

**2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

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2  
3  
4 This section describes alternatives for withdrawal of McGregor Range following the expiration in 2001 of  
5 the withdrawal enacted in 1986. The U.S. Army proposes to renew the McGregor Range withdrawal in its  
6 current configuration for the 50-year period 2001 through 2051 (Alternative 1). Other alternatives  
7 analyzed in this LEIS include options for renewal of the withdrawal for part of the existing withdrawn land  
8 area. The No Action Alternative is also described, under which the Army would cease military use of  
9 McGregor Range and make the land available to DOI for return to the public domain.

10  
11 The following sections describe the military uses that would be conducted on the withdrawn land (as well  
12 as Army fee-owned land interspersed with the withdrawn land), the nonmilitary uses that would be  
13 permitted under multiple use objectives for each alternative, and, for the partial withdrawal alternatives, the  
14 uses that may occur on lands that are returned to the public domain.

15  
16 The military uses are as defined for McGregor Range in the TADC. The TADC is a pre-planning  
17 document that describes the current Fort Bliss training range capabilities, and potential future uses and  
18 enhancements. These enhancements are long-range and conceptual in nature, and include potential new  
19 construction, training facilities, and associated improvements to current range capabilities. The TADC  
20 provides a framework for facilities planning and management of Fort Bliss including McGregor Range, to  
21 respond to the Army's current and future needs. The TADC is part of a broader framework for the  
22 continued evolution of land use and management proposals within the context of the ongoing missions at  
23 Fort Bliss and existing land and airspace boundaries.

24  
25 The TADC describes a variety of mission activities performed at Fort Bliss training areas that are grouped  
26 into 10 mission- and training-related land use categories, environmental management, and public access  
27 (Table 2.0-1). The figures in this section illustrate the distribution of these categories across the  
28 McGregor Range. Additional detail concerning these activities is available in the TADC (U.S. Army,  
29 1998d).

30  
31 The activities listed in Table 2.0-1 are not confined to discrete geographic areas but are dispersed over  
32 various portions of the range as required to support training needs. McGregor Range is organized in 26  
33 training areas, as shown in Figure 1.2-3. Each training area supports a range of activities.

34  
35 Future training needs could affect the level of use of McGregor Range in ways such as development of  
36 additional controlled access FTX sites, development of a helicopter training complex, and launching of a  
37 small number of Army Tactical Missile Systems (ATACMS) into McGregor Range (4 to 6 per year) to  
38 support test operations at WSMR.

39  
40 In addition, the USAF is proposing to expand GAF operations at HAFB, New Mexico. As part of that  
41 proposal, three alternative locations were considered for an air-to-ground tactical target complex, two of  
42 which are on McGregor Range. On May 29, 1998, the USAF selected Otero Mesa as the location for the  
43 tactical target complex. The tactical target complex includes a 5,120-acre impact area, and 180 square  
44 mile safety area for use by the U.S. and GAF units, primarily from HAFB. The description of the Otero  
45 Mesa option and the associated environmental impact analysis is presented in the USAF EIS (USAF,  
46 1998).

47  
48 The following sections describe military and nonmilitary uses projected to occur on McGregor Range  
49 under each of the alternatives. These include current activities, as well as potential future activities that  
50 may occur to meet evolving training needs.

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**Table 2.0-1. Training Categories**

<i>Training Category</i>	<i>Activities</i>
1. Mission Support Facility	Test facilities; landing zones/pads; drop zones; radar facilities
2. Weapons Firing	Firing areas for short range and High-to-Medium-Altitude Air Defense (HIMAD), surface-to-surface, surface-to-air, and air-to-surface weapons, launch sites; firing points; laser certified ranges; small arms ranges
3. Surface Impact	Live artillery; live fire surface-to-surface missile impact areas; air-to-surface target areas
4. Surface Danger Zone (SDZ)/Safety Footprint	Target debris areas and safety footprint for weapons use
5. Off-Road Vehicle Maneuver	Use of tracked or wheeled vehicles, not confined to roads
6. On-Road Vehicle Maneuver	Use of wheeled or tracked vehicles on existing roads
7. Controlled Access FTX Areas	Air Defense training sites; FTX assembly; training; communication, command, and control
8. Dismounted Training	Dismounted training; pyrotechnics
9. Aircraft Operations	Fixed-wing and rotary-wing overflights and air-to-air training
10. Built-up Areas	Range Camps
ENV. Environmental Conservation	Environmental management activities; conservation efforts conducted on Fort Bliss, i.e., ITAM Program, INRMP, and ICRMP
PA. Public Access	Areas available for public use for grazing and recreation

**2.1 ALTERNATIVE 1**

Under the proposed action, the withdrawal of McGregor Range would be renewed under the same conditions as provided in PL 99-606.

The area encompassed by the current boundary of McGregor Range includes approximately 608,385 acres of withdrawn public lands and 71,083 acres of Army fee-owned lands and 1,010 acres of previously state-owned lands within Otero County, New Mexico. McGregor Range also includes 18,004 acres of USFS lands, which are used by the Army in accordance with a MOU between the USFS and the DA (Appendix A).

Under this alternative, the boundaries of McGregor Range would remain the same. The withdrawal would include the 608,385 acres withdrawn under PL 99-606 plus 1,010 acres of land within McGregor Range that was transferred from State of New Mexico ownership to the BLM. The renewed withdrawal would be for 609,395 acres.

McGregor Range is publicly accessible via U.S. Highway 54 and New Mexico State Highway 506. The public is excluded from areas within Tularosa Basin south of New Mexico State Highway 506 due to safety concerns. Public access is allowed on other areas of McGregor Range when it does not interfere with the military mission.

1 **2.1.1 Military Missions and Capabilities on Withdrawn Lands**

2  
3 Military use of the withdrawn area currently conducted includes:

- 4 • Short-range and medium- and high-altitude missile training;
- 5
- 6
- 7 • Short-range and medium- and high-altitude missile testing and experimentation programs, particularly
- 8 DA/U.S. Department of Defense (DoD)-directed operational testing, per the Five-Year Test
- 9 Program, of Air and Missile Defense Weapons Systems;
- 10
- 11 • Roving Sands combined forces exercises;
- 12
- 13 • FIREX for Hawk, Patriot, Stinger, and Roland Missiles;
- 14
- 15 • Helicopter gunnery and Hellfire training; low altitude nap-of-the-earth (NOE) tactical training, which is
- 16 flight as close to the surface as possible;
- 17
- 18 • Laser operations;
- 19
- 20 • Fixed-wing aircraft bombing practice at the Class C Bombing Range;
- 21
- 22 • Airborne personnel, equipment drops, and Special Operations Forces ground troop maneuvers;
- 23
- 24 • Small arms training at Meyer Range Complex; and
- 25
- 26 • Limited use of the southern-most portion of McGregor Range for tracked vehicle operations.
- 27

28 Figure 2.1-1 shows the lands proposed to be withdrawn as McGregor Range under this alternative. Lands  
29 owned by the Army and USFS lands used in accordance with a MOU within the full boundary of  
30 McGregor Range are also shown on Figure 2.1-1. The color coding of training areas in Figure 2.1-1  
31 corresponds to training area land use categories listed in Table 2.1-1. As shown in Table 2.1-1, the  
32 activities in Table 2.0-1 have been grouped into 9 mappable training area land use categories designated A  
33 through I. In Table 2.0-1, the training categories across the top row of the table correspond to the training  
34 categories presented in the first column of Table 2.1-1. This table is also included at the end of this  
35 chapter as a fold-out to aid in reading Figure 2.1-1 and the other figures in this chapter.

36  
37 Each training area land use category, while a discrete map unit, carries with it multiple permitted uses that  
38 are compatible from a mission standpoint. As Table 2.1-1 shows, aircraft operations are conducted  
39 throughout the range and environmental management and conservation are performed in all areas except  
40 surface impact areas that present a hazard to personnel.

41  
42 Major field exercises such as Roving Sands make use of most, if not all, training areas on McGregor  
43 Range depending on the training objectives of the exercise. The Roving Sands JTX is a ground-to-air  
44 defense exercise that focuses upon communications and interoperability of U.S. service and allied units.  
45 The exercise includes air-to-air combat scenarios and air-to-ground attacks. The JTX Roving Sands is  
46 conducted annually in spring or early summer for approximately 1 month, and uses most of the range for a  
47 variety of ground and air activities. During this period, very little nonmilitary use is permitted. Live-fire  
48 activities are performed for approximately 1 week and usually result in periodic closure of New Mexico  
49 Highway 506 during the exercise. Additional information regarding the Roving Sands JTX is presented in  
50 the *Final Programmatic Environmental Impact Statement for the Joint Training Exercise*

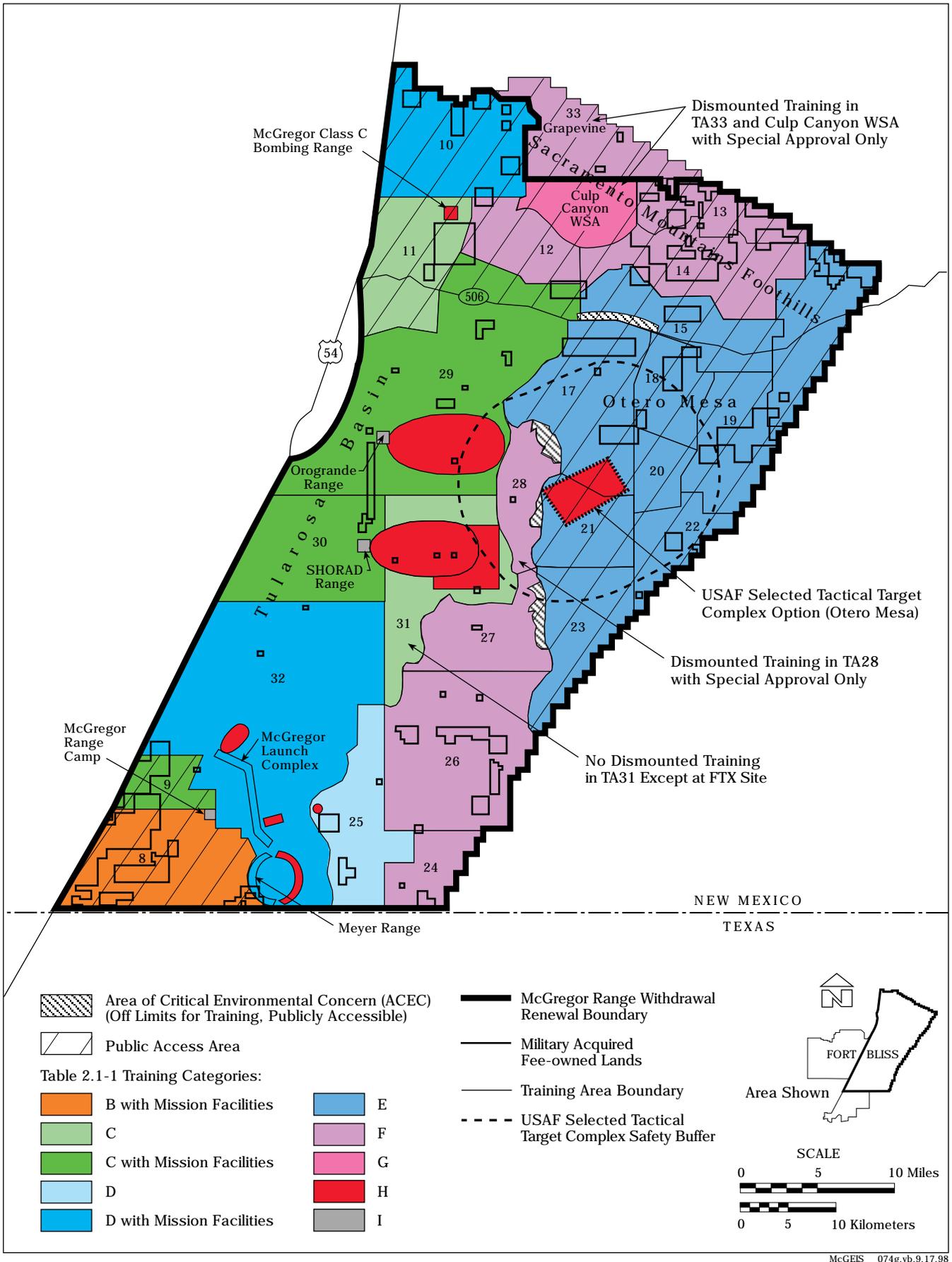


Figure 2.1-1. Land Status Under Alternative 1.

**Table 2.1-1. Fort Bliss Training Area Land Use Categories.**

Training Area Land Use Category	Fort Bliss Training Categories (Table 2.0-1)											
	1	2	3	4	5	6	7	8	9	10	ENV*	PA**
	Mission Support Facility	Weapons Firing	Surface Impact	SDZ/Safety Footprint	Off-Road Vehicle Maneuver	On-Road Vehicle Maneuver	Controlled Access FTX	Dismounted Training	Aircraft Operations	Built-up Areas	Conservation	Public Access
A		●		●	●	●		●	●		●	●
A with Mission Facilities	●	●		●	●	●		●	●		●	●
B					●	●		●	●		●	●
B with Mission Facilities	●				●	●		●	●		●	●
C		●		●		●	●	●	●		●	●
C with Mission Facilities	●	●		●		●	●	●	●		●	●
D		●		●		●		●	●		●	○
D with Mission Facilities	●	●		●		●		●	●		●	
E				●		●	●	●	●		●	●
F				●		●		●	●		●	○
G				●				●	●		●	●
H			●						●			
I	●			●		●			●	●	●	●

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- Training Category Occurs in Land Use - Uses May Not be Concurrent
- Public Access on Some Areas
- \* Environmental Management
- \*\* Public Access

Note: A foldout of this table is located at the end of Chapter 2.

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1 *Roving Sands at Fort Bliss, Texas and New Mexico and White Sands Missile Range, New Mexico,*  
2 February 1994 (U.S. Army, 1994a).

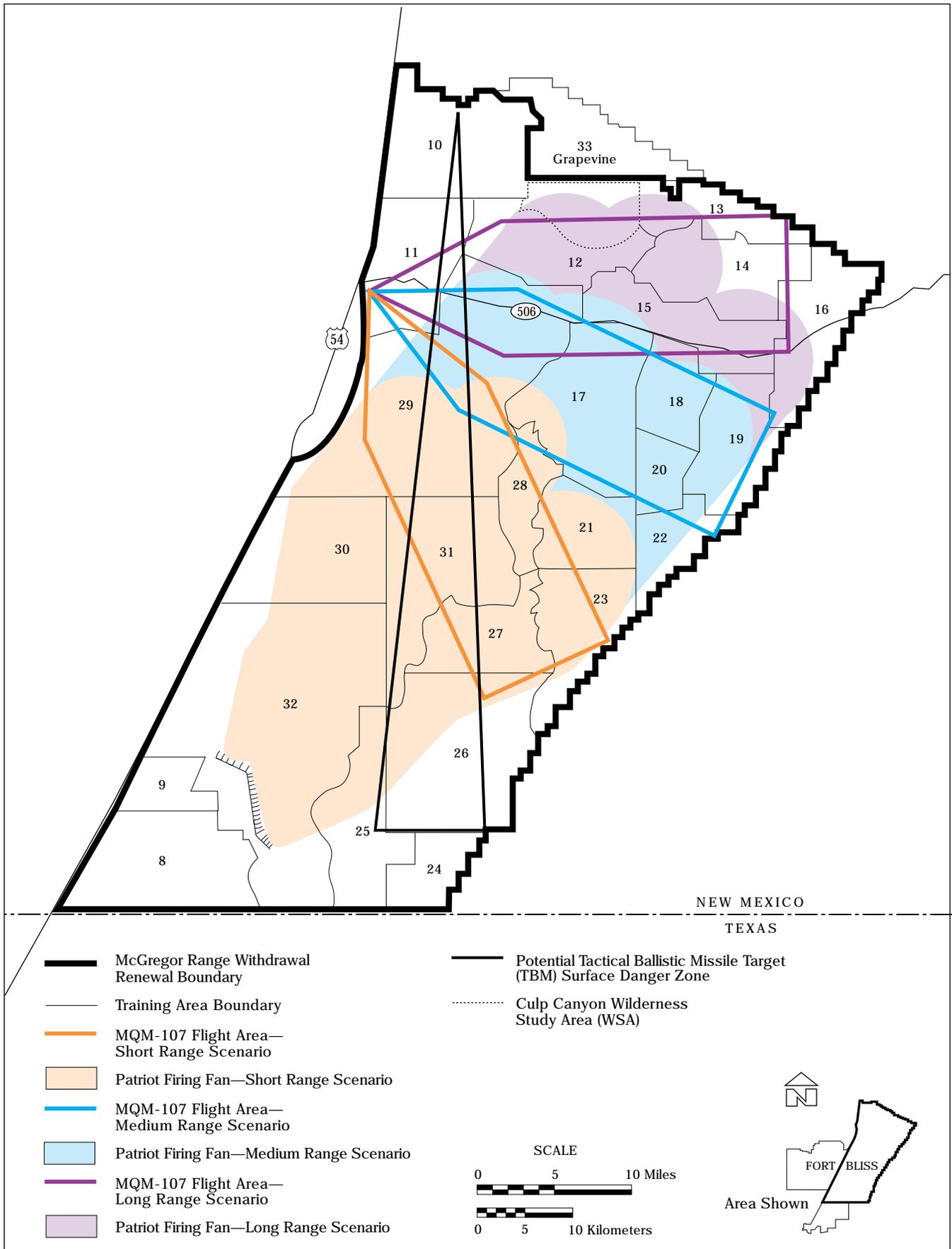
3  
4 TA 8, at the southwestern corner of the range, is the only area other than controlled access FTX sites  
5 where off-road wheeled vehicle maneuvers occur. McGregor Range Camp, located in TA 8, 23.5 miles  
6 north of the main cantonment, is used for a variety of administrative, troop housing, and training functions.  
7 Enlisted barracks capacity for transient and permanent personnel is 1,154. Mobilization capacity is 1,154  
8 for enlisted personnel and 66 for officers. Range Control functions are located at Davis Dome, near the  
9 range camp.

10  
11 A series of firing locations for HIMAD missiles are located in the south part of the range on the  
12 McGregor Launch Complex. These are used for a variety of large and small air defense missile systems  
13 and may also be used for Multiple Launch Rocket System (MLRS) firings. The direction of firings is  
14 usually from south to north. ATACMS firings are conducted about six times annually and impact in  
15 WSMR. ATACMS firings require temporary closure of U.S. Highway 54.

16  
17 Small missiles are fired from the SHORAD and Orogrande ranges and Forward Area Weapons (FAW)  
18 Site 10, all located on the west side of McGregor Range in TAs 29, 30, and 32. Typical missiles include  
19 Stinger, Advanced Medium-range Air-to-air Missile (AMRAAM), Hellfire, Tube-launched, Optically-  
20 tracked, Wire-guided (TOW), and Chaparral. SDZs for these are contained within the Tularosa Basin.  
21 Patriot missile live-fire exercises are the current activity that requires the most land area. Figure 2.1-2 is a  
22 graphic depiction of three Patriot training scenarios using MQM-107 aerial targets and Tactical Ballistic  
23 Missile (TBM) targets and their associated flight areas and SDZs. The SDZ is designed to contain debris  
24 from missile intercepts, missiles destroyed in flight, and the impact of fragments.

25  
26 TA 32 contains the McGregor Missile Launch complex and Meyer Range and associated surface impact  
27 areas. Other impact areas include the Class C Bombing Range in TA 11, the areas east of SHORAD and  
28 the Orogrande complex and TA 31 that contains the MLRS target impact area. TA 10 at the northwest  
29 corner of the range includes a launch point for a potential air defense TBM target system for the Patriot.  
30 At present, Fort Bliss does not have the capability to use a TBM target for live fire exercises. This type  
31 of target capability is required in the future as threats posed by these systems (i.e., Scud) increase. Since  
32 all Patriot Battalions based in the continental U.S. are located at Fort Bliss, capability to employ a TBM  
33 target into the live fire exercises is being investigated. This type of target requires a SDZ extending from  
34 TA 10 south to TA 25 approximately opposing the flight corridor of the Patriot, in addition to the SDZ  
35 required for Patriot firing. The TBM target would overfly TAs 10, 11, 12, 25, 26, 27, 29, 30, and 31.

36  
37 The training areas on Otero Mesa and the Sacramento Mountains foothills support on-road vehicle  
38 maneuvers and dismounted training (training of soldiers on foot without motor vehicles), SDZ, and aircraft  
39 operations. TAs 15 through 23 on Otero Mesa contain controlled access FTX sites, primarily for  
40 communications and target engagement training involving the Patriot and Hawk systems. Controlled  
41 access FTX sites are field training sites where military access is subject to increased control and restricted  
42 to activities with limited ground disturbing effects. Examples include training involving wheeled vehicle  
43 movement off-road limited to entering and exiting the site, no site improvements, no clearing of vegetation  
44 on the site, and no digging on the site. Public access is not restricted at controlled access FTX sites in  
45 public access areas when not in use by the military. The Culp Canyon WSA in TA 12 may only be used  
46 for dismounted training with special approval. The BLM will continue to manage the WSA under the  
47 *Interim Management Policy and Guidelines Under Wilderness Review* (1987). Fort Bliss will continue  
48 to be responsible for compliance with the guidelines and will generally limit surface use of the WSA to  
49 ground forces military training. Fort Bliss will notify the BLM, Las Cruces Field Office, 30 days prior to  
50 conducting any activities within the WSA (BLM, 1990b).



**Figure 2.1-2. Target Flight Areas and Surface Danger Zones Associated with Patriot Missile Firings—Alternative 1.**

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1 Aerial gunnery missions are conducted by helicopters at Cane Cholla Aerial Gunnery Range in TA 32 and  
2 by fixed-wing aircraft at the Class C Bombing Range north of New Mexico Highway 506 in TA 11.  
3 Class C targets are located in the Class C Bombing Range only. The area immediately around the Class  
4 C targets (about 20 acres) is fenced to exclude livestock. Public access to areas north of New Mexico  
5 Highway 506 within the vicinity of the Class C Bombing Range is not permitted when this area is in use.  
6 An average of four to five sorties use this target daily. A sortie represents a flight of a single military  
7 aircraft from takeoff through landing. Paradrop missions are occasionally conducted on the range's Drop  
8 Zone in TA 8 and the Wilde Benton landing strip in TA 29. Low-altitude (less than 300 feet above the  
9 ground) tactical navigation by helicopters occurs in four Terrain Flying Areas on McGregor Range.  
10 Terrain Flying Areas 2, 3, 4, and a portion of 5 are designated for both day and night use. The boundaries  
11 of these areas are shown in Figure 2.1-3. Terrain Flying Area 4 includes two NOE routes for very low-  
12 altitude, terrain-following helicopter training located in the northern portion of airspace R-5103B. All  
13 routes in this NOE course run in a west to east direction. The McGregor Range portion of Terrain Flying  
14 Area 5 is located over TA 8.

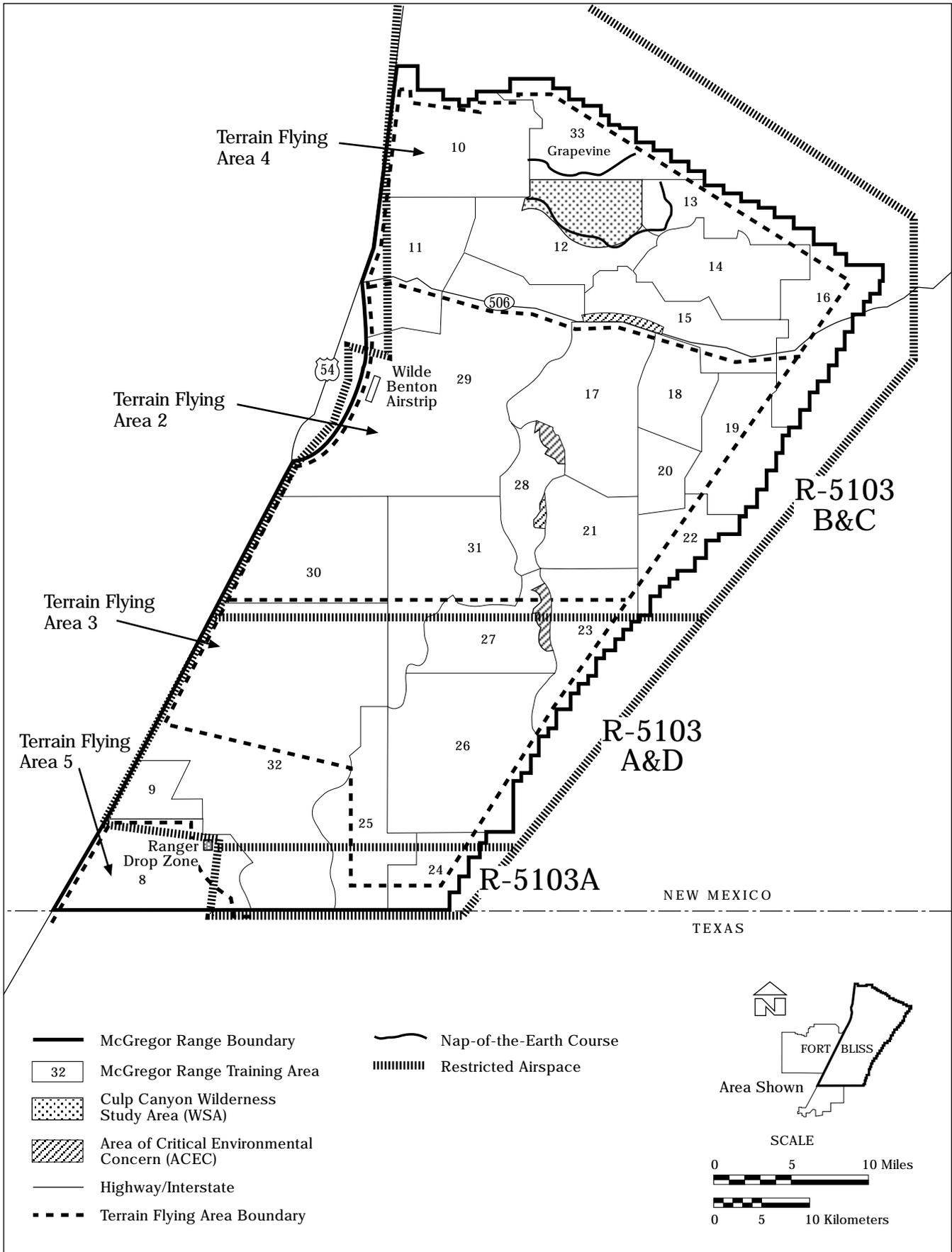
15  
16 During DA/DoD-directed Operational and Development Testing and Experimentation of Air Defense  
17 Systems, visual or radar observation is required for radar certification and verification of Air Defense  
18 Systems. Aircraft fly scripted profiles at required altitudes to ensure background clutter is captured in the  
19 data for analysis.

20  
21 The ADATD operates mobile "A" stations (remote unmanned ground instrumentation stations) with 37  
22 100-foot towers for data collection and radar verification, at several locations on the Otero Mesa and in  
23 the Tularosa Basin. The ADATD has utilized McGregor Range extensively for the following testing and  
24 experimentation support activities:

- 25
- 26 • Low flying attack profile with fixed and rotary aircraft;
- 27
- 28 • Laser tracking of aircraft and ground vehicles;
- 29
- 30 • Live short-range missile firings (Stinger, Chaparral, Air Defense Anti Tank System (ADATS), etc.);
- 31
- 32 • Live anti-aircraft gun firings (Bradley, Vulcan, etc.);
- 33
- 34 • Live laser designated weapon firings;
- 35
- 36 • Live Patriot missile firings;
- 37
- 38 • Live (High-mobility multi purpose wheeled vehicle Advanced Medium-range Air-to-air Missile  
39 (HUMRAAM) firing to include over the horizon (mesa); and
- 40
- 41 • Live "shoot-on-the-move" firings.
- 42

43 Small arms (including rifles, pistols, machine guns, and grenades), demolition, and other similar individual  
44 training is conducted at Meyer Range in the south part of the McGregor Range (TA 32). Meyer Range  
45 activities can occur simultaneously with most other military operations.

46  
47 The level of use or intensity of use varies among training areas and for the types of training missions  
48 performed in each training area. A general, current level of assessment of the McGregor Range training  
49 areas is provided in the following paragraphs, based on number of scheduled days in each training area



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**Figure 2.1-3. Terrain Flying Areas and Restricted Airspace Over McGregor Range.**

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**Table 2.1-2. Level of Military Use Criteria**

<i>Level of Use</i>	<i>Percent Scheduled Use</i>
Very Low (VL)	0 through 25 percent
Low (L)	26 through 50 percent
Moderate (M)	51 through 75 percent
High (H)	76 through 100 percent

1  
2  
3 as a percentage of the total days in the year. For current conditions, 1996 was used as the baseline year.  
4 Level of use is based on the criteria in Table 2.1-2.

5  
6 Table 2.1-3 depicts the most frequent training for each training area at McGregor Range. The table also  
7 includes Culp Canyon WSA and the restricted airspace overlying the range (Figure 2.1-3). The level of  
8 use in training areas at McGregor Range varies from very low to high. The areas that receive the highest  
9 concentration of training use are primarily centered around the facilities in TAs 29, 30, and 32, and  
10 associated impact areas in TA 31, and SDZs in TAs 27, 28, and 31 within the Tularosa Basin portion of  
11 the range. TA 11, where the Class C Bombing Range is located, receives a moderate level of use for  
12 training activities.

13  
14 McGregor Range TA 32 contains the McGregor Launch Complex, Meyer Range, Cane Cholla Helicopter  
15 Gunnery Range, and the Hellfire missile firing point which makes it the most highly used training area in  
16 the Fort Bliss Training Complex. The highest percent of training use area is facilities use.

17  
18 Use of TAs 29 and 30, where the Orogrande and SHORAD ranges are located, respectively, is roughly  
19 equivalent, and generally higher than other training areas in the Fort Bliss Training Complex. Level of  
20 training use on TAs 28 and 31, although high, is primarily confined to surface impact areas and SDZs.

21  
22 Most of the use in the majority of the training areas is as SDZ for weapons firing. Training areas within  
23 SDZs of SHORAD missions, including TAs 17 and 21, show a slightly higher level of use than areas  
24 within SDZs of HIMAD missiles, although use in these areas is still low. TAs 24, 25, and 26 are also  
25 within SDZs for weapons firings from TA 32. Training use in these training areas remains low.

26  
27 Some training areas also support on-road vehicle maneuvers, primarily associated with ADA training  
28 activities. Portions of that training may involve use of controlled-access sites used for the Roving Sands  
29 JTX. Because use of those sites can be rotated from year to year, some training areas experience higher  
30 use than others in any given year, especially in the Otero Mesa portions of McGregor Range. In 1996, the  
31 majority of use of TA 8 was for off-road and on-road wheeled vehicle maneuvers. TA 8 is the only  
32 training area at McGregor Range where off-road wheeled vehicle maneuvers are permitted. However,  
33 since the relocation of the 3<sup>rd</sup> Armored Cavalry Regiment (ACR), off-road vehicle use has declined, and  
34 more of the vehicle activity involves on-road travel by ADA units. Several training areas, as well as Culp  
35 Canyon WSA, are used for dismounted training, but that use is typically very low.

36  
37 McGregor Range is overlain by Restricted Airspace R-5103. Use of that airspace for air operations is  
38 high. Restricted Area R-5103 must be activated during missile firings to ensure safety.

39  
40 McGregor Range has been subject to a substantially higher level of environmental study than the other  
41 ranges/training areas. Although portions of McGregor Range are accessible to the public (TAs 8 through  
42 23), public access use is very low (less than 25 percent of the days in the year).

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**Table 2.1-3. Training Category(s) by Training Area**

<i>TA</i>	<i>Primary Training Categories</i>	<i>Training Level of Use</i>	<i>Projected Training Categories</i>	<i>Training Level of Use</i>
8	Off-road Vehicle Maneuvers	L	Mission Support Facilities; Off-road Vehicles	H
9	On-road Vehicle Maneuvers; SDZ	VL	On-road Vehicle Maneuvers; SDZ	VL
10	SDZ	L	SDZ	L
11	SDZ; Mission Support Facilities; Weapons Firing; Surface Impact	M	SDZ; Mission Support Facilities; Weapons Firing; Surface Impact	L
12	SDZ	L	SDZ	L
13	SDZ	L	SDZ	L
14	SDZ	L	SDZ	L
15	SDZ	L	SDZ	L
16	SDZ	L	SDZ	L
17	SDZ	L	SDZ; Mission Support Facilities; Surface Impact	H
18	SDZ	VL	SDZ	H
19	SDZ	VL	SDZ	H
20	SDZ	VL	SDZ	H
21	SDZ	L	SDZ; Mission Support Facilities; Surface Impact	H
22	SDZ	VL	SDZ	H
23	SDZ	L	SDZ	H
24	SDZ	L	SDZ	L
25	SDZ	L	SDZ	L
26	SDZ	L	SDZ	L
27	SDZ	H	SDZ	H
28	SDZ	H	SDZ	H
29	SDZ; Mission Support Facilities; Weapons Firing; Surface Impact	H	SDZ; Mission Support Facilities; Weapons Firing; Surface Impact	H
30	SDZ; Mission Support Facilities; Weapons Firing; Surface Impact	H	SDZ; Mission Support Facilities; Weapons Firing; Surface Impact	H
31	SDZ	H	SDZ	H
32	Mission Support Facilities; Built-up Areas; SDZ	H	Missions Support Facilities; Built-up Areas; SDZ	H
33 (Grape- vine)	SDZ	VL	SDZ	VL
WSA	SDZ	VL	SDZ	VL
R-5103	Flight Operations	H	Flight Operations	H

2

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As military training requirements evolve, McGregor Range could support additional types of activities. Table 2.1-4 identifies additional future actions and activities on McGregor Range. Specific locations have not yet been determined for some of these possible future actions. Most of these actions would result in intensified use of existing facilities and capabilities in the Tularosa Basin portion of McGregor Range. The effect of these projected activities on training level of use is shown in Table 2.1-3. One example of this would be the potential use as an Army aviation combat training range. Additional

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**Table 2.1-4. Possible Future Activities on McGregor Range**

<i>Status</i>	<i>Installation Capability/Envisioned Project</i>
<p><b>In Process</b> NEPA Documentation On-going or Completed</p>	<ul style="list-style-type: none"> <li>• The proposed USAF action to expand GAF operations at HAFB, NM, and to construct a tactical target complex on Otero Mesa.</li> <li>• Additional controlled access FTX sites, each approximately one to several square miles in size located in nonmountainous terrain on McGregor Range.</li> <li>• Geothermal sources in southern McGregor Range are being explored, but continued exploration could involve other locations.</li> <li>• Road and communication system improvements are ongoing.</li> </ul>
<p><b>Under Consideration</b></p>	<ul style="list-style-type: none"> <li>• Support testing of extended range of Block IB ATACMS. Launches may originate from Fort Wingate in northern New Mexico to impact on McGregor Range. Safety and environmental clearances and analysis would be required.</li> <li>• Development of a capability to use a TBM target launched from a new facility in the northwest part of McGregor Range.</li> <li>• Construction of a Military Operations Urbanized Terrain (MOUT) Training Complex on McGregor Range.</li> <li>• Installation of a geothermal binary generation and desalination plant.</li> <li>• Additional support facilities for 500 to 800 persons would be constructed near McGregor Range Camp.</li> <li>• Post mobilization National Guard heavy brigade validation may occur.</li> <li>• Construction of a rail spur from Union Pacific (UP) rail line (along U.S. Highway 54) to McGregor Range Camp.</li> <li>• Construction of additional classrooms at Meyer Range.</li> <li>• Construction of a new Law Enforcement Complex at Meyer Range.</li> <li>• Construction of additional facilities at McGregor Range Camp and linking of the domestic water distribution system on Doña Ana Range–North Training Areas to McGregor Range.</li> <li>• Phase III expansion of a new Ammunition Supply Point (ASP) in south McGregor Range, located between U.S. Highway 54 and McGregor Range Camp.</li> </ul>
<p><b>Additional Installation Capability</b></p>	<ul style="list-style-type: none"> <li>• Development of the existing Cane Cholla and Hellfire Training Area into a state-of-the-art Helicopter Training Complex in southern McGregor Range. The training area would be about 13 by 14 miles and include a 1,000-acre impact area.</li> <li>• Combat aviation training would utilize this gunnery facility and 62 by 124 miles of associated restricted airspace over Fort Bliss and WSMR.</li> <li>• Heavy Division Training Center that supports additional brigade-size training exercises. These activities would be at the scale of the Roving Sands exercise, involving about 10,000 troops for a duration of about 2 weeks each year. McGregor Range aviation gunnery and NOE flight training capabilities would be used.</li> </ul>

1

2

3

4 controlled access FTX sites could be sited outside the Tularosa Basin. Should these installation capabilities  
5 be required to support future missions, project specific NEPA documentation will be prepared to support  
6 future mission requirements.

7

8 The main projected initiatives that could affect level of use at McGregor Range training areas include the  
9 USAF proposed target complex, development of additional controlled access FTX sites, development of a  
10 helicopter training complex, and launching of a small number of ATACMS into McGregor Range (4 to 6  
11 per year). The USAF proposed action included a new air-to-ground tactical target complex on

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1 McGregor Range. When the target complex is constructed, it is expected to replace much of the use of  
2 the existing Class C Bombing Range in TA 11, which would consequently experience a decrease in  
3 training use. The proposed tactical target complex would increase training use substantially in TAs 17, 18,  
4 19, 20, 21, 22, and 23 from very low or low to high. With the exception of TAs 17 and 21, all of the  
5 increase would be in Category 4, SDZ. This proposal would introduce mission facilities and surface  
6 impact area as new uses in TAs 17 and 21.

7  
8 Figure 2.1-4 illustrates the existing controlled access FTX sites that are used for Roving Sands only and  
9 the approximately 150 square miles of terrain on McGregor Range suitable for siting additional controlled  
10 access FTX sites. Also shown are 13.5 square miles additional controlled access FTX sites being  
11 evaluated in separate NEPA documentation for site-specific characteristics.

12  
13 The additional controlled access FTX sites would be used for training small contingents in command and  
14 control, communications, and simulated target engagement activities. These areas would be similar to the  
15 existing sites used for Roving Sands and while they may be used more often throughout the year, the sites  
16 also could be rotated from year to year.

17  
18 With the potential construction of a MOUT training facility in TA 8, the distribution of use would change  
19 over current conditions, with more activity in facility use and MOUT training activities that may involve  
20 pyrotechnics. Use of TA 29 for SDZs would increase with the projected increase in SHORAD missions.  
21 TA 31 would also experience an increase in the percent of use for SDZs associated with helicopter  
22 gunnery missions.

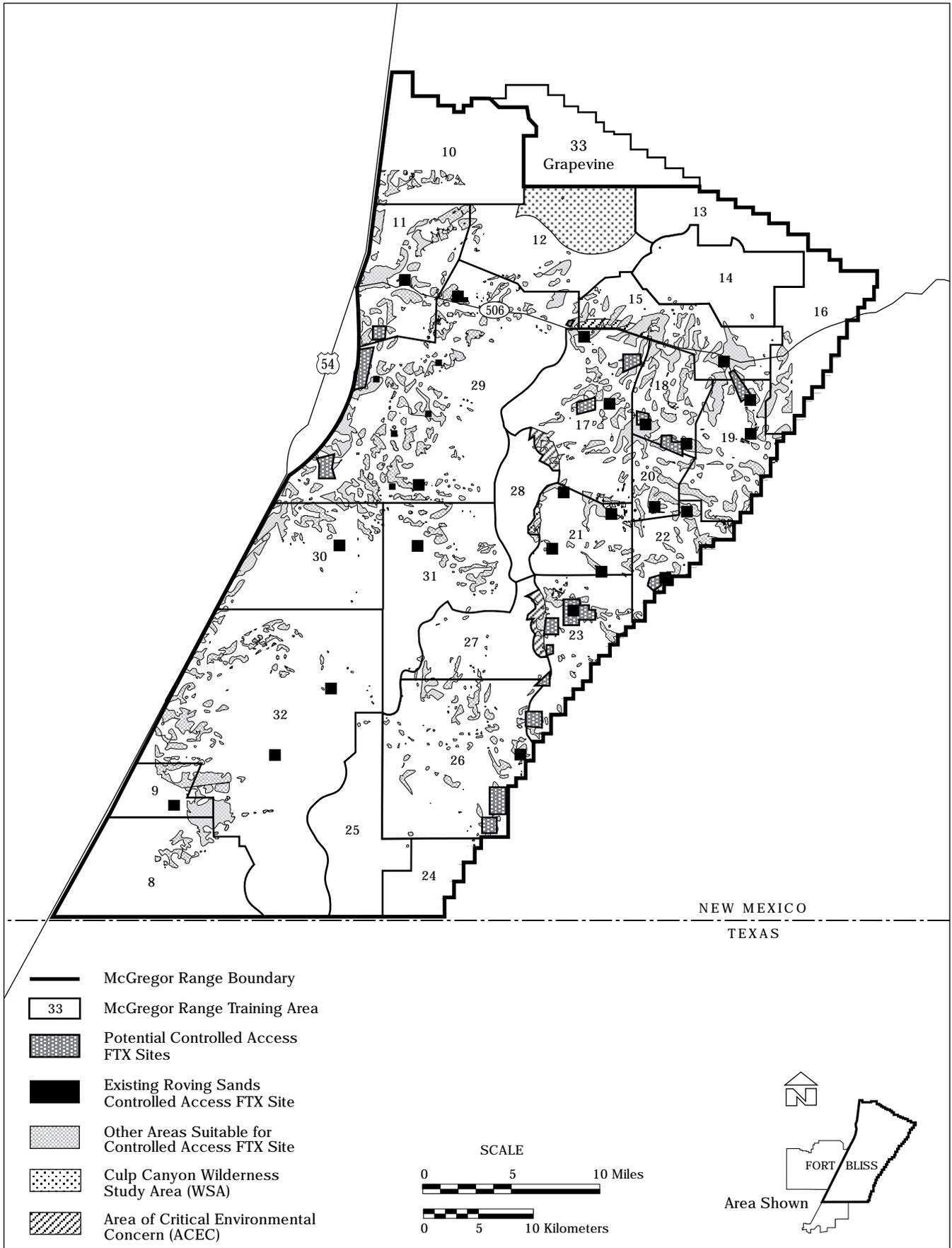
23  
24 With the exception of the training areas potentially affected by the USAF proposed new tactical target  
25 complex in TAs 17 and 21, or TA 31, as described above, the training areas that could experience the  
26 largest increase in level of use would be TAs 8 and 32. As noted above, the level-of-use increase in TA 8  
27 (about 130 percent) would be primarily in facilities use if a MOUT is developed in this training area.  
28 Increased use of TA 32 would be concentrated in and around McGregor Range Camp.

### 29 **2.1.2 Nonmilitary Uses of Withdrawn Lands**

30  
31  
32 Nonmilitary uses of the land would remain largely the same as they are under PL 99-606. Nonmilitary  
33 uses are managed by BLM with Fort Bliss concurrence in accordance with PL 99-606, the White Sands  
34 RMP as amended by the McGregor Range RMPA and the MOU between the Army and BLM. Areas on  
35 the range are managed for protection of archaeological and historical resources, and habitat conservation  
36 in accordance with the RMPA. In addition, there are special use areas for grazing, research, and public  
37 recreation.

38  
39 The 271,000 acres of withdrawn and Army fee-owned land, available for grazing are comprised of TAs 10  
40 through 23, which are designated grazing areas 1 through 5 and 7 through 15. Grazing will continue to  
41 take place in accordance with the specific decisions (Mc/G-1 through Mc/G-16) in the White Sands RMP  
42 (BLM, 1986a). These decisions provide objectives and procedures for the livestock grazing program that  
43 takes place on McGregor Range. In addition to grazing, the primary nonmilitary uses in these areas  
44 include hunting and dispersed recreational use such as hiking and observing nature. Depending on which  
45 future military developments are implemented, there could be some reduction in the acreage available for  
46 those uses or the times that access is permitted.

47  
48 Throughout McGregor Range, a variety of wildlife are sustained by varying suitable habitat conditions.  
49 Areas specially protected include the McGregor Black Grama Grassland Area of Critical  
50 Environmental Concern (ACEC) for its special grassland habitat and Culp Canyon WSA for its  
51



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**Figure 2.1-4. Existing and Potential Controlled Access FTX Sites on McGregor Range.**

wilderness qualities. Management of the Otero Mesa and Sacramento Mountains foothills portions of McGregor Range would continue to be managed under the White Sands RMP as amended by the RMPA.

Access to training areas is controlled by Fort Bliss. Members of the public must obtain annual access permits from 1<sup>st</sup> CAS BN through the Range Development and Enforcement Office, and are required to check in and out with McGregor Range Control to ensure safety and avoid interference with military missions. The Las Cruces Field Office of the BLM is also authorized to issue recreational access permits. Between 1,000 and 1,700 permits are issued annually for recreational purposes on the Fort Bliss Training Complex. Approximately 23 percent (230 to 391) of the recreational permits are for access to McGregor Range. Permit holders are responsible for complying with specific procedures for entry, use, and departing the range. Current access procedures allow concurrent use of any area for selected military missions (such as environmental resource surveys) with public use.

### **2.1.3 Use of Lands Returned to the Public Domain**

Since the boundaries of McGregor Range would be the same as the 1986 withdrawal, there would be no land returned to the public domain.

## **2.2 ALTERNATIVE 2**

The Tularosa Basin and Otero Mesa portions of McGregor Range would be withdrawn for continued military use. The Sacramento Mountains foothills portion of McGregor Range, including most of the Culp Canyon WSA, would return to the public domain. This area is about 40,000 acres, comprised of currently withdrawn lands in TAs 13 and 14, and parts of 12, 15, and 16, and including Culp Canyon WSA. Army fee-owned in-holdings within the lands returned to the public domain area would be retained for specialized training. Grazing under BLM management would continue on Army fee-owned in-holdings.

Under this alternative, Congress would renew the withdrawal of 569,395 acres and not withdraw public lands in the Sacramento Mountains foothills portion of McGregor Range. The Secretary of the Army would need to prepare a written determination concerning the contamination of these areas with explosive, toxic, or other hazardous substances. The Secretary of the Interior, in consultation with the Secretary of the Army, would decide what decontamination is economically feasible given different potential future use and relative risks. Following this decision, the Army would continue with studies and pursue decontamination actions at McGregor Range to the degree resources are available.

### **2.2.1 Military Missions and Capabilities on Withdrawn Lands**

Figure 2.2-1 illustrates the area that would be withdrawn under Alternative 2. Army fee-owned land within McGregor Range is also shown on Figure 2.2-1. With the loss of the Sacramento Mountains foothills land area on the north end of the range, McGregor Range would continue to support some current missions and some future missions based upon installation capabilities as described by Alternative 1. However, current mission activities that use the Sacramento Mountains foothills would be constrained and/or reduced. For example:

- The orientation of training scenarios used in live-firing of the Patriot missile will need to be adapted to avoid including the foothills area in the SDZ, thus limiting the full range of training possibilities available on the current configuration of McGregor Range (Figure 2.2-2). Each training scenario

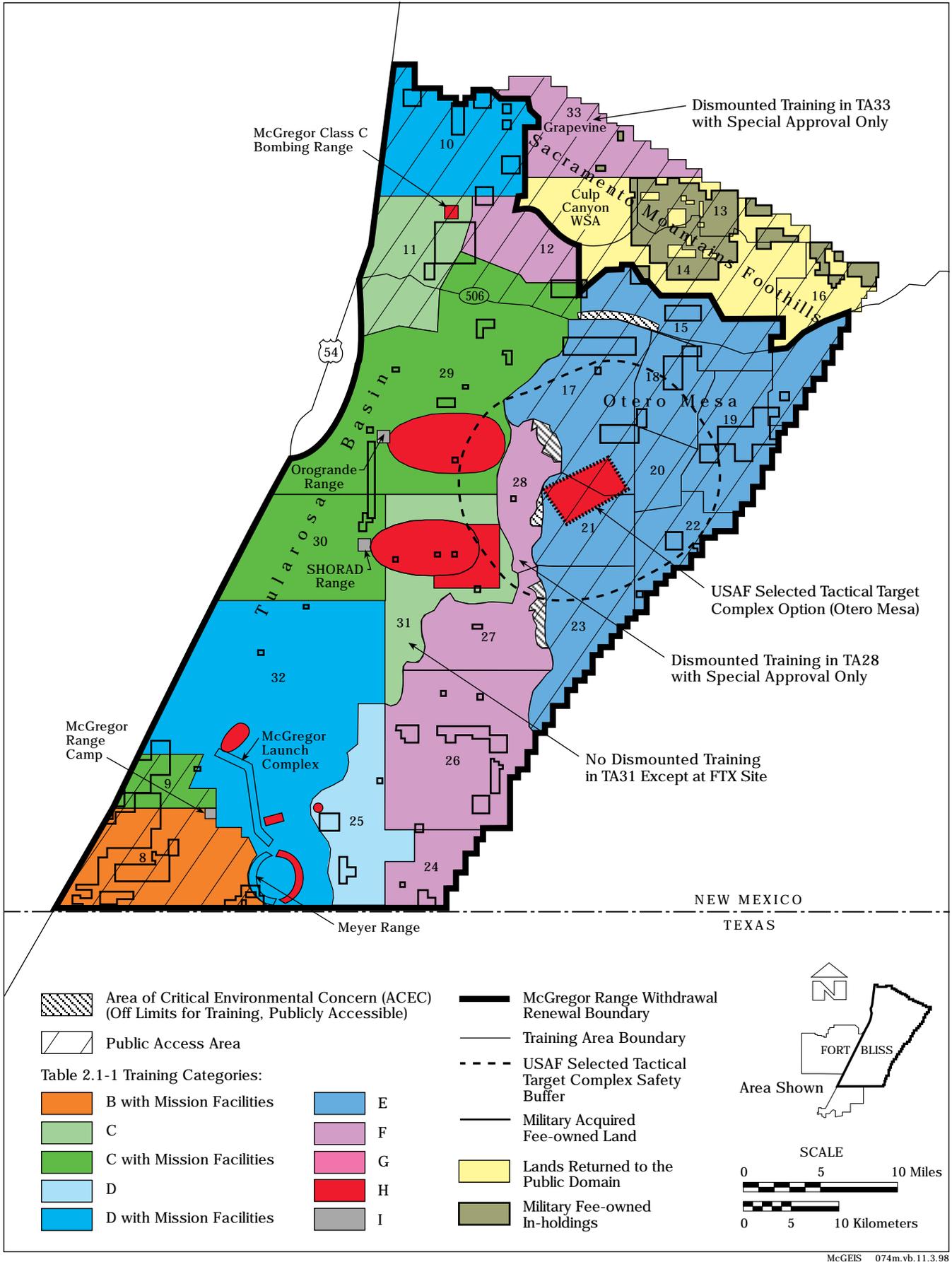
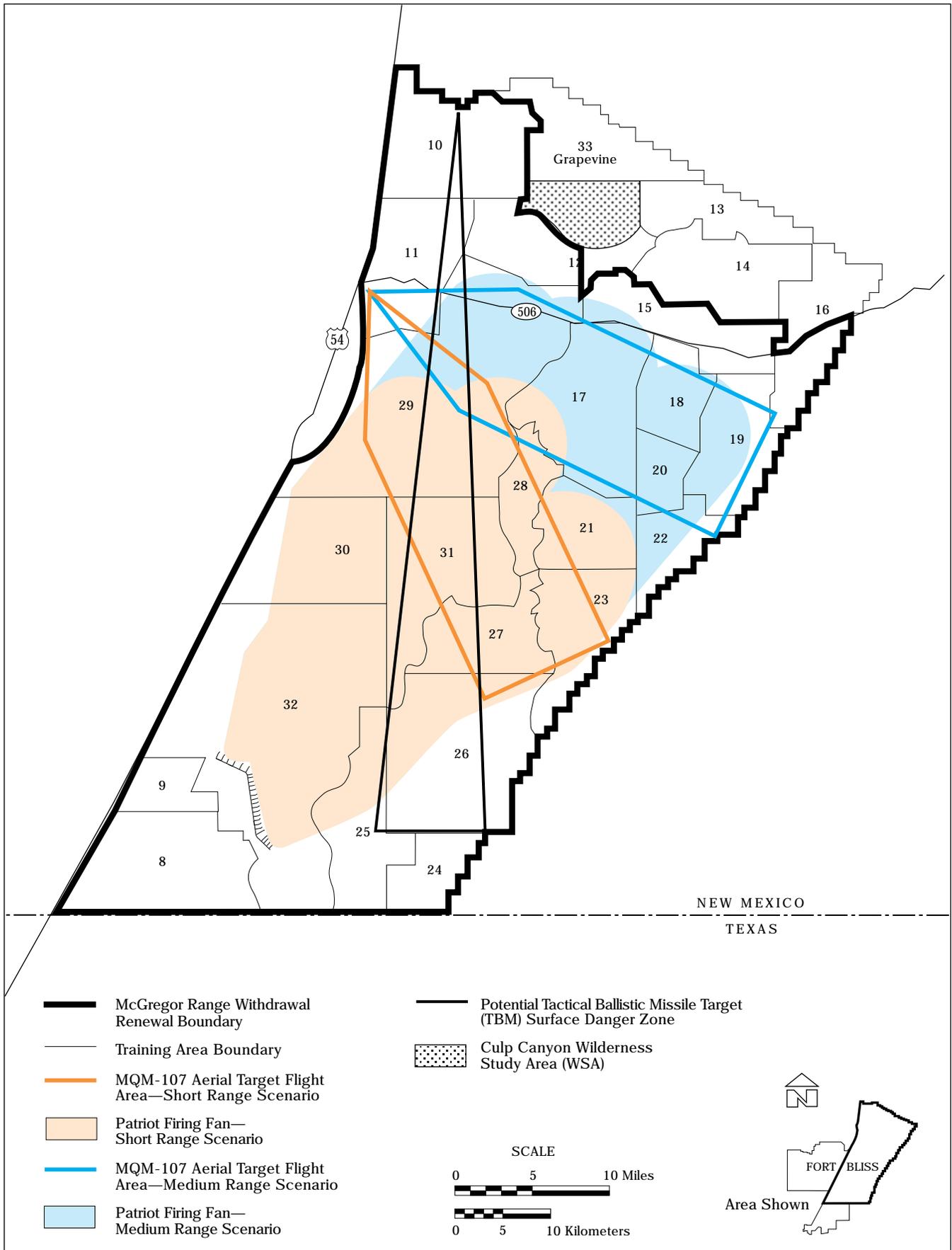


Figure 2.2-1. Land Status Under Alternative 2.



**Figure 2.2-2. Target Flight Areas and Surface Danger Zones Associated with Patriot Missile Firings—Alternative 2.**

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1 would be structured to contain all of the SDZs on withdrawn land. The most northern MQM-107  
2 aerial target option that extends across this area would no longer be available, reducing the potential  
3 number of training scenarios by one-third.

- 4
- 5 • Dismounted training opportunities in the foothill environment for units currently using the area, for  
6 example: special operations forces, would be reduced. The Culp Canyon WSA would no longer be  
7 used for dismounted military training or as a safety buffer. This training would be limited to withdrawn  
8 and fee-owned land and areas available through agreement with the USFS.
- 9

### 10 **2.2.2 Nonmilitary Uses on Withdrawn Lands**

11  
12 Nonmilitary uses of the land would remain largely the same as they are under PL 99-606. Nonmilitary  
13 uses are managed by BLM with Fort Bliss concurrence in accordance with PL 99-606, the White Sands  
14 RMP as amended by the McGregor Range RMPA and the MOU between the Army and BLM. Areas on  
15 the range are managed for protection of archaeological and historical resources, and habitat conservation  
16 in accordance with the RMPA. In addition, there are special use areas for grazing, research, and public  
17 recreation.

18  
19 Under this alternative 231,000 acres of withdrawn and Army fee-owned land would be coincident with  
20 grazing areas 1 through 5 and 7 through 15 (TAs 10 through 23) excluding grazing areas 4 and 5 (TAs 13  
21 and 14). Grazing will continue to take place in accordance with the specific decisions (Mc/G-1 through  
22 Mc/G-16) in the White Sands RMP as amended by the RMPA (BLM, 1986a). These decisions provide  
23 objectives and procedures for the livestock grazing program that will take place on McGregor Range. In  
24 addition to grazing, the primary nonmilitary uses would include hunting, and dispersed recreational use such  
25 as hiking and observing nature. Depending on which future military developments are implemented, there  
26 could be some reduction in the acreage available for those uses or the times that access is permitted.

27  
28 Throughout the area withdrawn for McGregor Range, a variety of wildlife are sustained by varying,  
29 suitable habitat conditions. Special areas contained in the revised configuration of McGregor Range  
30 include the McGregor Black Grama Grassland ACEC for its special grassland habitat. Management of  
31 the Otero Mesa and Tularosa Basin north of New Mexico Highway 506 would continue under the RMPA  
32 as it currently exists.

33  
34 As under Alternative 1, members of the public would continue to obtain annual access permits from CDR,  
35 1<sup>st</sup> CAS BN through Range Development and Enforcement and be required to check in and out with  
36 McGregor Range Control to ensure safety and avoid interference with military missions. Permit holders  
37 are responsible for complying with specific Army procedures for entry, use, and departing the training  
38 areas. Current access procedures allow concurrent use of any area for selected military missions with  
39 public use (such as environmental resource surveys).

### 40 **2.2.3 Uses of Lands Returned to the Public Domain**

41  
42  
43 Lands in the Sacramento Mountains foothills would no longer be managed in accordance with the 1990  
44 MOU between the BLM and Fort Bliss concerning policies, procedures, and responsibilities related to land  
45 use planning and resource management of McGregor Range. This MOU was incorporated into the  
46 McGregor Range RMPA. These lands would continue to be managed in accordance with the White  
47 Sands RMP (BLM, 1986a). The U.S. Army would continue to provide sufficient water for wildlife and  
48 maintenance of the grazing program, as specified in the current MOU for these lands.

**McGregor Range Land Withdrawal**  
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1 The primary changes in nonmilitary use if the Sacramento Mountains foothills were returned to the public  
2 domain include:

- 3
- 4 • Grazing authority would be derived from the public land laws. Under Alternative 2, grazing units 4 and  
5 5 (TAs 13 and 14) and portions of grazing areas 3 and 8 (TAs 3 and 16) would return to the public  
6 domain. These grazing units would be deleted from the area covered by the specific provisions of the  
7 White Sands RMP, as amended, McGregor Range (BLM, 1990a) and revert to management under  
8 the White Sands RMP (BLM, 1986a).
- 9

10 Management of grazing permits on public land is administered by the BLM on the basis of qualified  
11 applicants for grazing privileges. The BLM's authority to manage resources on public lands is derived  
12 from Section 302 of PL 94-579, FLPMA of 1976. Grazing on public land in New Mexico generally is  
13 administered in accordance with 43 CFR 4100, *Grazing Administration—Exclusive of Alaska*.  
14 Lands returned to the public domain could revert to provisions of the *Taylor Grazing Act* (43 USC  
15 315). However, because the Army acquired all base property when it acquired the fee-owned land at  
16 McGregor Range, there may be no qualified applicants under the Act. Lack of existing base property  
17 on McGregor Range may prevent BLM from adjudicating grazing privileges in most areas of the  
18 range (Phillips, 1998). Base property means: (1) land that has the capability to produce crops or  
19 forage that can be used to support authorized livestock for a specified period of the year, or (2) water  
20 that is suitable for consumption by livestock and is available and accessible, to the authorized livestock  
21 when the public lands are used for livestock grazing. To qualify for grazing use on the public lands, an  
22 applicant must own or control land or water base property. Since the U.S. Army holds the formerly  
23 private land and the water right that supports wildlife and, subsequently, livestock grazing on  
24 McGregor Range, it is expected that there would be few, if any, qualified applicants for grazing  
25 privileges under the terms of the *Taylor Grazing Act* (Phillips, 1998).

26

27 If there were no qualified applicants under the *Taylor Grazing Act*, it is possible that BLM could  
28 continue the present auction system to allow grazing to continue under current arrangements, using its  
29 authority to permit vegetative sales. Congressional designation of the current method of grazing as  
30 specified in the RMPA would serve to solidify the legal aspects of the issue (Phillips, 1998).

31

- 32 • Unrestricted access to 40,000 acres for recreation. Hunts scheduled by New Mexico Department of  
33 Game and Fish (NMDGF) would continue as needed in response to herd sizes.
  - 34
  - 35 • Applications for mineral exploration on 29,000 acres, including oil and gas and geothermal resources  
36 would not be subject to Army concurrence. Future use of the area for mineral extraction would  
37 depend on the quality, quantity, and accessibility of resources. Mineral use is suspended in the Culp  
38 Canyon WSA pending congressional action.
- 39
- 40

### 41 **2.3 ALTERNATIVE 3**

42

43 The Tularosa Basin portion of McGregor Range would be withdrawn for continued military use. The  
44 Otero Mesa and Sacramento Mountains foothills portions of McGregor Range would return to the public  
45 domain. This area is about 180,000 acres, comprised of currently withdrawn lands in TAs 13 through 23  
46 and part of 12. This area would include Culp Canyon WSA and the McGregor Black Grama Grassland  
47 ACEC. The withdrawn area of McGregor Range (about 429,300 acres) would encompass areas within  
48 the Tularosa Basin and the escarpment of Otero Mesa and is illustrated in Figure 2.3-1.  
49 Army fee-owned in-holdings within the lands returned to the public domain area would be retained for  
50 specialized training. Grazing on Army fee-owned in-holdings would continue under BLM management.

51

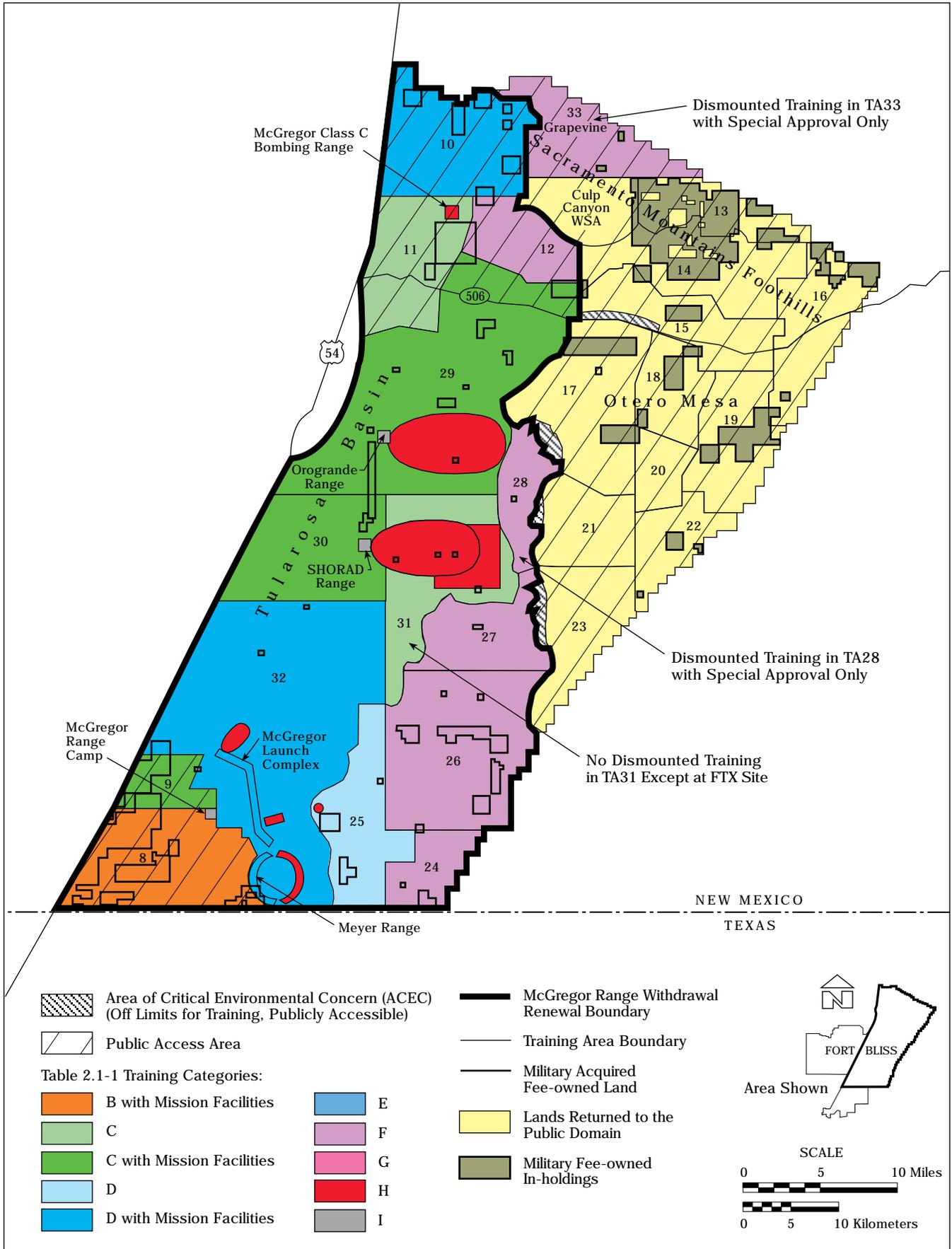


Figure 2.3-1. Land Status Under Alternative 3.

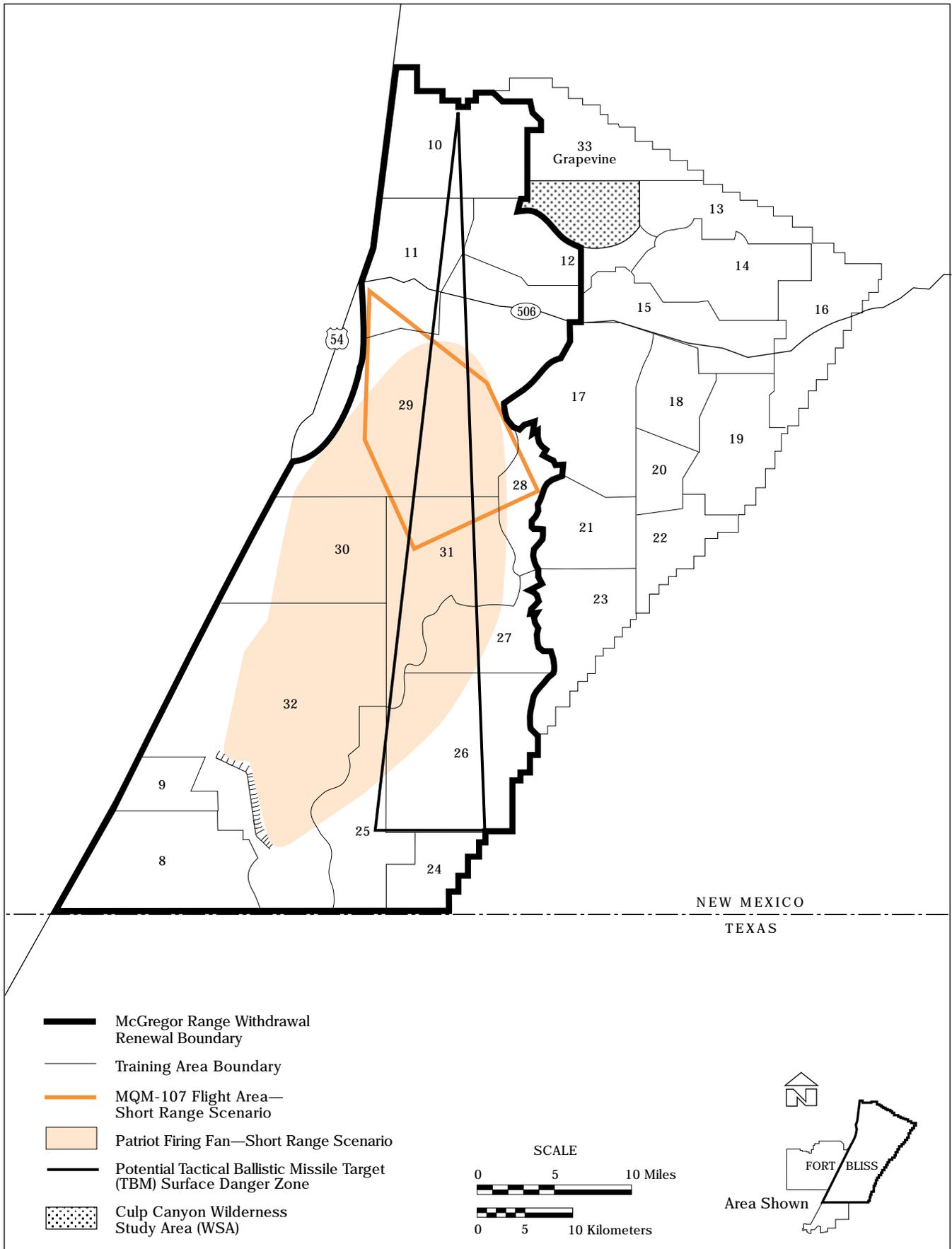
1 Under this alternative, Congress would renew the withdrawal of 429,395 acres and would not withdraw  
2 the Otero Mesa and Sacramento Mountains foothills portions of McGregor Range. The Secretary of the  
3 Army would need to prepare a written determination concerning the contamination of the areas with  
4 explosive, toxic, or other hazardous material. The Secretary of the Interior, in consultation with the  
5 Secretary of the Army, would decide what decontamination is economically feasible (considering potential  
6 future use). Following this decision, the Army would decontaminate land as funds were appropriated for  
7 such purpose  
8

### 9 **2.3.1 Military Missions and Capabilities on Withdrawn Lands**

10  
11 Figure 2.3-1 illustrates the area that would be withdrawn under Alternative 3. Army fee-owned land  
12 within McGregor Range is also shown on Figure 2.3-1. Mission activities that use the Otero Mesa and  
13 Sacramento Mountains foothills portions of McGregor Range would be further constrained and/or reduced  
14 from that under Alternative 2. For example:  
15

- 16 • Several training scenarios used in live-firing of the HIMAD missiles will need to be eliminated to avoid  
17 including the Otero Mesa in the SDZ. The orientation of training scenarios that use the MQM-107  
18 aerial target would be constrained to the Tularosa Basin presenting a highly limited target engagement  
19 scenario Figure 2.3-2. Over half of the most easterly SDZ would not be available as a target area or  
20 secondary danger area, approximately one third of the center SDZ would not be available as a target  
21 area or secondary danger area, and the far secondary danger area of the most westerly SDZ would  
22 need to be structured to contain all of the SDZ on withdrawn land. Two-thirds of the present most  
23 northern and over half of the central MQM-107 aerial target options that extend across this area  
24 would no longer be available.  
25
- 26 • Small missiles could continue to be used from firing locations in the south part of the range. Most  
27 small missile types currently used at the SHORAD/Orogrande complex could continue. Some safety  
28 fans for small missiles extend slightly over TA 17. Continuation of this capability may require slight  
29 adjustments to firing scenarios or limited firing range for some munitions.  
30
- 31 • Aerial gunnery by both rotary-wing aircraft at Cane Cholla, and fixed-wing aircraft at the Class C  
32 Bombing Range in TA 11 (grazing unit 2) would continue.  
33
- 34 • Ground troop maneuvers could continue in the withdrawn areas, however, training opportunities for  
35 special operations forces on the Otero Mesa and in the Sacramento Mountains foothills parts of  
36 McGregor Range would be limited to fee-owned lands and areas available through agreement with  
37 USFS.  
38
- 39 • Roving Sands exercises could continue but would be severely limited by the reduced land area.  
40 Several controlled access FTX sites located in the lands returned to the public domain would no longer  
41 be available.  
42

43 Currently, the McGregor Range and the Doña Ana Range–North Training Areas on Fort Bliss are wide  
44 enough east to west to realistically accommodate a single ADA brigade as deployed based on doctrine.  
45 During large-scale exercises such as Roving Sands, up to four brigade equivalents have been deployed in  
46 this area to obtain the best training possible given the land available. The loss of Otero Mesa and  
47 Sacramento Mountains foothills would further increase the density of ADA forces during the training. This  
48 is an unrealistic training density when compared with actual operations in the Persian Gulf and Korea.  
49 This constraint reduces the command's capability to test unit interoperability, that is, how well the various  
50 U.S. services perform their missions together. Fewer controlled access FTX sites further reduce the  
51 ADA training and realistic survivability techniques.



**Figure 2.3-2. Target Flight Areas and Surface Danger Zones Associated with Patriot Missile Firings—Alternative 3.**

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**McGregor Range Land Withdrawal**  
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1 Portions of future missions that use the installation capabilities as described in Alternative 1 would still be  
2 feasible under this alternative. However, current or future missions that use the installation capabilities  
3 that would not be supportable under this alternative include:

- 4
- 5 • Air defense related training components of joint service exercises (i.e., Roving Sands) that currently or  
6 could use the Otero Mesa and Sacramento Mountains foothills area would have to be modified to  
7 reduce the spatial component of the training scenario. Several existing controlled access FTX sites  
8 would no longer be available and sites for additional or replacement controlled access FTX sites would  
9 need to be confined to the reduced withdrawn and fee-owned lands or other areas of Fort Bliss.  
10 Access to the fee-owned lands may be necessary for training on these lands to continue.
- 11
- 12 • Use of the USAF tactical target complex to be constructed on Otero Mesa would no longer be  
13 possible.
- 14

### 15 **2.3.2 Nonmilitary Uses on Withdrawn Lands**

16

17 Nonmilitary uses of the land would remain largely the same as they are under PL 99-606. Nonmilitary  
18 uses are managed by BLM with Fort Bliss concurrence in accordance with PL 99-606, the White Sands  
19 RMP as amended by the McGregor Range RMPA and the MOU between the Army and BLM. Areas on  
20 the range are managed for protection of archaeological and historical resources, and habitat conservation  
21 in accordance with the RMPA. In addition, there are special use areas for grazing, research, and public  
22 recreation.

23

24 In 91,000 acres of withdrawn and Army fee-owned lands, coincident with grazing areas 1, 2, and part of 3  
25 (TAs 10 through 12) grazing will continue to take place in accordance with the specific decisions (Mc/G-1  
26 through Mc/G-16) in the White Sands RMP (BLM, 1986a) as amended by the RMPA. These decisions  
27 provide objectives and procedures for the livestock grazing program that will take place on McGregor  
28 Range. In addition to grazing, the primary nonmilitary uses would include hunting, and dispersed  
29 recreational use such as hiking and observing nature. Depending on which future military developments  
30 are implemented, there could be some reduction in the acreage available for those uses or the times that  
31 access is permitted.

32

33 Access to training areas would remain controlled by Fort Bliss. Military units, government agencies, and  
34 contractors would continue to be required to coordinate access and use with the CDR 1<sup>st</sup> CAS BN  
35 (through the Range Scheduling Office) to ensure public safety and to avoid interference with other military  
36 missions.

37

38 Members of the public would obtain annual access permits from CDR, 1<sup>st</sup> CAS BN through Range  
39 Development and Enforcement and be required to check in and out with McGregor Range Control to  
40 ensure safety and avoid interference with military missions. Permit holders for withdrawn land access  
41 would remain responsible for complying with specific Army procedures for entry, use, and departing the  
42 training areas. Under this alternative, current access procedures allow concurrent use of any area for  
43 selected military missions (such as resource surveys) with public use.

### 44 **2.3.3 Uses of Lands Returned to the Public Domain**

45

46

47 Lands on the Otero Mesa and in the Sacramento Mountains foothills would no longer be managed in  
48 accordance with the 1990 MOU between the BLM and Fort Bliss. These lands would be managed in  
49 accordance with the White Sands RMP (BLM, 1986a). The U.S. Army would continue to provide water  
50 sufficient for wildlife and maintenance of the grazing program as specified in the current MOU.

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---

1 The primary changes in nonmilitary use if the Otero Mesa and Sacramento Mountains foothills areas were  
2 returned to the public domain include:

- 3
- 4 • As under Alternative 2, lands returned to the public domain would continue to be managed under the  
5 public land laws. Lack of existing base property on McGregor Range may prevent BLM from  
6 adjudicating grazing privileges in most areas of the range under the *Taylor Grazing Act* (Phillips,  
7 1998). In that case, it may be possible to continue grazing practices as vegetative sales.  
8 Congressional designation of the current method of grazing as specified in the White Sands RMP, as  
9 amended by the RMPA, , would serve to solidify the legal aspects of the issue (Phillips, 1998).

10  
11 Under Alternative 3, grazing units 4, 5, 7 through 15, and portions of 3 (TAs 13 through 23 and part of  
12 12) would return to the public domain. These grazing units would be deleted from the area covered by  
13 the RMPA, McGregor Range (BLM, 1990a) and the RMPA would be revised to reflect the range  
14 boundary changes. Similarly, the White Sands RMP (BLM, 1986a) would be amended to reflect  
15 these grazing units as being outside of McGregor Range.

- 16
- 17 • Reduction of road closures along New Mexico Highway 506 due to HIMAD live fire operations.
- 18
- 19 • Unrestricted access to 180,000 acres for recreation. Hunts would continue to be managed and  
20 scheduled by the NMDGF.
- 21
- 22 • Applications for mineral exploration on 169,000 acres, including oil and gas and geothermal resources  
23 would not be subject to Army concurrence. Future use of the area for mineral extraction would  
24 depend on the quality, quantity, and accessibility of resources. Mineral use is suspended in the Culp  
25 Canyon WSA pending congressional action.
- 26
- 27 • Return of the McGregor Black Grama Grassland ACEC to public domain land, assumed to continue to  
28 be used for scientific purposes.
- 29

30

#### 31 **2.4 ALTERNATIVE 4**

32

33 Under this alternative, Congress would not withdraw any portion of McGregor Range north of New  
34 Mexico Highway 506 or on Otero Mesa. This area would be about 244,000 acres comprised of currently  
35 withdrawn lands in TAs 10 through 23, and would include Culp Canyon WSA and McGregor Black  
36 Grama Grassland ACEC. The portion of grazing unit 2 (TA 11) south of New Mexico Highway 506  
37 would be exchanged for the area between New Mexico Highway 506 and grazing unit 3 (TA 29). The  
38 Tularosa Basin portion of McGregor Range, south of New Mexico Highway 506, encompassing about  
39 365,395 acres as shown in Figure 2.4-1 would be withdrawn for military use. Army fee-owned in-holdings  
40 within the lands returned to the public domain would be retained for specialized training. Grazing would  
41 continue under BLM management on Army fee-owned in-holdings.

42

43 The Secretary of the Army would need to prepare a written determination concerning the contamination  
44 of these areas with explosive, toxic, or other hazardous material. The Secretary of the Interior, in  
45 consultation with the Secretary of the Army, would decide what decontamination is economically feasible  
46 (considering potential future use). Following this decision, the Army would decontaminate land as funds  
47 were appropriated for such purpose, and the land would subsequently revert to the public domain.

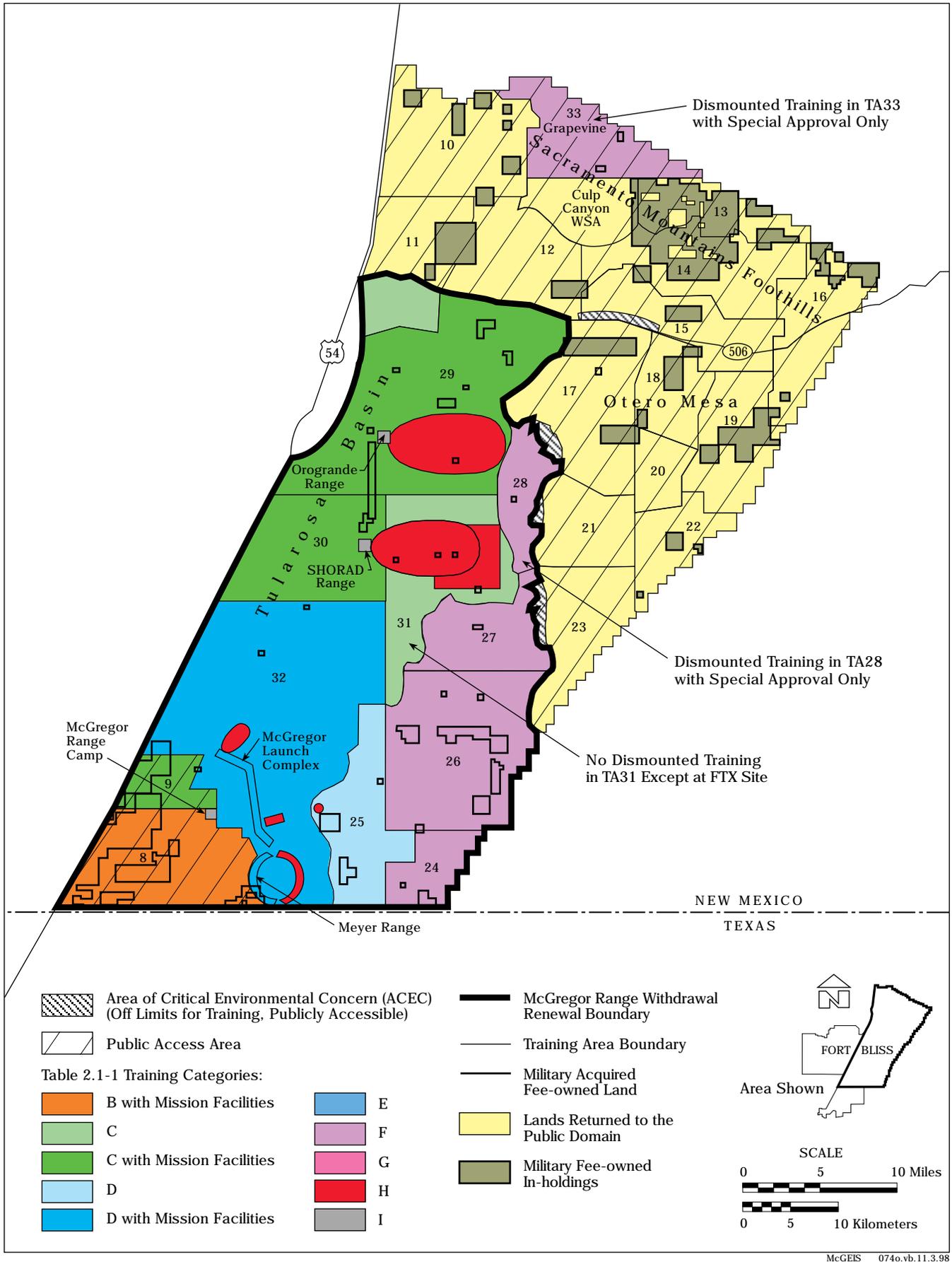


Figure 2.4-1. Land Status Under Alternative 4.

1 **2.4.1 Military Missions and Capabilities on Withdrawn Lands**

2  
3 With the loss of the land area north of New Mexico Highway 506 and Otero Mesa, McGregor Range  
4 could continue to support only some of its current missions, with constrained or reduced activities for  
5 others. Reductions in mission activities would be similar to those described for Alternative 3 in Section  
6 2.3.1 with the following additional degradation:

- 7  
8 • The orientation of training scenarios used in live-firing of the HIMAD missiles would need to be  
9 significantly modified to avoid including land in the Tularosa Basin north of New Mexico Highway 506,  
10 the Otero Mesa, and Sacramento Mountains foothills area in the SDZ (Figure 2.4-2). Under  
11 Alternative 4, Patriot missile firings would be limited from one firing point with one short-range firing  
12 scenario. This would be tactically unrealistic and, therefore, of little training value.

13  
14 In addition to restrictions associated with Alternative 3, Alternative 4 would present these additional  
15 constraints:

- 16  
17 • McGregor Range would no longer be able to support fixed-wing aerial gunnery training at the existing  
18 Class C Bombing Range located on lands returned to the public domain.
- 19  
20 • SDZs for some small missile missions may extend east into TA 17 (grazing unit 9) and would need to  
21 be modified or curtailed.
- 22  
23 • Aerial gunnery by both rotary- and fixed-wing aircraft would be limited to target areas with safety  
24 buffers within a smaller portion of Tularosa Basin, south of New Mexico Highway 506.
- 25  
26 • Projections of future missions related to installation capabilities would be similar to Alternative 3 under  
27 this alternative. Also, siting options for additional controlled access FTX sites would be extremely  
28 constrained within the remaining withdrawn area.

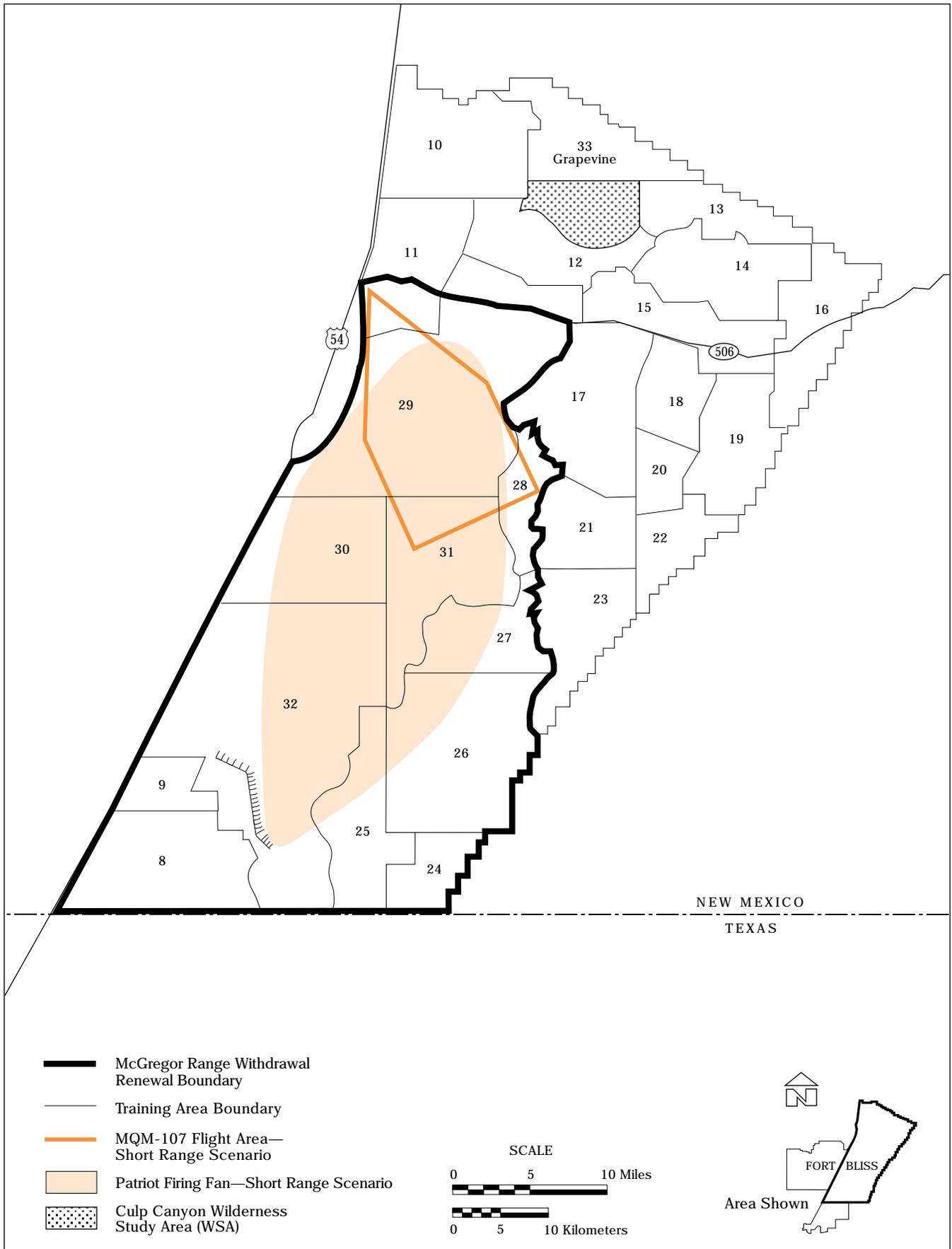
29  
30 **2.4.2 Nonmilitary Uses on Withdrawn Lands**

31  
32 Nonmilitary uses of the land would remain largely the same as they are under PL 99-606. Nonmilitary  
33 uses are managed by BLM with Fort Bliss concurrence in accordance with PL 99-606, the White Sands  
34 RMP as amended by the McGregor Range RMPA and the MOU between the Army and BLM. Areas on  
35 the range are managed for protection of archaeological and historical resources, and habitat conservation  
36 in accordance with the RMPA. In addition, there are special use areas for grazing, research, and public  
37 recreation.

38  
39 **2.4.3 Uses of Lands Returned to the Public Domain**

40  
41 Lands in the Otero Mesa and lands north of New Mexico Highway 506 in the Sacramento Mountains  
42 foothills would no longer be managed in accordance with the 1990 MOU. These lands would be managed  
43 in accordance with the White Sands RMP (BLM, 1986a). The U.S. Army would continue to provide  
44 water sufficient for wildlife and maintenance of the grazing program as specified in the current MOU for  
45 these lands. The primary changes in nonmilitary use of the lands returned to the public domain include:

- 46  
47 • As under Alternative 3, lands returned to the public domain would continue to be managed under the  
48 public land laws. The lack of existing base property on McGregor Range may prevent BLM from  
49 adjudicating grazing privileges in most areas of McGregor Range under the *Taylor Grazing Act*



**Figure 2.4-2. Target Flight Areas and Surface Danger Zones Associated with Patriot Missile Firings—Alternative 4.**

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1 (Phillips, 1998). In that case, it may be possible to continue grazing practices as vegetative sales.  
2 Congressional designation of the current method of grazing as specified in the White Sands RMP, as  
3 amended by the RMPA, would serve to solidify the legal aspects of the issue (Phillips, 1998). In  
4 addition, a portion of TA 29 north of New Mexico State Highway 506 would be added to the grazing  
5 area. The RMP would be revised to reflect the range boundary changes. Similarly, the White Sands  
6 RMP (BLM, 1986a) would be amended to reflect these grazing units as being outside of McGregor  
7 Range.

- 8
- 9 • Elimination of road closures along New Mexico Highway 506 due to HIMAD live fire operations.
- 10
- 11 • Unrestricted access of 244,000 acres for recreation. Hunts would continue to be managed and  
12 scheduled by the NMDGF.
- 13
- 14 • Application for mineral exploration on 233,000 acres, including oil and gas and geothermal resources  
15 would not be subject to Army concurrence.. Future use of the area for mineral extraction would  
16 depend on the quality, quantity, and accessibility of resources.
- 17
- 18 • Return of the McGregor Black Grama Grassland ACEC to public domain land, assumed to continue to  
19 be used for scientific purposes.
- 20

## 21 **2.5 ALTERNATIVE 5 - NO ACTION**

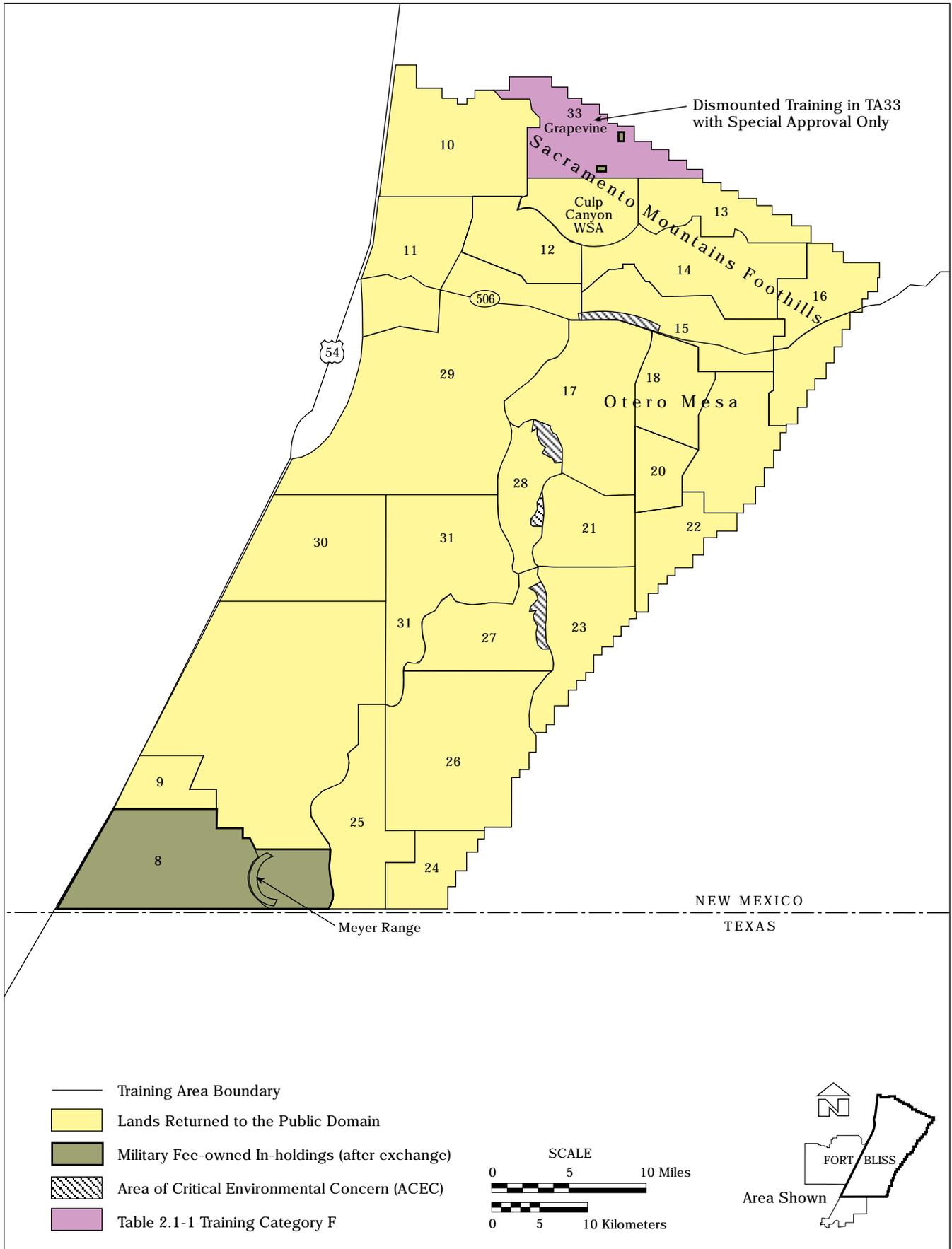
22  
23  
24 Under this alternative the withdrawal of 608,385 acres of currently withdrawn land on McGregor Range  
25 would not be renewed. The land would return to the public domain. Army fee-owned in-holdings within  
26 the lands returned to the public domain would be exchanged for public lands in TAs 8 and 32, to maintain  
27 essential infrastructure around McGregor Range Camp, the McGregor ASP, and the Meyer Range  
28 Complex. The Secretary of the Army would need to prepare a written determination concerning the  
29 contamination of the areas with explosive, toxic, or other hazardous material. The Secretary of the  
30 Interior, in consultation with the Secretary of the Army, would decide what decontamination is  
31 economically feasible (considering potential future use). Following this decision, the Army would study the  
32 conditions and decontaminate land as funds were appropriated for such purpose.

33  
34 There would be no further military use of the McGregor Range withdrawn land area. Restricted airspace  
35 above the land area could continue to be used for some aircraft training by Army aviation and USAF units  
36 within the region. Figure 2.5-1 shows the lands status under the No Action Alternative. The lands  
37 obtained by the Army in exchange for fee-owned in-holdings would continue to be available for training  
38 purposes. Installation facilities on McGregor Range that would have to be relocated elsewhere include:

- 39
- 40 • Orogrande Range;
- 41 • SHORAD Range; and
- 42 • McGregor Range Firing Complex.
- 43

44 The loss of these facilities and the associated SDZs will result in the loss of several activities and units at  
45 Fort Bliss, in addition to those described for Alternatives 2, 3, and 4. The activities lost include:

- 46
- 47 • Short-range and medium- and high-altitude missile training;
- 48 • ADATD/Air Defense Board testing of long-and short-range weapons;
- 49 • Roving Sands combined forces exercises;
- 50 • FIREX for Hawk, Patriot, Stinger, and Roland Missiles;
- 51 • Helicopter gunnery and Hellfire training;



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**Figure 2.5-1. Land Status Under the No Action Alternative.**

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- 1 • Laser operations; and
- 2 • Airborne personnel, equipment drops, and Special Operations Forces ground troop maneuvers.

3  
4 Operations directed by WSMR primarily use the Orogrande and SHORAD ranges. After Congress acts  
5 in 2001, organizations from the MICOM (23 authorizations), the TEXCOM (200 authorizations [including  
6 Department of the Army Civilian (DAC), and dedicated technical support contractors during testing  
7 periods]) (U.S. Army, 1996a) and elements of the 1<sup>st</sup> CAS BN (45 authorizations) (Tibbett, 1998) that  
8 support missile firing activities that are stationed at Fort Bliss and use these facilities would be relocated.  
9 The ADATD/Air Defense Board has utilized McGregor Range for decades due to the large expanses of  
10 restricted land and airspace essential for both long- and short-range weapons testing. The types of tests  
11 conducted by this organization may not be executable at any other Continental U.S. (CONUS) land-based  
12 range facility. Adapting other facilities for test missions may not be realistic, technically feasible, or would  
13 add prohibitively to test costs. Millions of dollars are spent yearly on Operational Testing and McGregor  
14 Range has the land, airspace, and flexibility necessary for cost-effective testing. In addition, the allied  
15 forces ASPs at McGregor Range and the associated military sales contracts would be eliminated.

16  
17 Decisions by the Secretary of the Interior and the Secretary of the Army concerning what  
18 decontamination is practicable or economically feasible would influence the extent and type of future uses  
19 on large portions of lands returned to the public domain.

20  
21 Impact areas that cannot be economically decontaminated in the Tularosa Basin may be permanently  
22 unsuitable for some public uses. Surface clearance of some areas in the basin may be sufficient for  
23 activities that would not involve subsurface ground disturbance (such as grazing or wildlife conservation).  
24 Some contaminated areas may need to be fenced to preclude public access.

25  
26 The existing grazing areas (271,000 acres) would continue to be available for multiple uses, to the extent  
27 that the areas have productive value and would be managed in accordance with public land laws. As  
28 under Alternatives 2, 3, and 4, lands returned to the public domain would revert to the public land laws.  
29 Lack of existing base property on McGregor Range may prevent BLM from adjudicating grazing  
30 privileges in most areas of the range under the *Taylor Grazing Act*. In that case, it may be possible to  
31 continue grazing practices as vegetative sales. Congressional designation of the current method of grazing  
32 as specified in the White Sands RMP, as amended by the RMPA, would serve to solidify the legal aspects  
33 of the issue (Phillips, 1998).

34  
35 Under Alternative 5, currently withdrawn TA 8 and a portion of TA 32 would be transferred to DoD in  
36 exchange for Army fee-owned land elsewhere on McGregor Range. Water rights associated with the  
37 fee-owned lands would also be exchanged. The RMPA for McGregor Range (BLM, 1990a) would be  
38 revised and the White Sands RMP (BLM, 1986a) would be amended to reflect that the former McGregor  
39 Range is included in this management plan.

40  
41 In addition to vegetation sales, BLM could open areas designated for locatable minerals, leasable minerals,  
42 and salable minerals. Some cultural resources could be opened up for interpretative recreational  
43 opportunities. However, some areas could continue to be unavailable for public access and/or minerals  
44 extraction due to ordnance and explosives hazards until the area is cleaned up.

45  
46 Wildlife would continue to use areas of suitable habitat throughout the range. Future conditions for wildlife  
47 resulting from decreased military use and potentially increased public access and grazing would depend on  
48 the management actions implemented by BLM.

1 **2.6 ALTERNATIVE 6**

2  
3 During scoping it was suggested that Congress designate the Culp Canyon WSA as a wilderness area. In  
4 addition, it was suggested that Congress designate the Otero Mesa and Sacramento Mountains foothills,  
5 including in-holdings held in fee by the DA, as an NCA. The affected fee-owned in-holdings would be  
6 exchanged for other public lands elsewhere. This alternative would require congressional action separate  
7 from the renewal of the military land withdrawal and could potentially alter the management practices  
8 associated with the area included in the NCA. The NCA, as envisioned, could be designated along with  
9 Alternative 3, 4, or 5. In this case, Army fee-owned land on the NCA would no longer be available for  
10 training.

11  
12 In the *New Mexico Statewide Wilderness Study* (BLM, 1988a) a “No Wilderness” status was proposed  
13 for the Culp Canyon WSA, based upon the low quality of wilderness value and the potential for conflict  
14 with military use. The area is managed in accordance with the *Interim Management Policy and*  
15 *Guidelines for Lands under Wilderness Review*, whereby no impairing activities can occur that may  
16 permanently alter wilderness value.

17  
18 The lands suggested for NCA designation are currently managed in accordance with the BLM’s RMPA  
19 for McGregor Range (BLM, 1990a). Scoping comments suggested that the NCA be established to return  
20 full administration of the land to the DOI to allow the Secretary of the Interior and the BLM to showcase  
21 the customs and culture of the region. The public commentors envision the NCA as enhancing the  
22 protection and/or restoration of the historical, archaeological, paleontological, scientific, recreational,  
23 wildlife, and educational resources of the area and may include grazing as a traditional use of the land.  
24 Designation of this area as an NCA would follow congressional action and would require modifications of  
25 both the White Sands RMP and the McGregor Range RMPA because the configuration of McGregor  
26 Range would change from that described in the current plans. These modifications would be concurrent  
27 with or follow congressional action on the Army’s application for renewal of the land withdrawal. This  
28 alternative has the potential to increase public access and use of the Culp Canyon WSA.

29  
30 The existing grazing area (271,000 acres) would continue to be available for multiple uses, to the extent  
31 that the areas have productive value and would be managed in accordance with public land laws and  
32 congressional specifications for the NCA. Lands that are a part of McGregor Range would continue as  
33 currently established within the area designated as an NCA. Grazing would continue to take place in  
34 accordance with the specific decisions (Mc/G-1 through Mc/G-16) in the White Sands RMP (BLM,  
35 1986a). These decisions provide objectives and procedures for the livestock grazing program that will take  
36 place on McGregor Range. Congressional designation of the current method of grazing would be helpful  
37 to solidify the legal aspects of the issue.

38  
39 Under Alternative 6, the RMPA for McGregor Range (BLM, 1990a) and the White Sands RMP (BLM,  
40 1986a) would be amended to reflect the NCA designation and associated management practices. The  
41 following summary outlines the establishment, uses, and management practices envisioned for the NCA.

- 42
- 43 • **Establishment.** Congress would establish the NCA in the State of New Mexico. This designation  
44 would recognize the NCA’s historic landscape and showcase the custom and culture of the rural  
45 west. The NCA would be administered by the BLM and managed under the authority of FLPMA.
  - 46
  - 47 • **Uses.** The uses to be considered include, but are not limited to, all forms of outdoor recreation  
48 including scenic enjoyment, hunting, hiking, horse-back riding, camping, picnicking, watershed  
49 management, wildlife management, minerals development, preservation of ecological diversity,  
50 scientific study, and access.
- 51

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- 1 • **Planning.** The Secretary of the Interior, in accordance with Section 202 of FLPMA, would prepare  
2 and implement a comprehensive long-range plan for the management, use, development, and  
3 protection of the public lands within the NCA. Such plan would take into account the principles of  
4 multiple use. The plan would be developed in consultation with the public and with the Advisory  
5 Committee (below). The plan would be completed within 3 years of congressional designation. The  
6 plan would be reviewed and re-evaluated periodically.  
7
- 8 • **Water Rights.** Water rights from the Sacramento River and Carrisa Spring sufficient to support  
9 wildlife resources and grazing would be transferred to the BLM from the DoD for the purposes of  
10 supporting the objectives of the NCA.  
11
- 12 • **Mining Claims.** Nothing in the congressional designation would affect the applicability of the U.S.  
13 mining laws, except that patents shall not be issued on any mining claim. All mining claims located on  
14 public lands within the NCA would be subject to such reasonable measures as the Secretary of the  
15 Interior may prescribe to effectuate the purposes of this act. Such measures would provide for  
16 protection of the functionality of the ecosystems present, and protect against undue impairment of  
17 other scenic, environmental, or social values.  
18
- 19 • **Advisory Committee.** A committee would be established to advise on the establishment and  
20 implementation of the plan.  
21
- 22 • **Land Acquisition.** State or local government lands could be acquired by purchase, exchange, or  
23 donation. DoD fee-owned lands would be exchanged for other public land since military use would be  
24 incompatible with the goals of the NCA.  
25

26 The designation of the area as an NCA is not part of the Army's application for military land withdrawal,  
27 but could be a separate action affecting McGregor Range lands. The establishment of an NCA by  
28 Congress is outside the jurisdiction of the DoD and would be administered by the DOI. This LEIS, the  
29 purpose of which is to address the application for military withdrawal, does not address the impacts of  
30 wilderness and NCA designation in detail.  
31  
32

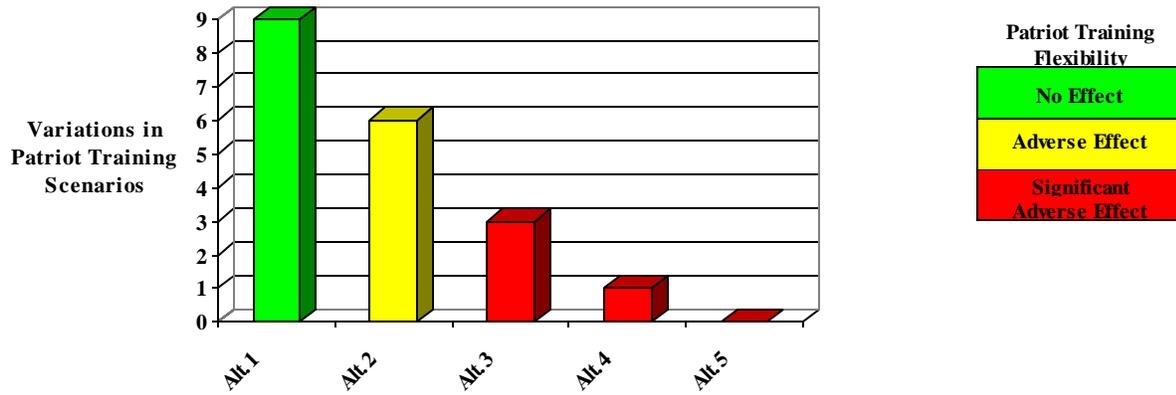
## 33 **2.7 COMPARISON OF ALTERNATIVES BY RESOURCE AND POTENTIAL IMPACTS**

34

35 Chapter 4.0 presents an analysis of the impacts resulting from each withdrawal renewal alternative.  
36 These alternatives range from the renewal of the land withdrawal as authorized in 1986 by PL 99-606 to  
37 the return of all currently withdrawn land to the public domain. Figure 2.7-1 illustrates the changes in  
38 military value as represented by general variations in Patriot training scenarios that can be incorporated  
39 into live-firing exercises under each withdrawal alternative. Alternative 6 would be similar to Alternatives  
40 3, 4, and 5. However, fee-owned in-holdings would no longer be available for training use in areas  
41 returned to the public domain. The loss of the fee-owned land would result in greater loss of mission  
42 capability.  
43

44 Table 2.7-1 provides a comparison of alternatives by resource and potential impact of the various  
45 configurations of McGregor Range. Impacts from reconfiguration of McGregor Range are indirect in the  
46 sense that activities on the land have the potential to impact the land rather than administrative changes in  
47 the withdrawal boundaries. Impacts to the current mission capability from reconfiguration of the military  
48 land withdrawal are shown on Table 2.7-2.  
49  
50  
51

1  
2  
3



4  
5 Note: Alternative 6, an NCA, could be designated in combination with Alternative 3, 4, or 5.  
6

7  
8

**Figure 2.7-1. Military Training Value by Renewal Alternative.**

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**Table 2.7-1. Comparison of Alternatives by Resource and Potential Impacts**

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>Alternative 4</i>	<i>Alternative 5</i>	<i>Alternative 6</i>
<b>Land Use</b>					
Continued military use throughout McGregor Range.	Cessation of military ground operations on public lands in the Sacramento Mountains foothills; continuation of military aircraft training and training on fee-owned land.	Cessation of military ground operations on public lands in the Sacramento Mountains foothills and on Otero Mesa; continuation of military aircraft training and training on fee-owned land.	Cessation of military ground operations on public lands on Otero Mesa and north of New Mexico Highway 506; continuation of military aircraft training and training on fee-owned land.	Cessation of all military ground operations on McGregor Range, except in TA 8 and portions of TA 32; continuation of military aircraft training.	Same as Alternative 3, 4, or 5, except no military ground operations on fee-owned parcels in Sacramento Mountains foothills or on Otero Mesa.
Continuation of nonmilitary land uses, primarily grazing and recreation, on Otero Mesa and north of New Mexico Highway 506.	No substantive change in nonmilitary land uses.	No substantive change in nonmilitary land uses.	No substantive change in nonmilitary land uses.	Possible nonmilitary use of previously withdrawn portion of Tularosa Basin, consistent with safety restrictions.	Same as Alternative 3, 4, or 5.
Continued management of nonmilitary land use managed in accordance with the White Sands RMP, as amended by the McGregor Range RMPA.	Continued management of returned land and nonmilitary land use on withdrawn land in accordance with the White Sands RMP, as amended by the McGregor Range RMPA.	Continued management of returned land and nonmilitary land use on withdrawn land in accordance with the White Sands RMP, as amended by the McGregor Range RMPA.	Continued management of returned land and nonmilitary land use on withdrawn land in accordance with the White Sands RMP, as amended by the McGregor Range RMPA.	Continued management of returned land in accordance with the White Sands RMP, as amended by the McGregor Range RMPA.	Same as Alternative 3, 4, or 5.
Areas adjacent to McGregor Range are affected by noise from military operations and periodic closures of New Mexico Highway 506.	No change in impact to adjacent land uses.	Reduction in impacts to adjacent land areas from noise and closures of New Mexico Highway 506.	Reduction in impacts to adjacent land areas from noise; elimination of New Mexico Highway 506 closures.	Reduction in impacts to adjacent land areas from noise; elimination of New Mexico Highway 506 closures.	Same as Alternative 3, 4, or 5.
Use of McGregor Range consistent with Visual Resource Management objectives.	No change to visual resources.	No change to visual resources.	No change to visual resources.	No change to visual resources.	No change to visual resources.

22

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**Table 2.7-1. Comparison of Alternatives by Resource and Potential Impacts**

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>Alternative 4</i>	<i>Alternative 5</i>	<i>Alternative 6</i>
<b>Airspace</b>					
Civil aircraft prohibited from traversing McGregor Range when restricted airspace is activated.	No change in airspace impacts.	No change in airspace impacts.	No change in airspace impacts.	No change in airspace impacts.	No change in airspace impacts.
<b>Transportation</b>					
New Mexico Highway 506 periodically closed for HIMAD firings.	Little to no change in closures of New Mexico Highway 506.	Reduction in closures of New Mexico Highway 506.	Elimination of New Mexico Highway 506 closures.	Elimination of New Mexico Highway 506 closures.	Same as Alternative 3, 4, or 5.
Civilian traffic on U.S. Highway 54 occasionally impeded by military traffic.	No change in impacts to traffic on U.S. Highway 54.	No change in impacts to traffic on U.S. Highway 54.	No change in impacts to traffic on U.S. Highway 54.	Reduction in effects on civilian traffic on U.S. Highway 54.	Same as Alternative 3, 4, or 5.
<b>Utilities</b>					
Utilities consumption to support military operations and construction at various locations on McGregor Range.	No change in utilities consumption.	Little to no change in utilities consumption.	Little to no change in utilities consumption.	Utilities consumption for military activities on McGregor Range limited to McGregor Range Camp and TA 8, and portions of TA 32.	Same as Alternative 3, 4, or 5.
Solid waste and nonhazardous scrap metal from military operations managed in accordance with applicable laws, regulations, and Army procedures.	No change in nonhazardous waste impacts.	Reduction in nonhazardous scrap metal generated by air-to-ground training on Otero Mesa.	Reduction in nonhazardous scrap metal generated at tactical target complex on Otero Mesa and Class C bombing range.	Reduction in nonhazardous waste generation by military operations at McGregor Range	Same as Alternative 3, 4, or 5.

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**Table 2.7-1. Comparison of Alternatives by Resource and Potential Impacts (Continued)**

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>Alternative 4</i>	<i>Alternative 5</i>	<i>Alternative 6</i>
<b>Earth Resources</b>					
McGregor Range is withdrawn from mining and mineral leasing laws. Development of saleable minerals and leasable resources is possible in areas designated in RMPA.	29,000 acres no longer withdrawn from mining and mineral leasing laws. Army permission no longer required to develop saleable minerals and leasable resources in those areas.	169,000 acres no longer withdrawn from mining and mineral leasing laws. Army permission no longer required to develop saleable minerals and leasable resources in those areas.	233,000 acres no longer withdrawn from mining and mineral leasing laws. Army permission no longer required to develop saleable minerals and leasable resources in those areas.	McGregor Range no longer withdrawn from mining and mineral leasing laws. Army permission no longer required to develop saleable minerals and leasable resources.	Same as Alternative 3, 4, or 5.
Military and nonmilitary activities affect soils susceptible to erosion.	No change in soils erosion impacts.	Reduction in erosion due to military activities on Otero Mesa.	Reduction in erosion due to military activities on Otero Mesa and Tularosa Basin north of New Mexico Highway 506.	Reduction in erosion due to military activities; potential increase in erosion from clean-up activities and grazing in Tularosa Basin.	Same as Alternative 3, 4, or 5.
<b>Air Quality</b>					
Temporary air quality impacts from fugitive dust and military vehicle and aircraft emissions.	No change in air quality impacts.	Slight reduction in fugitive dust and vehicle emissions on Otero Mesa. Reduction in emissions from aircraft using tactical target complex under Alternatives 1 and 2.	Slight reduction in fugitive dust and vehicle emissions on Otero Mesa. Reduction in emissions from aircraft using tactical target complex and Class C bombing range under Alternatives 1 and 2.	Reduction of fugitive dust and vehicle and aircraft emissions in northern Tularosa Basin and on Otero Mesa.	Same as Alternative 3, 4, or 5.
<b>Water Resources</b>					
Water from Sacramento River and Carrisa Spring used for wildlife and livestock.	No change in water used for wildlife and livestock.	No change in water used for wildlife and livestock.	No change in water used for wildlife or livestock.	No change in water used for wildlife or livestock.	Same as Alternative 3, 4, or 5.
Municipal water sources consumed to support military requirements on McGregor Range.	No change in military water consumption.	No change in military water consumption.	No change in military water consumption.	Reduction in municipal water consumption for military use other than McGregor Range Camp and Meyer Range.	Same as Alternative 3, 4, or 5.

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**Table 2.7-1. Comparison of Alternatives by Resource and Potential Impacts (Continued)**

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>Alternative 4</i>	<i>Alternative 5</i>	<i>Alternative 6</i>
Potential development of geothermal water sources.	No change in potential development of geothermal resources.	No change in potential development of geothermal resources.	No change in potential development of geothermal resources.	No change in potential development of geothermal resources.	Same as Alternative 3, 4, or 5.
<b>Biological Resources</b>					
Vegetation, wetlands and arroyo-riparian drainages, wildlife, and sensitive species may be impacted by military activities that result in ground disturbance and fires.	29,000 acres no longer subject to impacts from military activities on vegetation, wetlands and arroyo-riparian drainages, wildlife and sensitive species.	169,000 acres no longer subject to ground disturbance impacts from military activities to vegetation, wetlands and arroyo-riparian drainages, wildlife and sensitive species. There would be fewer potential impacts from fire.	233,000 acres no longer subject to ground disturbance impacts from military activities to vegetation, wetlands and arroyo-riparian drainages, wildlife, and sensitive species. There would be less impacts from fire.	Impacts to vegetation, wetlands and arroyo-riparian drainages, and wildlife from military activities outside of TA 8 and portions of TA 32 would be eliminated. Impacts from grazing on previously ungrazed lands could increase	Same as Alternative 3, 4, or 5.
<b>Cultural Resources</b>					
Potential for impacts to archaeological, architectural, and other cultural resources from military and nonmilitary ground disturbance.	Impacts from military activities to archaeological, architectural, or other cultural resources on 29,000 acres would cease.	Impacts from military activities to archaeological, architectural, or other cultural resources on 169,000 acres would cease.	Impacts from military activities to archaeological, architectural, or other cultural resources on 233,000 acres would cease.	Impacts from military activities to archaeological, architectural, or other cultural resources outside of TA 8 and portions of TA 32 would cease.	Same as Alternative 3, 4, or 5.
<b>Socioeconomics</b>					
Beneficial effect on local economy from military employment and purchases.	No change in socioeconomic effects.	No change in socioeconomic effects.	No change in socioeconomic effects.	Minor reduction in military employment and purchases.	Minor to no change in military employment and purchases.
<b>Environmental Justice</b>					
No disproportionately high or adverse effects on minority or low-income populations.	No change in environmental justice impacts.	No change in environmental justice impacts.	No change in environmental justice impacts.	No change in environmental justice impacts.	No change in environmental justice impacts.

**Table 2.7-1. Comparison of Alternatives by Resource and Potential Impacts (Continued)**

200

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<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>Alternative 4</i>	<i>Alternative 5</i>	<i>Alternative 6</i>
<b>Noise</b>					
Noise from military operations and aircraft flights is within land use compatibility guidelines.	No change in noise impacts.	Reduction in aircraft noise associated with tactical target complex.	Reduction in aircraft noise associated with tactical target complex and Class C bombing range.	Reduction in aircraft noise associated with target complexes and missile firings.	Same as Alternative 3, 4, or 5.
<b>Safety</b>					
Low level of ground, flight, and explosive safety risks associated with military operations.	No change in safety risks.	Slight reduction in ground and explosive safety risks from military vehicles and air-to-ground operations on Otero Mesa.	Slight reduction in ground and explosive safety risks from military vehicles and air-to-ground operations on Otero Mesa and north of New Mexico Highway 506.	Reduction in safety risks from military operations on returned lands. Increased potential for public exposure to ordnance and explosive safety risks in portions of Tularosa Basin.	Same as Alternative 3, 4, or 5.
<b>Hazardous Materials and Other Items of Special Concern</b>					
Hazardous waste from military operations would continue to be managed in accordance with applicable laws, regulations, and Army procedures.	No change in hazardous waste impacts.	No change in hazardous waste impacts.	No change in hazardous waste impacts.	Reduction in hazardous waste generation by military operations at McGregor Range.	Same as Alternative 3, 4, or 5.

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**Table 2.7-2. Military Mission Consequences**

<i>Mission Capability</i> <sup>(1)</sup>	<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>	<i>Alternative 4</i>	<i>Alternative 5</i>	<i>Alternative 6</i>
<b>Weapons Firing</b>						
<b>Patriot/HIMAD</b>	No effect	-33%	-89%	-89%	-100%	-89 to 100%
<b>Small Missiles</b>						
McGregor Launch Complex	No effect	No effect	No effect	No effect	-100%	-89 to 100%
SHORAD Range Operations	No effect	Training Modification Required	Training Modification Required	Training Modification Required	-100%	Training Modification Required
Orogrande Range Operations	No effect	Training Modification Required	Training Modification Required	Training Modification Required	-100%	Training Modification Required
<b>Small Arms</b>						
Meyer Range	No effect	No effect	No effect	No effect	No effect	No effect
<b>Test Operations</b>						
<b>Laser Operations</b>						
Orogrande Range	No effect	Test Modification Required	Test Modification Required	Test Modification Required	-100%	Test Modification Required
<b>Missile System Components</b>						
Orogrande Range: ADATD Operations	No effect	Test Modification Required	Test Modification Required	Test Modification Required	-100%	-100%
SHORAD Range Operations	No effect	No effect	No effect	No effect	-100%	No effect
McGregor Launch Complex	No effect	No effect	No effect	No effect	-100%	No effect
<b>Surface Impact</b>						
MLRS	No effect	No effect	No effect	Training Modification Required	-100%	No effect
Air-to-ground						
Otero Mesa Site	No effect	No effect	-100%	-100%	-100%	-100%
Class C Bombing Range	No effect	No effect	No effect	-100%	-100%	No effect
<b>Off-road Vehicle Maneuver</b>						
TA 8	No effect	No effect	No effect	No effect	No effect	No effect
<b>On-road Vehicle Maneuver</b>	No effect	-6%	-26%	-35%	-100%	-26%
<b>Controlled Access FTX</b>	No effect	No effect	-48%	-57%	-100%	-48 to -100%
<b>Dismounted Training</b>	No effect	-6%	-26%	-35%	100%	-26%
<b>Aircraft Operations</b>						
Fixed-wing Air-to-air	No effect	No effect	No effect	No effect	No effect	No effect
Rotary-wing NOE	No effect	No effect	No effect	No effect	No effect	No effect

<sup>(1)</sup> Impacts to mission capability are presented as the percentage change in training scenarios, land acreage available, or qualitatively as to requirements to modify training or test programs.

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No Effect	Adverse Effect	Significant Adverse Effect
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**McGregor Range Land Withdrawal  
Legislative Environmental Impact Statement**

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**Fold-out. Fort Bliss Training Area Land Use Color Coding Matrix (110a)**

### Fort Bliss Training Area Land Use Color Coding Matrix

Training Area Land Use Category	Fort Bliss Training Categories (Table 2.0-1)											
	1	2	3	4	5	6	7	8	9	10	ENV*	PA**
	Mission Support Facility	Weapons Firing	Surface Impact	SDZ/Safety Footprint	Off-Road Vehicle Maneuver	On-Road Vehicle Maneuver	Controlled Access FTX	Dismounted Training	Aircraft Operations	Built-up Areas	Conservation	Public Access
A		●		●	●	●		●	●		●	●
A with Mission Facilities	●	●		●	●	●		●	●		●	●
B					●	●		●	●		●	●
B with Mission Facilities	●				●	●		●	●		●	●
C		●		●		●	●	●	●		●	●
C with Mission Facilities	●	●		●		●	●	●	●		●	●
D		●		●		●		●	●		●	○
D with Mission Facilities	●	●		●		●		●	●		●	
E				●		●	●	●	●		●	●
F				●		●		●	●		●	○
G				●				●	●		●	●
H			●						●			
I	●			●		●			●	●	●	●

McGEIS 110a.dg.10.22.98

- Training Category Occurs in Land Use - Uses May Not be Concurrent
- Public Access on Some Areas
- \* Environmental Management
- \*\* Public Access