

4.19.4 Alternative IV: Southwest/East Gate/UTM 90

4.19.4.1 Impacts

The environmental impacts under this alternative would be the same as Alternative II.

4.19.4.2 Mitigation

No mitigation is proposed.

4.19.5 Alternative V: East Gate/UTM 90

4.19.5.1 Impacts

No one currently lives within the boundaries of this alternative. Impacts to environmental justice are not expected.

4.19.5.2 Mitigation

No mitigation is proposed.

4.19.6 Alternative VI: No Action

4.19.6.1 Impacts

Environmental justice impacts are not expected from this alternative, as current operations at Fort Irwin would continue within current boundaries.

4.19.6.2 Mitigation

No mitigation is proposed.

4.19.7 Cumulative Impacts

Significant cumulative impacts are not expected to occur in the area of economic justice.

4.20 Other Impacts

This section describes other impact assessments to the environment not covered elsewhere in the document. The following sections are prepared according to applicable NEPA guidelines and include assessments to:

- ❖ Short-term uses of the environment vs. long term impacts on productivity;
- ❖ Irreversible and irretrievable commitment of resources;
- ❖ Unavoidable significant and adverse impacts; and
- ❖ Impacts on global commons.

4.20.1 Short Term Uses of the Environment vs. Maintenance and Enhancement of Long Term Productivity

The land would remain in military use for the conceivable future. As such, impacts related to maintenance, enhancement and long-term productivity will be permanent. The proposed project will remove primarily undisturbed desert land that supports a variety of plant and wildlife species within the western Mojave desert ecosystem and replace it with an Army training area that will be used to support the NTC's mission and contribute towards the security of the Nation. Even with the level of disturbance anticipated, some areas within the project area will remain completely undisturbed and would continue to contribute towards species recovery (such as designated conservation areas and low-use areas) and the functioning of the ecosystem. Additionally, some areas will act as buffers between the training areas and the surrounding environment or be impacted minimally due to location or topography.

In general, long term enhancement and productivity of the biological environment will be permanently impacted and also may result in impacts to adjacent areas that would then be subject to the indirect effects of loss of habitat, cover and impaired plant production. Wildlife living in the region may experience reduced range and a decrease in biomass to support life and life functions. However, the benefit to national security and the NTC's training mission is substantially greater than the impact to the long term productivity, as the benefit derived from realistic training is key to the strength of the forces of the United States Army. Experience has shown that soldiers need to be able to "train like they fight", and the unrealistic distances coupled with off-limits areas and restrictions on the range currently in use do not provide realistic training opportunities in particular over widely dispersed areas or realistic distances.

The Army has proposed several mitigation measures to offset the effects of the proposed project. These mitigation measures should significantly alter the BLM management of west Mojave region and reduce the likelihood of private development in critical areas. In addition, the proposed mitigation measures, in particular the purchase private land, placement of tortoise fencing, contribution towards route closure and rehabilitation of the BLM route network plus other proposed mitigation measures, will reduce the long term impact of the project to adjacent areas; the direct impacts though are basically non-mitigable.

In conclusion, a long term impact will occur to maintenance and enhancement of the environment but that impact is off-set by the value added to the NTC' training mission and security of the United States and lessened by the proposed mitigation measures for indirect impacts. These impacts should be the same for each of the five action alternatives with level of impact dependent upon the amount of land impacted. There will be no impact if the no action alternative is chosen.

4.20.2 Irreversible and Irretrievable Commitment of Resources

There will be an irreversible and irretrievable commitment of three resources due to the implementation of the proposed project: geology, energy resources, and land use.

Non-renewable energy resources are used daily in the operation of Fort Irwin and the NTC - these uses are not anticipated to increase due to the implementation of the proposed project as there is no planned increase in the number of miles driven or JP-8 fuel that will be allotted to each rotation. There will be a temporary increase in the use of non-renewable fossil fuels as they are used during the construction of infrastructure and other systems required to integrate the expansion lands into the training area and ready them from Army training. Fort Irwin currently has

in place an oil-recycling program and all vehicles are fitted with new air filters and oil filters each rotation to promote energy efficiency. The vehicles used in construction though will likely be contractor vehicles and will not be subject the Fort Irwin's policies regarding fuel efficiency. However, all vehicles registered in California for operation are subject the State's stringent air quality standards, thus the emissions are far less than vehicles in unregulated states.

Permanent alteration of geologic landforms is expected due to road grading and siting of utilities. Roads may be graded not only for use by rotational actives but for access to communication towers and other infrastructure. Hilltops may be graded flat to allow for the siting of utilities and communications and/ or monitoring equipment - these minor landform alterations represent an irreversible and irretrievable commitment, as restoration is generally ineffective or infeasible.

Private land purchases proposed as mitigation to off-set the effects of the proposed action will result in a large quantity of land being removed from the private market and thus from future development potential - these lands will be held in perpetuity and managed for species conservation by the BLM. As the land will be removed from the private domain and transferred to the public domain, growth, by way of private development and population in the areas of land purchases will be impeded. The loss of this land for private development is an irreversible impact unless the BLM decides to alter their Land Tenure Adjustment program and re-designate such areas as areas targeted for disposal.

Impacts to the biological environment and aesthetics and visual resources are not considered an irreversible or irretrievable commitment as experience has shown that the desert landscape will recover to its natural condition if military use is halted. Similarly, attendant soil disturbance would also eventually stabilize. While recovery is slow - sometimes decades, it has been shown that the environment will eventually rejuvenate. Areas used during WWII in the 1940's for training maneuvers in the desert around and on Fort Irwin and south to near the Mexican border have recovered to a level that supports all or most of the identified wildlife and plant species that were present before training occurred. The UTM 90 area on Fort Irwin has been off-limits since 1991 to mechanized training and despite being used for over 40 years as a maneuver area and impact area, the area has now recovered and supports a medium density population of desert tortoise and average plant cover. Thus, it is likely that if the new training area was taken out of use, the area would slowly re-vegetate and wildlife would move back into the area. However the area would likely be slow to completely recover, as is the case in most arid environments.

4.20.3 Unavoidable, Significant, and Adverse Impacts

There are several unavoidable significant adverse impacts anticipated as a result of implementation of the proposed project: loss of individuals and habitat of federally listed threatened or endangered species, loss of vegetation cover; loss of wilderness characteristic to adjacent wilderness areas, loss and disruption of soil surfaces; loss of mining resources and loss of recreation opportunities. Each alternative has a varying degree of impact upon each resource area dependent upon the amount of land within the alternative. Each impact is unavoidable given the nature of the proposed project and can not be fully mitigated, or mitigated at all, except to off-set the effects of the impact through other measures such as land purchases and other actions outside the alternative. The choice of an alternative that would be the environmentally preferred alternative (such as alternative III) would negatively affect the NTC's training mission and purpose and objective of the project even though it would promote use of less sensitive land and in a smaller quantity than the preferred alternative. These impacts should be the same for each of the

five action alternatives with level of impact dependent upon the amount of land impacted. There will be no impact if the no action alternative is chosen.

4.20.4 Impacts on Global Commons

Executive Order 12114, dated January 4, 1979, requires all major federal actions to consider any potential impacts on the environment outside the United States, its territories, and possessions. The effects of the proposed action do not cross international boundaries and will not influence domestic or foreign manufacturing. There is no significant impact on the global commons.