

Executive Summary

The National Training Center (NTC) and Fort Irwin Military Reservation in San Bernardino County, California, is used to train United States Army brigade-sized units in a realistic battlefield environment. Because of changes in training requirements caused by new equipment, technology and Army fighting doctrine, the facility was expanded by a congressional land withdrawal action in 2001 by approximately 110,000 acres (44,517 ha). Further refinements due to land surveys and GIS analysis of the boundary indicate the total land withdrawal area to be approximately 118,674 acres (48,027 ha). The legislation expanding size of Fort Irwin also required that before Fort Irwin can use the land for training purposes, the change of use must be analyzed pursuant to both the National Environmental Quality Act (NEPA) and the Endangered Species Act (ESA) and be coordinated with the review of the West Mojave Coordinated Management Plan, a planning effort currently being undertaken by the Bureau of Land Management (BLM). This Biological Assessment (BA) was prepared to assess the impacts of the proposed project, including mitigation, compensation and conservation measures on species federally listed as threatened or endangered.

There are two federally listed species, the desert tortoise (*Gopherus agassizi*) and Lane Mountain milk-vetch (*Astragalus jaegerianus*) present within the Project Area. An additional species was also included for impacts analysis in this BA, it is a plant, desert cymopterus (*Cymopterus deserticola*), a species with a petition for listing currently pending before the U.S. Fish and Wildlife Service. The BA found that the proposed project is likely to adversely impact each of these species. In addition, the BA found that the proposed project is likely to adversely modify desert tortoise critical habitat. However, proposed mitigation, conservation and compensation measures incorporated into the project would aid in the long-term survival of these species. The basis of these findings is described briefly below.

The project area includes three general sites: Superior Valley, Eastgate, and the UTM 90 Gridline Area (UTM 90 Area). All sites would be used for non-live fire Army training maneuvers except for designated conservation or off-limits areas. In addition, a transit route to allow for the movement of vehicles and equipment from the cantonment area on Fort Irwin to the Superior Valley area would also be improved through NASA's Goldstone Deep Space Communications Complex. While each area would be used for maneuver training, with the exception of the transit route, the intensity of training and types of training activities will vary from area to area and be highly dependent upon terrain and type of Army unit participating in the rotation. Impacts from Army training activities will range from zero (0) direct or indirect impacts in off-limits or low use areas,

to 100% ground surface disturbance in high use areas. The number of training rotations and numbers of soldiers participating any in rotation would not increase. In addition to the increase in the size of the maneuver training land, several conservation, compensation and mitigation actions are incorporated into the project to off-set and mitigate for impacts to endangered species as described below.

The potential major adverse impacts to the desert tortoise includes an potential estimated direct mortality of approximately 1,000 animals, possible elimination or adverse modification of approximately 120,766 acres (48,874 ha) of occupied, unoccupied and potential tortoise habitat near the edge of the species range of which 87,300 (35,330 ha) is also designated critical habitat, and constriction of the population south of Fort Irwin. The majority of the area anticipated to be impacted contains low to extremely low densities of desert tortoise. The loss and fragmentation this habitat may cause the heightened possibility of additional loss of animals in the fragmented sites at the edge of the species range. Proposed mitigation measures to avoid, lessen, and offset these impacts and impacts to designated critical habitat include, but are not limited to, the enhancement and recovery of the current core desert tortoise population northwest of Barstow and populations throughout the proposed Superior-Cronese Lakes, Fremont-Kramer and Ord-Rodman DWMA's by consolidating land ownership through the purchase of approximately 130,000 acres (52,610 ha) of land; avoiding direct impacts to 16,901 acres (6,840 ha) of tortoise habitat on Fort Irwin by designation as conservation areas or off-limits areas from training; eliminating direct impacts of cattle grazing on desert tortoise habitat and permitting its recovery by retiring over 478,379 acres (193,599 ha) of grazing allotments; contribution towards closure and rehabilitation of approximately 2,000 miles of dirt roads and trails to increase the habitat values associated with adjacent DWMA's and critical habitat; placing fencing in critical locations, including along Irwin Road, to reduce fatalities; implementing a translocation program in the training areas to move desert tortoises from harm's way and reduce potential fatalities while bolstering population numbers in adjacent compatible areas; providing education to all military, civilian, and contractor personnel visiting the base. These proposed conservation, compensation and mitigation measures will work to offset the effects of the proposed project and aid in the long-term recovery of the species.

The major potential adverse impact to Lane Mountain milk-vetch is the degradation of habitat and potential loss of plants on approximately 6,660 acres (2,695 ha) (or approximately 31%) of known habitat as of this writing for the plant. However, the likely impact to the plant and it's habitat based on projected intensity of use of habitat areas for Army training is that approximately 25% of habitat will experience potential losses. Mitigation proposed to address this impact includes

preservation of over 4,019 occupied habitat acres (1,626 ha) on Fort Irwin by designating them as conservation areas and the proposed acquisition of approximately 13,000 acres outside of the boundaries of Fort Irwin to place all known Lane Mountain milk-vetch habitat into public ownership. Each conservation area also includes buffer zone where plants may occur but have not yet been detected. In addition, closure and rehabilitation of dirt roads and trails on BLM managed lands as mentioned above, will be focused in the proposed Lane Mountain milk-vetch ACEC on Coolgardie Mesa thereby increasing the habitat values in this area. These proposed conservation, compensation and mitigation measures will work to offset the effects of the proposed project and aid in the long-term conservation and recovery of the species.

The major potential adverse impact to desert cymopterus is the loss of less than 0.3 percent of the known population of plants. Mitigation measures proposed for desert tortoise and Lane Mountain milk-vetch should also aid this species.