the text for task 4.2.1-1 Develop and implement an agreement with BLM regarding patrol of translocation recipient sites.

Comment 3	Responses to Comment
<p>MTCM-1 Remove the sentence “Reduce Encroachment on the Military Mission” and replace with Goal 1: “Strengthen MAGTFTC MCAGCC’s operational capability by reducing our environmental footprint through more sustainable practices”</p>	<p>MTCM-1: The Final INRMP was modified as a result of this comment.</p>
<p>MTCM-2 In general, we should talk about natural and cultural resources together. In each section, in each paragraph and in each sentence that mentions natural resources we should also be talking about cultural resources except in the Executive Summary- examples will follow.</p>	<p>MTCM-1: While Environmental Affairs approaches the management of natural and cultural resources under separate programs the significant relationship between the two is acknowledged. Section 2.2 - PreMilitary Land Use was modified to include pre-western use of lands now under USMC care, and Section 4.2, Element 4.4 - Cultural Resources was added, which summarizes how Environmental Affairs manages cultural resources and emphasizes ways in which indigenous peoples may remain connected with the natural resources aboard the installation.</p>
<p>MTCM-3 Please add the tribes as external stakeholders.</p>	<p>The Final INRMP was modified to identify Tribes as external stakeholders in the management of Natural Resources.</p>
<p>MTCM-4 Tribes are requesting access to natural resources aboard the installation, to include flora and fauna.</p>	<p>The Final INRMP was modified as a result of this comment. Language was added identifying section 1.9.2 - Tribal Consultation, identifying the request for natural resources access aboard the installation, and task 4.4.1-A was added to the Workplan.</p>

Comment 4	Received 19 July 2018	Responses to Comments
 <p>TWENTY-NINE PALMS BAND OF MISSION INDIANS <small>46-300 Harrison Place, Coachella, California, 92236. Ph: 760.863.2444 Fax: 760.863.2449</small></p> <p>July 19, 2018</p> <p>Janelle Harrison Environmental Affairs (UMSC MAGFTFC) MCAGCC Box 788110 Bldg. 1418 Twentynine Palms, CA 92278-8110</p> <p>RE: IMPLEMENTATION OF THE INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN 2018-2022</p> <p>Dear Ms. Harrison,</p> <p>This letter is in regards to consultation for the Integrated Natural Resources Management Plan. The Twenty-Nine Palms Band of Mission Indians (Tribe), are a Chemehuevi people who are a federally recognized tribe, with two reservations – one located near the city of Coachella in Riverside County and the other located near the city of Twentynine Palms in San Bernardino County. The Integrated Natural Resources Management Plan (INRMP) for the Marine Air Ground Task Force Training Command (MAGFTFC) Marine Corps Air Ground Combat Center (MCAGCC) objective is to reduce encroachment of natural resources on the installation and ensures that national resources are sustained on Marine Corps training lands.</p> <p>The Integrated Cultural Resources Management Plan (ICRMP) notes plant species which are culturally significant to the Tribe. These include Chia (<i>Chamaesyce pedunculifera</i>), Desert Willow (<i>Chilopsis linearis</i>), Creosote (<i>Larrea tridentata</i>), Greasewood (<i>Adenostoma fasciculata</i>), Cottonwood (<i>Populus sp.</i>), Jojoba (<i>Simmondsiacaceae</i>), White Sage (<i>Salvia apiana</i>), Acorns/Oak (<i>Fagaceae</i>), Reed (<i>Elymus condensatus</i>), Datura (<i>Datura meteloides</i>), Tobacco (<i>Nicotiana</i>), Agave (Agavaceae), Mesquite (<i>Prosopis juliflora</i>), and Pinyon (<i>Pinaceae</i>). These and other native plants were used for ceremony, food, tools and housing. In addition to the flora, there are numerous faunal species which have a deep connection to the Tribe which inhabit the MAGFTFC/MCAGCC. One of the most significant animals to the Tribe is the coyote (<i>Canis latrans</i>). Coyote was present during the first creation and Coyote's people became the ancestors of modern-day Southern Palute, including Chemehuevi. Other animals that appear in stories and are significant species to the Tribe are the roadrunner (<i>Geococcyx californianus</i>) and desert tortoise (<i>Gopherus agassizii</i>). Many desert animals that reside on the installation are a part of the Tribe's stories and songs and were also used for subsistence, ceremony, and decoration. As the MAGFTFC/MCAGCC works to create a plan for the sustainability of flora and fauna, the Tribe requests to be notified for future developments that may have impacts to natural resources.</p> <p>If you have any questions, please do not hesitate to contact the Tribal Historic Preservation Office at (760) 775-3259 or by email: TNPConsultation@29palmsbomi-nsn.gov.</p>		<p>29PBMI-1: The Final INRMP was modified as a result of this comment. Tribal interests were added as a category on the Special Status species lists for flora and fauna. Only those species that were specifically identified by individual tribes and requested for inclusion on these lists were marked "TI" for Tribal Interest; therefore, at this time, none of the plant or animal lists presented in the INRMP reveals all the culturally significant natural resources known to occur on base.</p> <p>29PBMI-2: The Combat Center will consult with the Tribes and all other external stakeholders identified in this INRMP as appropriate under NEPA requirements to ensure adequate inclusion in planning processes.</p>
<p>Sincerely,</p>  <p>Anthony Madrigal, Jr. Tribal Historic Preservation Officer</p> <p>cc: Darrell Mike, Twenty-Nine Palms Tribal Chairman Sarah Bliss, Twenty-Nine Palms Cultural Resources Manager Walter Christensen, USMC</p>		

Comment 5	Received 20 July 2018	Responses to Comments
<p>Out: Windows https://mail.yahoo.com/d/ folders/72/messages/186280</p> <p>Subject: FW: My addition to the draft INRMP</p> <p>From: Waller, J. Christiansen To: jlm@regisolar.com Cc: MCAAGC/INRMP #46@area.net; janelle_h_99@yahoo.com Date: Monday, July 23, 2018, 9:57:18 AM PDT</p> <p>Re: My</p> <p>Additional San Manuel comments on the INRMP below. There was no attachment to this email.</p> <p>Waller, J. Christiansen Head, Conservation Branch Environment Affairs MCAAGC/INRMP Box 786110, Bldg 1418 Twentynine Palms CA 92276 (760)933-5200 wj@cmh.com</p> <p>> Original Message > From: Lisa Cassese [mailto:L.Cassese@sanmanuel.com] > Sent: Friday, July 20, 2018, 12:31 PM > To: 'Walter, J. Christiansen' <jlm@regisolar.com> > Cc: 'Christiansen CW Waller, J.' <waller.j@cmh.com> > Subject: [Non-DoD Source] FW: My addition to the draft INRMP</p> <p>> Good morning, Janelle and Walter > > > I have reviewed the comments on the draft INRMP your team has generated based on both your individual review of that document > and the comments I verbally provided on June 25, 2018, at our inter-tribal meeting. I appreciate the inclusion of San Manuel Band of Mission Indian's comments regarding the alteration to some of the language choice and tone in the document about mission and > priorities, the inclusion of consulting Tribes as stakeholders, and the addition of language regarding the forthcoming SA. > > > I also thank you for noting that there is an interest with the Tribal communities related to the management of plants and the state > of these communities to possibly have access to the information for the purposes of plant gathering. At this time, I would not include > a list of potential plants to be gathered or indicate where communities might gather certain plants. Rather, it would be to provide > MCAAGC simply provided the Tribes with some inventories and maps of the plant communities that do exist within the BLM's > state, so that Tribes could then indicate which plants might be of interest to them. The provision of such</p>	<p>SMBMI-1: The Final INRMP was modified as a result of this comment. Language was added identifying the tribal request for access to natural resources at the Combat Center. A Cultural Resources Element was added to Goal 4, and facilitating the development of policies supporting Tribal access to natural resources task 4.4.1-A.</p>	
<p>Out: Windows https://mail.yahoo.com/d/ folders/72/messages/186280</p> <p>Subject: My addition to the draft INRMP</p> <p>From: Lisa Cassese To: jlm@regisolar.com Cc: MCAAGC/INRMP #46@area.net; janelle_h_99@yahoo.com Date: Monday, July 23, 2018, 10:45 AM PDT</p> <p>Re: My</p> <p>Additional San Manuel comments on the INRMP below. There was no attachment to this email.</p> <p>Waller, J. Christiansen Head, Conservation Branch Environment Affairs MCAAGC/INRMP Box 786110, Bldg 1418 Twentynine Palms CA 92276 (760)933-5200 wj@cmh.com</p> <p>> Original Message > From: Lisa Cassese [mailto:L.Cassese@sanmanuel.com] > Sent: Friday, July 20, 2018, 12:31 PM > To: 'Walter, J. Christiansen' <jlm@regisolar.com> > Cc: 'Christiansen CW Waller, J.' <waller.j@cmh.com> > Subject: [Non-DoD Source] FW: My addition to the draft INRMP</p> <p>> Good morning, Janelle and Walter > > > I have reviewed the comments on the draft INRMP your team has generated based on both your individual review of that document > and the comments I verbally provided on June 25, 2018, at our inter-tribal meeting. I appreciate the inclusion of San Manuel Band of Mission Indian's comments regarding the alteration to some of the language choice and tone in the document about mission and > priorities, the inclusion of consulting Tribes as stakeholders, and the addition of language regarding the forthcoming SA. > > > I also thank you for noting that there is an interest with the Tribal communities related to the management of plants and the state > of these communities to possibly have access to the information for the purposes of plant gathering. At this time, I would not include > a list of potential plants to be gathered or indicate where communities might gather certain plants. Rather, it would be to provide > MCAAGC simply provided the Tribes with some inventories and maps of the plant communities that do exist within the BLM's > state, so that Tribes could then indicate which plants might be of interest to them. The provision of such</p>	<p>SMBMI-2: Refer to the response to comment SMBMI-1.</p> <p>SMBMI-3: The Final INRMP was updated in response to this comment. Section 2.2 was added describing pre-military land use.</p>	

**PROOF OF PUBLICATION
(2015.5 C.C.P)**

This space is for the County Clerk's Filing Stamp

STATE OF CALIFORNIA
County of San Bernardino

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of the:

HI-DESERT STAR

a newspaper of general circulation, printed and published **BI-WEEKLY** in the City of **YUCCA VALLEY**, County of San Bernardino, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California,

under the date of **November 27, 1961**.

Case Number **107762**; that the notice, of which the annexed is printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in supplement thereof on the following dates, to wit:

05/31
in the year **2018**

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at: **YUCCA VALLEY**, California,
this **31ST** day of **MAY, 2018**.


Signature
ANAIS CARBONELL

Notice of Preparation of Integrated Natural Resources Management Plan 2018-2022 and Description of the Proposed Action and Alternatives
Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center, Twentynine Palms, California

The United States Marine Corps (USMC) is revising the Integrated Natural Resources Management Plan (INRMP) for the Marine Corps Air Ground Combat Center (MCAGCC), in Twentynine Palms, California. The USMC is the lead agency for this action. The purpose of the Proposed Action is to implement the revised MCAGCC INRMP which includes newly expanded areas of the installation, streamlines and expands its Natural Resources Program, reduces encroachment of natural resources management on the military mission, and ensures high-quality natural resources are sustained aboard Marine Corps training lands. The USMC has prepared a Description of the Proposed Action and Alternatives (DOPAA) describing the Proposed Action. The DOPAA and INRMP are available for review at <http://www.29palms.marines.mil/Staff/G4-Installations-and-Logistics/Environmental-Affairs/>. Copies are also available for review at:

- Twentynine Palms Branch Library 6078 Adobe Rd. Twentynine Palms, CA 92277
- Yucca Valley Branch Library 57098 29 Palms Highway Yucca Valley, CA 92284

The USMC encourages your comments on this Proposed Action, along with supporting rationale that the responsible official should consider in reaching a decision. Your comments will help us prepare an environmental assessment on the Proposed Action. The assessment will be used to determine whether to prepare an environmental impact statement (EIS) or a finding of no significant impact.

It is the responsibility of persons providing comments to submit them by the close of the comment period. Only those who submit timely and specific written comments regarding the proposed project during a public comment period established by the responsible official are eligible to challenge the final decision. Written and electronic comments concerning this action will be accepted through June 29, 2018. Written and electronic comments must be submitted to: Naval Facilities Engineering Command Southwest; Attention: Dr. Aaron Hebshi, Project Manager, 1220 Pacific Coast Highway, San Diego, CA 92132; aaron.hebshi@navy.mil. Comments received in response to this solicitation, including names and address of those who comment, will be considered part of the public record for this project and will be available for public inspection and will be released if requested under the Freedom of Information Act.

(PUB: S. & T. 5/31/2018)

Notice of Preparation of Integrated Natural Resources Management Plan 2018-2022 and Description of the Proposed Action and Alternatives
Marine Air Ground Task Force Training Command Marine Corps Air Ground Combat Center, Twentynine Palms, California

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(PUB: S. & T. 5/31, & 6/7/2018)

30 May 2018

Twentynine Palms Library
6078 Adobe Road
Twentynine Palms, CA 92277

Please display the documents titled "Integrated Natural Resources Management Plan 2018-2022" and the associated "Description of the Proposed Action and Alternatives for Implementation of the Integrated Natural Resources Management Plan 2018-2022" for the Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms, California. These two documents should be displayed during the period extending from May 30, 2018 through June 29, 2018.

I hereby certify that a copy of the documents referenced above was received at the Twentynine Palms Library.

Caroline Zentgraf
Print Name

Caroline Zentgraf
Signature

5/30/2018
Date

30 May 2018

Yucca Valley Library
57098 29 Palms Highway
Yucca Valley, CA 92284

Please display the documents titled "Integrated Natural Resources Management Plan 2018-2022" and the associated "Description of the Proposed Action and Alternatives for Implementation of the Integrated Natural Resources Management Plan 2018-2022" for the Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms, California. These two documents should be displayed during the period extending from May 30, 2018 through June 29, 2018.

I hereby certify that a copy of the documents referenced above was received at the Yucca Valley Library.

Michael Jacobs
Print Name


Signature

5-30-18
Date



Hi-Desert Publishing Co.

People you know, news you can trust

PROOF OF PUBLICATION (2015.5 C.C.P)

STATE OF CALIFORNIA
County of San Bernardino

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of the:

HI-DESERT STAR & DESERT TRAIL

both newspapers of general circulation, printed and published WEEKLY in the City of YUCCA VALLEY, County of San Bernardino, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California,

under the date of November 27, 1961.

Case Number 107762: that the notice, of which the annexed is printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in supplement thereof on the following dates, to-wit:

12/06, 12/08, 12/13, 12/15/2018
all in the year 2018

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date at: YUCCA VALLEY, California,
this 17th day of DECEMBER, 2018.

Brandi Larson

Signature
BRANDI LARSON

PROOF OF PUBLICATION

NOA FOR PUBLIC DRAFT EA INRMP MARINE CORPS AIR GROUND COMBAT CENTER 29 PALMS, CALIFORNIA

NOTICE OF AVAILABILITY OF INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN AND PUBLIC DRAFT ENVIRONMENTAL ASSESSMENT FOR MARINE AIR GROUND TASK FORCE TRAINING COMMAND MARINE CORPS AIR GROUND COMBAT CENTER TWENTYNINE PALMS, CALIFORNIA
Pursuant to the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500-1508) implementing the National Environmental Policy Act (NEPA) and Marine Corps Order 5090.2, the U.S. Marine Corps gives notice that a Public Draft Environmental Assessment (EA) has been prepared for the proposed Integrated Natural Resources Management Plan (INRMP) at the Marine Corps Air Ground Combat Center located at Twentynine Palms, California (hereafter referred to as the Combat Center).

The purpose of the Proposed Action is to implement the revised INRMP, which addresses both legacy and expansion areas of the installation, streamlines and diversifies the Natural Resources Program at the Combat Center, reduces encroachment of natural resources management on the military mission, and ensures high-quality natural resources are sustained aboard Marine Corps training lands.

The Public Draft EA evaluates the potential environmental impacts associated with implementing the Proposed Action and the No Action Alternative:

PROPOSED ACTION: The Proposed Action would adopt and implement the revised INRMP for MAGTF-C MCAGCC. The revised INRMP would be consistent with military use of the property as well as the requirements of the Sikes Act Improvement Act (as amended), strengthen the Combat Center's operational capabilities, and provide further improvement in natural resources management.

NO-ACTION ALTERNATIVE: Under the No-Action Alternative the proposed implementation of the revised INRMP would not occur. Instead, implementation of the existing 2012 through 2016 INRMP would continue. The No Action Alternative would retain the old program structure, and all natural resources objectives and management practices detailed in the 2012 through 2016 INRMP would continue into the future.

The Public Draft EA evaluates the potential environmental effects of each alternative on the following resource areas: topography, geology and soils, water resources, and biological resources.

The public is invited to continue participating in the NEPA process by reviewing and commenting on the INRMP and Public Draft EA during the public comment period, from **DECEMBER 6, 2018 TO JANUARY 11, 2019**. Comments on the INRMP and Public Draft EA must be postmarked or received by January 11, 2019 for consideration in the INRMP and the Final EA.

The US Marine Corps encourages your comments on this INRMP and Public Draft EA, along with supporting rationale that the responsible official should consider in reaching a decision regarding this project. The INRMP and Public Draft EA is available for public comment and may be reviewed by interested parties at the Twentynine Palms Branch Library, 6078 Adobe Road, Twentynine Palms, CA, and the Yucca Valley Branch Library, 57098 29 Palms Highway, Yucca Valley, CA, as well as on the Combat Center website: <http://www.29palms.marines.mil/Staff/G4InstallationsandLogistics/NRFEA.aspx>.

WRITTEN COMMENTS MAY BE SUBMITTED TO:

Naval Facilities Engineering Command Southwest
Attn: Mr. Aaron Hebshi, Project Manager
1220 Pacific Highway
San Diego, California 92132
aaron.hebshi@navy.mil

(PUB: HI-DESERT STAR & DESERT TRAIL 12/06, 12/08, 12/13, 12/15/2018)

From: [Ilima](#)
To: [Christensen CIV Walter J; walter@christenen.org; Kerr CIV Scott A](#)
Cc: [Hebshi, Aaron J CIV NAVFAC SW, FSD; INRMP \(MCAGCCINRMP-EA@kmea.net\)](#)
Subject: Public library deliveries
Date: Thursday, December 06, 2018 1:52:32 PM

Walter and Scott,

I am writing to confirm I hand-delivered the following items to the public libraries in Twentynine Palms and Yucca Valley today:

Hard copies of the NOA, draft EA, and draft INRMP
CD containing PDFs of the draft EA and draft INRMP

Ilima

APPENDIX C
AGENCY CORRESPONDENCE

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From: Hoffmann, Scott
To: [Segoviano, Civ Ilima B](#); [Christensen, CIV Walter J](#)
Subject: [Non-DoD Source] INRMP review
Date: Monday, April 2, 2018 5:21:34 PM
Attachments: [Draft 29Palms INRMP - SL-comments.docx](#)

Hi Ilima,

Apologies again for the delay in getting this back to you, I only have a few comments in Chapter 4 and none are really significant. Let me know if you have any questions on them.

Scott

Scott Hoffmann
Wildlife Biologist
U.S. Fish and Wildlife Service
West Mojave Desert Division
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262
Office: 760-322-2070 x413

Telework/Mobile: 760.422.9987

<http://www.fws.gov/carlsbad/> <<http://www.fws.gov/carlsbad/>>

USFWS INRMP Comments

Chapter 4

- 1) Element 1.2, page 36, Animal Control - Is this consistent with coyote removals and trapping in translocation recipient sites?
- 2) Element 2.3, page 41, Habitat Management - Are there target-based criteria that would inform adaptive management? E.g., if you are collecting data on recruitment or persistence for a species, are there criteria to use to develop surveys instead of just monitoring for the sake of monitoring? For all monitoring proposed, what are the objectives and are they meaningful and measurable? For example, to look at invasive plants, are there criteria that would be used as triggers for some management action to take place (e.g., if invasive cover increases over 50%).
- 3) Element 2.4, page 42, Wildlife Management - Same comment as above...
- 4) Goal 3, page 48, Introductory paragraph - Maybe include Executive Order 13186 as well, given the recent m-opinion on the MBTA?
- 5) Goal 3, page 4-56, Migratory Bird Treaty Act - As in previous comment, maybe make note of EO 13186?
- 6) Element 4.1, page 4-57, Outdoor Recreation - Also note the Shared Use Area within the 7

Appendix A

- 7) Task 2.3.1-A on page A-8 - What are the metrics being used to evaluate this?
- 8) Task 2.3.1-B on page A-8 - I don't think there is much Joshua tree woodland on the Combat Ceter...do we have those data and is there any need or potential for establishing areas for conservation priority?

From: Jones, Rebecca@Wildlife
To: [Segoviano, Civ Ilima B](#)
Subject: [Non-DoD Source] Comments on the Draft INRMP
Date: Thursday, March 15, 2018 11:49:44 AM
Attachments: [CDFW Comments on Draft INRMP.docx](#)

Hi Ilima,

Attached are my comments. If you have any questions, please let me know.

Rebecca Jones

State of California

Department of Fish and Wildlife

Inland Deserts Region

(661) 285-5867

CDFW Comments on Draft INRMP

Page 1-9 Section for CDFW – We recommend MAGTFTC MACAGCC obtain a desert tortoise MOU for the translocation project especially since the work is being conducted off base on BLM land.

Page 3-22 Section 3.7.6 – Desert tortoise was state list in August of 1989.

Page 3-30 & 31 – Desert kit fox (*Vulpes macrotis arsipus*) is protected under the California Code of Regulations -Title 14 CCR 460 Division 1 Subdivision 2 Chapter 5 states "Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time."

Ringed-tailed Cat (*Bassariscus astutis*) mentioned on D-25 and not here. It is a fully protected species in CA.

Correct page numbering Section 4.0 starts on page 33. I think it should be page 4.1

Page 35 Section for Roadway construction and repair - CDFW concurs that berms are a problem for desert tortoise, but it could be noted this is especially problematic for juvenile tortoises.

Pages 36-37 section on Animal Control – I am assume if there are problem ravens they will be controlled. Something about ravens should be included in this section.

Appendix A – As mentioned in the meeting, I think 1.1.1-A and 1.1.1-C could be better worded.

Some suggestions for A (some wording taken from INRMP) "Develop a plan to use the Encroachment Program...":

- 1) to protect sensitive natural resources to reduce encroachment on the military mission.
- 2) Page 1.1 - to target natural resources management strategies to sustain military mission readiness.
- 3) Page 1-10 - to manage for biodiversity in a way that supports the military mission.
- 4) Page 33 – to align Natural Resources Management and military mission.

Suggestion for C – Maintain a preemptive conservation planning strategy to minimize impacts to military mission from federal listing of new species.

Appendix D- 24 Townsend's big-eared bat is as listed on page 3-31 Candidate ST

Appendix D- 25 See desert kit fox and ring-tailed cat above

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION



01-017-2018-009

November 20, 2018

[VIA EMAIL TO: aaron.hebshi@navy.mil]
Department of Defense
Dr. Aaron Hebshi
1220 Pacific Coast Highway
San Diego, California 92132

Re: Environmental Analysis of the 2018-2022 Integrated Natural Resources Management Plan for the Marine Corps Air Ground Combat Center, Twentynine Palms, California

Dear Dr. Aaron Hebshi,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the MCA GCC 2018-2022 Integrated Natural Resources Management Plan project.

*At this time ACBCI has no comments, but please continue to provide our office with updates as the project progresses. Also, please inform our office if there are changes to the scope of this project.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6956. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Lacy Padilla
Archaeological Technician
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

3001 JUDAH BLVD, PALM SPRINGS, CA 92264
TEL: 760/870-0000 F: 760/870-0004 WWW.AGUACALIENTE.BAND.ORG



TWENTY-NINE PALMS BAND OF MISSION INDIANS

46-200 Harrison Place . Coachella, California . 92236 . Ph. 760.863.2444 . Fax: 760.863.2449

July 19, 2018

Janelle Harrison
Environmental Affairs | UMSC MAGTFTC MCAGCC
Box 788110 Bldg. 1418
Twentynine Palms, CA 92278-8110

**RE: IMPLEMENTATION OF THE INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN
2018 -2022**

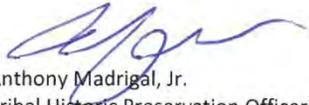
Dear Ms. Harrison,

This letter is in regards to consultation for the Integrated Natural Resources Management Plan. The Twenty-Nine Palms Band of Mission Indians (Tribe), are a Chemehuevi people who are a federally recognized tribe, with two reservations – one located near the city of Coachella in Riverside County and the other located near the city of Twentynine Palms in San Bernardino County. The Integrated Natural Resources Management Plan (INRMP) for the Marine Air Ground Task Force Training Command (MAGTFTC) Marine Corps Air Ground Combat Center (MCAGCC) objective is to reduce encroachment of natural resources on the installation and ensures that natural resources are sustained on Marine Corps training lands.

The Integrated Cultural Resources Management Plan (ICRMP) notes plant species which are culturally significant to the Tribe. These include Chia (*Chamaesyce pediculifera*), Desert Willow (*Chilopsis linearis*), Creosote (*Larrea tridentate*), Greasewood (*Adenostoma fasciculata*), Cottonwood (*Populus Sp.*), Jojoba (*Simmiondsiaceae*), White Sage (*Salvia apiana*), Acorns/Oak (*Fagaceae*), Reed (*Elymus condensatus*), Datura (*Datura metaloides*), Tobacco (*Nicotiana*), Agave (Agavoideae), Mesquite (*Prosopis juliflora*), and Pinyon (*Pinaceae*). These and other native plants were used for ceremony, food, tools and housing. In addition to the flora, there are numerous faunal species which have a deep connection to the Tribe which inhabit the MAGTFTC/MCAGCC. One of the most significant animals to the Tribe is the coyote (*Canis latrans*). Coyote was present during the first creation and Coyote's people became the ancestors of modern-day Southern Paiute, including Chemehuevi. Other animals that appear in stories and are significant species to the Tribe are the roadrunner (*Geococcyx californianus*) and desert tortoise (*Gopherus agassizi*). Many desert animals that reside on the installation are a part of the Tribe's stories and songs and were also used for subsistence, ceremony, and decoration. As the MAGTFTC/MCAGCC works to create a plan for the sustainability of flora and fauna, the Tribe requests to be notified for future developments that may have impacts to natural resources.

If you have any questions, please do not hesitate to contact the Tribal Historic Preservation Office at (760) 775-3259 or by email: TNPConsultation@29palmsbomi-nsn.gov.

Sincerely,



Anthony Madrigal, Jr.
Tribal Historic Preservation Officer

cc: Darrell Mike, Twenty-Nine Palms Tribal Chairman
Sarah Bliss, Twenty-Nine Palms Cultural Resources Manager
Walter Christensen, USMC

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<https://mail.yahoo.com/d/folders/172/messages/186280>

Subject: FW: My addition to the draft INRMP

From: walter.christensen@usmc.mil
To: ilima.segoviano@usmc.mil
Cc: MCAGCC\INRMP-EA@kmea.net; janelle_h_99@yahoo.com
Date: Monday, July 23, 2018, 9:37:18 AM PDT

Ilima:

Additional San Manuel comments on the INRMP below. There was no attachment to this email.

Walter J. Christensen
Head, Conservation Branch

Environmental Affairs
MAGTFTC, MCAGCC
Box 788110, Bldg 1418
Twentynine Palms CA 92278

(760)830-5200
walter.christensen@usmc.mil

> -----Original Message-----

> From: Lee Clauss [mailto:LClauss@sanmanuel-nsn.gov]
> Sent: Friday, July 20, 2018 12:31 PM
> To: Janelle Harrison <janelle_h_99@yahoo.com>
> Cc: Christensen CIV Walter J <walter.christensen@usmc.mil>
> Subject: [Non-DoD Source] RE: My addition to the draft INRMP

>
> Good morning, Janelle and Walter,

>
>
> I have reviewed the comments on the draft INRMP your team has generated based on both your individual review of that document
> and the comments I verbally provided on June 25, 2018, at our inter-tribal meeting. I appreciate the inclusion of San Manuel Band of
> Mission Indian's comments regarding the alteration to some of the language choice and tone in the document about mission and
> priorities, the inclusion of consulting Tribes as stakeholders, and the addition of language regarding the forthcoming PA.

>
>
>
> I also thank you for noting that there is an interest within the Tribal communities related to the management of plants and the desire
> of these communities to possibly have access to the installation for the purposes of plant gathering. At this time, I would not include a
> list of potential plants to be gathered or indicate which communities might gather certain plants. Rather, it would be helpful if
> MCAGCC simply provided the Tribes with some inventories and maps of the plant communities that do exist within the lands you
> steward, so that Tribes could then indicate which plants might be of interest/concern. The provision of such

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documents/maps and the
> development of a process by which plant gathering could be permitted and instituted could be a goal denoted in the
> INRMP.
>
>
>
> The only topic mentioned by SMBMI at the June 25th meeting that I do not see on your comment matrix is that
> related to the
> provision of certain animal parts to Tribal communities. Tribal communities, including SMBMI, would be interested in
> discussing a way
> in which the carcasses of desert tortoises, bighorn sheep, and raptors (or portions of such carcasses or even
> downed feathers) might
> be able to be collected or otherwise obtained by the Tribes from lands within the MCAGCC. Again, perhaps
> research into this
> prospect and protocols/processes could be a goal included in the INRMP.
>
>
>
> Finally, it was suggested by another community that the INRMP might be improved by the inclusion of some
> information regarding not
> only the specific tribal communities with affiliations to MCAGCC lands, but also a bit about their individual histories
> with this landscape
> and inter-relationships with each other and the larger region. Perhaps there is a place for such information in the
> INRMP, or perhaps
> that is content for the new ICRMP that needs to be developed.
>
>
>
> Thank you for capturing many of the comments shared by SMBMI regarding the INRMP at the June 25th meeting
> and for now
> including the comments provided today in your overall review and edits of that document, as well. Should you have
> any questions
> about the content of this communication, please do not hesitate to reach out to me at your convenience for
> additional clarification.
>
>
>
> Respectfully,
>
>
>
> Lee
>
>
>
>
>
>
>
> Lee Clauss
> DIRECTOR, CULTURAL RESOURCES MANAGEMENT
> O: (909) 864-8933 x503248
> Internal: 50-3248
> M: (909) 633-5851
> 26569 Community Center Drive, Highland California 92346
> <<http://www.sanmanuel-nsn.gov>>
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> From: Janelle Harrison [mailto:janelle_h_99@yahoo.com]
> Sent: Wednesday, July 11, 2018 6:17 PM
> To: Lee Clauss <L.Clauss@sanmanuel-rsn.gov>
> Subject: My addition to the draft INRMP
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> Lee,
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>
> I thought you'd like to see my comments and the sections I believe should be added to the INRMP.
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>
>
> v/r
>
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APPENDIX D

MINIMIZATION, MITIGATION, AND MONITORING

IMPLEMENTATION PLAN

See 2018-2022 INRMP, Appendix A

APPENDIX E
2012-2016 GOALS

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Table 6.4-A lists projects that are of a continuous or ongoing nature. Table 6.4-B lists projects that are planned for a particular year or multiple years.

TABLE 6.4-A: INRMP 2012-2016 Ongoing Projects

Section	Ongoing or Continuous Projects, Goals and Objectives
CHAPTER 4 – NATURAL RESOURCES MANAGEMENT	
4.1.1	Ecosystem Management Coordination
	<i>Manage MAGTFTC MCAGCC natural resources with an ecosystem management approach</i>
	Plan NR Mgmt to sustain the military mission, incorporating regional strategies
	<i>Participate in regional natural resources planning</i>
	Support regional planning
	Participate in DMG and similar groups Participate in PACIDERM and similar groups
4.1.2	INRMP Review and Update
	<i>Maintain the INRMP process to plan and integrate natural resources management</i> Review INRMP annually, report actions to USFWS, CDFW and HQMC
4.4.1	Flora Inventory and Monitoring
	<i>Inventory flora and monitor species / communities</i>
	Continue to monitor plant species, especially sensitive species, and conduct surveys as needed
	Monitor ESA for potential listing of species found at MAGTFTC
	Update the flora inventory (including herbarium mounts) as new species are found during general floristic surveys, sensitive plant species surveys, and other projects
Maintain a plant species database	
4.4.2	General Habitat Management
	<i>Base species management priorities on conservation needs</i>
	<i>Utilize landscape level planning to alter limiting factors and promote priority endemic species</i> Maintain healthy xeroriparian washes
4.4.3	Habitat Enhancement
	<i>Provide adequate habitat or modify existing habitat to allow flora and fauna species to thrive in particular areas</i>
	Maintain two guzzlers in coordination with the Society for the Conservation of Bighorn Sheep
	Monitor current bat gates; inspect for trespass and condition Continue to evaluate mine entrances for installation of bat gates to those mines that are exceptional bat habitat but not culturally significant
4.5.2	General Wildlife Inventory and Monitoring
	<i>Inventory faunal resources and monitor species</i>
	Survey for species most likely to be proposed for listing under ESA
	Monitor Bighorn Sheep population
	Monitor the use of natural and artificial water sources by large mammals Monitor bat populations, especially species that might qualify for ESA listing

TABLE 6.4-A: INRMP 2012-2016 Ongoing Projects

Section	Ongoing or Continuous Projects, Goals and Objectives	
		Map locations of washes and canyons throughout noting relative condition (e.g., poor, good, or excellent)
		Monitor burrowing owl populations
		Expand avian baseline inventory
		Monitor Mojave fringe-toed lizard populations and condition of habitat
4.5.3	General Wildlife Management	
	<i>Manage native wildlife species in order to support populations while maintaining training lands</i>	
		Minimize Mojave Fringe-toed Lizard mortality and injury from military maneuvers
		Monitor CDFW’s list of special status species. Consider state-protected species and migratory birds in all Marine Corps actions
		Protect all species protected by federal or state law from illegal take
		Discourage military personnel and civilians from handling and collecting reptiles
		Rehabilitate injured wildlife, particularly species protected by federal or state law
		Determine bighorn sheep management needs based on sheep sightings
		Monitor Bird Airstrike Hazard and update plan if needed.
4.5.4	Federally-listed Species Management	
	<i>Comply with the Endangered Species Act, Bald and Golden Eagle Protection Act</i>	
		Survey for federally-listed species and develop monitoring procedures
	<i>Inventory fauna and monitor ecosystem indicator species</i>	
		Develop an inventory/monitoring program for federally-listed species either newly found or newly listed
4.5.4	Federally-listed Species Management	
	<i>Comply with Migratory Bird Treaty Act while meeting mission requirements</i>	
		Maintain Special Purpose Permit
		Continue Invasive Species Mgmt to provide quality habitat for migratory birds
		Maintain tree-trimming protocol and limit habitat disturbance during the breeding season
	Desert Tortoise Management	
	<i>Protect and improve desert tortoise habitat and strive toward increasing populations</i>	
		Implement “Reasonable and Prudent Measures” of the Biological Opinion
		Implement “General Conservation Measures” of the Biological Opinion
		Implement “Terms and Conditions” of the Biological Opinion
		Implement “Conservation Recommendations” with discretionary funds
	<i>Evaluate known and potential Desert Tortoise habitat</i>	
		Monitor desert tortoise habitat condition and health
		Identify high-risk areas of desert tortoise habitat
	<i>Understand long term tortoise population trends aboard MAGTFTC MCAGCC</i>	
		Continue long-term tortoise density and trend monitoring program
		Maintain established tortoise study plots

TABLE 6.4-A: INRMP 2012-2016 Ongoing Projects

Section	Ongoing or Continuous Projects, Goals and Objectives
	<i>Further MAGTFTC’s knowledge of Upper Respiratory Tract Disease (URTD) and integrate that knowledge into management decisions</i>
	Cooperate with research on URTD
	<i>Minimize tortoise injury and mortality</i>
	Minimize MSR and road proliferation
	Continue tortoise awareness program
	Continue non-native predator management
	<i>Desert Tortoise “Head Start” Program</i>
	Construct, operate and manage the desert tortoise Captive Rearing (or “Head Start”) facility to protect nests and hatchlings from predation
	Monitor tortoise growth and population changes over time to determine facility success
4.6	Wet Area Management
	<i>Manage wet areas to protect their ecosystem functionality</i>
	Avoid use of wet areas for training maneuvers
	Design tank traps to maintain natural water flow
	Restore disturbed washes
	Update GIS database if new springs are discovered
4.9	Training Land Management
	<i>Coordinate with military planners to minimize damage to training lands, and disturbance to natural resources</i>
	Implement disturbance minimization measures
	Concentrate military activities onto lands already degraded
4.9	Training Land Management (continued)
	Use previously damaged lands for facility development
	Maintain Predesignated Range Training Support Sites and other areas of concentrated military use
	Create additional Predesignated Range Training Support Sites as needed
	Design roads to benefit both military use and conservation
	Evaluate flash flood risks to roads due to vegetation loss and soil compaction
	<i>Restore and rehabilitate training lands when economically feasible</i>
	Implement land restoration projects when beneficial to military mission and or conservation
	Emphasize native species during land restoration and specifically target the replacement of exotic invasive species
	<i>Prevent damage to sensitive areas</i>
	Use and maintain a uniform marking and delineation system
	<i>Maintain military access across public / BLM lands</i>
	Manage use of BLM ROW routes by military units
	<i>Use soil parameters to facilitate military activities, promote soil stability, and conserve wildlife habitat</i>
	Use site-specific soil testing for natural resource programs
	Incorporate soil data into decision-making processes
	Develop and maintain a monitoring system to determine wind erosion impacts aboard MAGTFTC MCA GCC

TABLE 6.4-A: INRMP 2012-2016 Ongoing Projects

Section	Ongoing or Continuous Projects, Goals and Objectives	
4.10	Grounds Management Support	
	<i>Ensure that Mainside landscaping and grounds maintenance are integrated and consistent with natural resources goals and objectives</i>	
		Provide support to incorporate xeriscape principles into Mainside landscaping plans
		Ensure that xeriscape principles are used through an approved plant list and the Base Exterior Architecture Plan
		Comply with ecosystem management concepts, Executive Order 13112, and future mandates with regard to Mainside grounds maintenance
		Advise planners / builders on the use of drought-tolerant and native plant species
		Improve water conservation practices and funding and include in long-term landscaping programs
		Emphasize that construction funding include long-term landscaping programs
4.11	Pest Management	
	<i>Control plant and animal species that negatively impact natural resources or the military mission</i>	
		Support implementation of the Pest Management Plan
		Respond to requirements for wildlife control aboard MAGTFTC
		Discourage subsidized predators, particularly around Mainside and Camp Wilson
		Educate military and civilian personnel on the importance of proper trash disposal
4.11	Pest Management (continued)	
		Develop a comprehensive Feral Dog Management Plan in cooperation with other federal agencies in the Mojave Desert
		Emphasize integrated pest management
		Take actions to control Africanized honeybees
4.12	Invasive Species Management	
	<i>Prevent, contain and slow the spread of invasive species to conserve and enhance native species and the functional value of natural systems</i>	
	<i>Understand the impacts of invasive species on natural processes to make informed decisions necessary for exotic species management</i>	
		Survey and monitor for invasive species to allow for early detection and rapid response
		Remove and control invasive <i>Tamarix</i> , <i>Brassica</i> and <i>Salsola</i> plants
		Conduct control measures on invasive species that affect listed species or their habitat
4.12	Invasive Species Management (continued)	
		Use native seed stock in restoration projects to prevent introduction of invasive species
		Exercise vigilance for the potential introduction of new, invasive, exotic species
		Ensure herbicide applicators are fully certified

TABLE 6.4-A: INRMP 2012-2016 Ongoing Projects

Section	Ongoing or Continuous Projects, Goals and Objectives	
4.13	Wildfire Management	
	<i>Prevent and suppress wildfires to maintain ecosystem biodiversity and functionality</i>	
		Implement the wildfire management plan
		Require personnel to report wildfires
		Incorporate burn areas as a GIS data layer
		Perform wildfire risk assessments and incorporate invasive species (e.g. <i>Schismus</i>) into prevention plan
		Evaluate methods to treat burned areas to reduce invasion by exotic species
		Use the environmental awareness (military) project to emphasize wildfire prevention and reporting
4.14	Special Interest Area Protection	
	<i>Protect areas of special ecological concern</i>	
		Use the NEPA process to protect special interest areas
		Use GIS to identify areas of special interest
		Use the NEPA process to minimize or mitigate adverse impacts on development in or immediately adjacent to flood plains
		Protect lava tubes and mines
CHAPTER 5 – NATURAL RESOURCES RELATED PROGRAMS		
• 5 · 1	Natural Resources Law Enforcement	
•	<i>Ensure compliance of military and civilian activities with natural resources regulations</i>	
		Educate personnel on environmental laws, specifically natural resources protection
		Coordinate natural resources law enforcement with other agencies
5.3.1	Environmental Mission Awareness (Military)	
	<i>Encourage awareness of natural resources protection and its value in supporting military training.</i>	
		Provide natural resources briefings to military personnel
	<i>Educate military users on minimizing impact to natural resources to sustain and enhance training</i>	
		Update environmental awareness materials and briefings
		Increase awareness of Desert Tortoises and their habitat
		Evaluate incorporation of personnel safety issues into environmental awareness materials
5.3.2	Environmental Awareness (Public)	
	<i>Provide information about MAGTFTC natural resources program to outside stakeholders.</i>	
		Keep Natural Resources Section staff knowledgeable on all aspects of the natural resources program
		Provide presentations on MAGTFTC MCAGCC environmental management to public as requested
		Use media to keep MAGTFTC MCAGCC and outside communities informed

TABLE 6.4-A: INRMP 2012-2016 Ongoing Projects

Section	Ongoing or Continuous Projects, Goals and Objectives	
		Update / expand natural resources information on MAGTFTC website
		Plan / participate in conservation awareness activities in local communities
		Maintain Wildlife Viewing Area and investigate other opportunities
5.4	Outdoor Recreation	
	<i>Support outdoor recreation opportunities when and where feasible</i>	
		Maintain Wildlife Viewing Area and surrounding nectar, tortoise and heritage gardens and explore opportunities for other areas
5.5	Cultural Resources Protection	
	<i>Implement INRMP in a manner consistent with the conservation of cultural resources</i>	
		Implement provisions of the ICRMP that relate to natural resources management
		Consider cultural resources areas when planning natural resources surveys
		Avoid / mitigate adverse effects to cultural resources from natural causes
		Notify Cultural Resources Manager if artifacts are discovered during natural resources surveys or projects
		Incorporate natural resource restoration projects and cultural resource protection
5.6	National Environmental Policy Act Implementation	
	<i>Use NEPA to identify projects and activities that may impact natural resources and work with proponents to resolve issues early in the planning process</i>	
	<i>Assist MAGTFTC in NEPA compliance</i>	
		Reference this INRMP in descriptions of affected environment to reduce verbiage in other NEPA documents
		Classify mitigation as a "must fund" for budgetary purposes

CHAPTER 6 - IMPLEMENTATION

6.2	Personnel	
	<i>Ensure staff is adequate to effectively implement this INRMP</i>	
		Provide staffing for the MAGTFTC natural resources program
6.2.2	Personnel Training	
	<i>Provide natural resources personnel with training to implement this INRMP</i>	
		Encourage EA natural resources personnel to continue professional development.
		Send personnel to natural resources training on a yearly basis
		Send personnel to annual workshops or conferences for professional development

TABLE 6.4-B: INRMP 2012-2016 Year-specific Projects

Section	Projects / Goals / Objectives	Implementation Year				
		2012	2013	2014	2015	2016
4.1.2	INRMP Review and Update					
<i>Maintain the INRMP process to plan and integrate natural resources management</i>						
	Update INRMP every five years					●
4.4.1	Flora Inventory and Monitoring					
<i>Inventory flora and monitor species / communities</i>						
	Update vegetation map and community classification			●		
4.4.2	Habitat Management					
<i>Base species management priorities on conservation needs</i>						
	<i>Utilize landscape level planning to alter limiting factors and promote priority endemic species</i>					
	Map locations of washes and canyons and their relative conditions					●
4.4.3	Habitat Enhancement					
<i>Provide adequate habitat or modify existing habitat to allow flora and fauna species to thrive in particular areas</i>						
	Evaluate modification of guzzlers in the Lava Bed Mountains and the Bullion Mountains		●			
.5.2	General Wildlife Inventory and Monitoring					
<i>Inventory faunal resources and monitor species</i>						
	Survey for Pallid San Diego pocket mouse	●				
	Repeat bat survey using modern acoustical analysis technology	●				
	Survey for Chuckwalla and determine distribution aboard MAGTFTC MCAGCC		●	●		
	Expand amphibian / reptile inventory on MCAGCC			●		●
	Survey the Bullion and Lava Bed Mountains for Desert Bighorn Sheep (<i>Ovis Canadensis nelsoni</i>)	●	●			
4.5.4	Federally Protected Species					
<i>Comply with Migratory Bird Treaty Act while meeting mission requirements</i>						
	Verify and add to bird surveys from 2011 Wildlife Inventory			●		●
	Renew Special Purpose Permit			●		
	Survey for Golden Eagles on the MCAGCC	●	●			

Understand known and potential desert tortoise habitat						
	Monitor established tortoise study plots on a rotational basis			●	●	●
4.5.4	Federally Protected Species (continued)					
<i>Investigate effects of contaminants on Desert Tortoise</i>						
	Conduct preliminary survey to determine the source of any disturbance and assess their impacts on tortoise health		●	●		
4.9.2	Training Land Management					
<i>Use soil parameters to facilitate military activities, promote soil stability, and conserve wildlife habitat</i>						
	Develop and maintain a monitoring system to determine wind erosion impacts aboard MAGTFTC MCAGCC			●		
4.10	Grounds Management Support					
<i>Incorporate xeriscaping principles into Mainside landscaping plans</i>						
	Replace tamarisk windbreaks with Xeriscape landscaping				●	●
	Incorporate the Base Exterior Architecture Plan into the Comprehensive Development Plan to guide the use of native plants for landscaping	●	●			
4.11	Pest Management					
<i>Invasive Species Management</i>						
	Coordinate Invasive Species Management Plan with Wildlife Management Plan		●			
	Develop a comprehensive feral dog management plan in cooperation with other federal agencies in the Mojave Desert		●	●		