

## **4.0 ENVIRONMENTAL CONSEQUENCES**

This chapter presents the environmental consequences, (direct and indirect effects, and cumulative impacts) of implementing one of the six alternatives described in Chapter 2. Discussions of resources are based on the environmental setting specific to the described resource (Chapter 3) as they are potentially impacted. The discussion of environmental consequences follows the order of presentation of the fourteen resources described in Chapter 3. Therefore, Chapter 2 has described the proposed action and alternatives, Chapter 3 has described the environmental setting into which the action is being proposed, and Chapter 4 now describes the environmental consequences of implementing the alternatives. The detailed description of each alternative is presented in Chapter 2. To assist the reader, a brief description of the alternatives is presented below.

### **ALTERNATIVE 1**

Under Alternative 1, the withdrawal of McGregor Range would be renewed for the same area provided in PL 99-606. The withdrawal would be the 608,385 acres currently withdrawn under PL 99-606. As described in Section 2.1.1, current military activities would continue and could expand in the future with additional training needs.

### **ALTERNATIVE 2**

Under Alternative 2, Congress would renew the withdrawal of 568,385 acres in the Tularosa Basin and Otero Mesa portions of McGregor Range. About 40,000 acres in the Sacramento Mountains foothills portion of McGregor Range, including the Culp Canyon WSA, would return to the public domain. Army fee-owned in-holdings within this area would be retained for specialized training. Current mission activities that use the Sacramento Mountains would be constrained or reduced.

### **ALTERNATIVE 3**

Under Alternative 3, the Tularosa Basin portion of McGregor Range would remain withdrawn for continued military use. The withdrawn area of McGregor Range (about 428,385 acres) would encompass areas within the Tularosa Basin and the escarpment of Otero Mesa. About 180,000 acres in the Otero Mesa and Sacramento Mountains foothills portions of McGregor Range would return to the public domain. Army fee-owned in-holdings within this area would be retained for specialized training. Current mission activities that use the Sacramento Mountains and Otero Mesa would be constrained or eliminated.

### **ALTERNATIVE 4**

Under Alternative 4, only portions of the Tularosa Basin south of New Mexico Highway 506 would be withdrawn for military use (about 364,385 acres). About 244,000 acres north of New Mexico Highway 506 and on Otero Mesa would be returned to the public domain. Army fee-owned in-holdings within this area would be retained for specialized training. Current mission activities that use the area north of New Mexico Highway 506 and Otero Mesa would be constrained or eliminated. Most potential, future training activities may not be supportable under this alternative.

### **ALTERNATIVE 5 – NO ACTION**

Under Alternative 5, the No Action Alternative, the withdrawal of McGregor Range would not be renewed and all the land would return to the public domain. Army fee-owned in-holdings within this

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area would be exchanged for public lands in TAs 8 and 32, in order to maintain essential infrastructure around McGregor Range Camp, the McGregor ASP, and the Meyer Range Complex.

**ALTERNATIVE 6**

During scoping, it was suggested that Congress designate the Culp Canyon WSA as a wilderness area. In addition, Congress could designate the Otero Mesa and Sacramento Mountains foothills, including in-holdings that are held in fee by the DA, as a NCA. The affected fee-owned in-holdings would be exchanged for other public lands elsewhere within McGregor Range. Alternative 6 would require separate congressional action (a separate withdrawal) and could potentially alter the management practices associated with the area included in the NCA.

**DIRECT AND INDIRECT EFFECTS AND CUMULATIVE IMPACTS**

Direct effects are those caused by the action and occur at the same time and place (40 CFR 1508.8). For example, the effects of a congressional decision to change the segregation of public lands through the size of the McGregor Range military land withdrawal would have a direct effect on land use management by both military and nonmilitary users of the currently withdrawn land.

Indirect effects are caused by the action (congressional decision to segregate public lands) and are later in time or farther in distance, but are still reasonably foreseeable. For example, a decision to reduce the size of the withdrawal so that some military missions could not be adequately accomplished causing units to be reassigned to other installations, reduced, or disbanded would result in indirect effects on the local economy (40 CFR 1508.8). Other examples of indirect effects are the impacts of military uses on water, biological, or cultural resources. Another example is the indirect effects of nonmilitary activities on public land that is presently withdrawn but would be returned to the public domain. This occurs under Alternatives 2, 3, 4, 5, and 6.

Cumulative impacts are incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) 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).

Cumulative environmental impacts are most likely to arise when a relationship exists between a proposed action or alternative and other actions that have or are expected to occur in a similar location, time period, and/or involving similar actions. For example, the Army and the BLM entered into a 1966 MOU that allows co-use grazing on the McGregor Range. This decision was separate from the congressional decision withdrawing the land 9 years earlier, in 1957. The incremental effects of grazing on resources such as vegetation, when added to the effects of military activity, become cumulative impacts. Similarly, as a result of the 1990 Army and BLM MOU, current effects of nonmilitary uses of withdrawn land under Alternatives 1, 2, 3, and 4, such as grazing, mineral development, or recreation on physical, biological, and/or cultural resources result in cumulative impacts. In addition, projects in close proximity to the proposed action or alternative would be expected to have more potential for cumulative impacts than those more geographically separated. These projects could be proposed by various agencies (federal, state, or local) or persons.

The cumulative effects assessment in this LEIS focuses on addressing two fundamental questions: (1) Does a relationship exist such that the impacts from the proposed action or alternative might affect or be affected by the impacts of the other actions? And (2) if such a relationship exists, does this assessment

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reveal any potentially significant impacts not identified when the proposed action or alternative is considered alone?

For the purposes of this LEIS, two types of activities have been identified that, in combination with the proposed action, have the potential for contributing to cumulative impacts on resources within McGregor Range or an ecosystem that occurs on but extends beyond McGregor Range. They are:

- On-going or projected military activities in the ROI, including areas of Fort Bliss other than McGregor Range, WSMR, and HAFB;
- Nonmilitary activities and plans that also affect areas or resources affected by the proposed action or alternative, including resource management and planning by BLM and USFS (such as grazing, mineral development and recreational use), and those activities of the states of New Mexico and Texas, Doña Ana and Otero counties, New Mexico, and El Paso County, Texas.

These activities are described in detail in Appendix G, *Cumulative Impacts Analysis Background*. The activities are summarized as follows.

Military activities on the Fort Bliss Training Complex with potential for cumulative effects on McGregor Range and contiguous ecosystems include training and testing activities on the South Training Areas and Doña Ana Range–North Training Areas. These include:

- Weapons firing,
- SDZs,
- Off-road vehicle maneuvers,
- Dismounted training, and
- Aircraft operations.

Military activities at WSMR are centered on mission support for research, development, testing, and evaluation of Army missile and rocket systems. WSMR is adjacent to the Doña Ana–North Training Areas of Fort Bliss, west and northwest of McGregor Range. Training, testing, and environmental resource management activities at each installation can affect resources and ecosystems that transcend installation boundaries.

Military activities at HAFB, other than the USAF construction of a new air-to-ground tactical target complex, such as the deactivation of units such as the 435<sup>th</sup> Fighter Squadron that reduced flight operations over McGregor Range, have the potential to contribute to the cumulative effects on McGregor Range.

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The BLM Las Cruces Field Office encompasses McGregor Range. The White Sands RMP, as amended by the McGregor Range RMPA describe BLM area-wide activities with potential to affect McGregor Range. The White Sands RMP serves as the basis from which the BLM co-manages lands on McGregor Range and on public lands in the vicinity of McGregor Range and WSMR. The RMPA provides a comprehensive framework under the White Sands RMP for managing the withdrawn lands of McGregor Range. The RMPA sets forth the land-use decisions, terms, and conditions for guiding and controlling future management actions on McGregor Range that could contribute to cumulative effects. The objectives of the RMPA are to:

- Make withdrawn public land and its resources on McGregor Range available for use and development for the public;

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- Provide for the public use of locatable, leasable, and salable minerals consistent with the laws that govern these activities and to minimize environmental damage;
- Maintain and enhance the soil, water, and air resources on McGregor Range;
- Maintain a desirable plant community which is equivalent to the present rangeland ecological condition and to protect federal, state, and candidate threatened and endangered plants;
- Stabilize ecological condition and trend, or improve trend in other areas and increase production;
- Ensure optimum population and a natural abundance and diversity of wildlife resources by restoring, maintaining, and enhancing habitat conditions and to conserve rare, vulnerable, and representative habitats, plant communities, and ecosystems on McGregor Range;
- Manage recreation use to protect the health and safety of users, to protect natural and cultural resource values, and to promote public use and enjoyment;
- Manage visual resources to protect the quality of the scenic values;
- Protect and provide for the proper use of cultural resources.

The USFS manages lands adjacent to the northeastern boundary of McGregor Range including grazing, minerals, water, soils, fuel wood gathering, hunting, and recreation. USFS actions that could affect McGregor Range are included in the *Forest Management Plan* for the Lincoln National Forest (USFS, 1986).

The states of New Mexico and Texas administer certain lands and highways in the ROI. New Mexico is evaluating plans to widen portions of U.S. Highway 54 near McGregor Range. Texas has no current plans known to contribute to cumulative effects on McGregor Range.

Doña Ana and Otero counties, New Mexico, and El Paso County, Texas are in the ROI for this LEIS. In the New Mexico counties, community and private developments could contribute to cumulative effects. Growth in El Paso County could cumulatively affect regional groundwater supplies and regional air quality.

#### MITIGATION MEASURES

Mitigation measures have been incorporated into each alternative, if the impact analysis indicates that adverse impacts would result from implementation of the alternative. These measures are intended to reduce or eliminate the negative impact to the resource.

#### IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section identifies the major irreversible and irretrievable commitments of resources that are identifiable at the level of this analysis. A commitment of resources is irreversible when its primary or secondary impacts limit the future options for a resource. An irretrievable commitment refers to the use or consumption of resources neither renewable nor recoverable for later use by future generations.