



# **NEVADA TEST AND TRAINING RANGE (NTTR) LAND WITHDRAWAL**

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**Legislative Environmental Impact Statement**

**EXECUTIVE SUMMARY**

December 2017 • DRAFT

This Executive Summary of the Draft Legislative Environmental Impact Statement (LEIS) for the Nevada Test and Training Range (NTTR) Land Withdrawal provides a summary of information that is presented in the LEIS. The LEIS provides a programmatic analysis of the potential environmental impacts of the proposed extension of the current land withdrawal for the NTTR and possible expansion of its boundaries.

A CD containing the Draft LEIS is provided inside the back cover of this Executive Summary. A copy of the Draft LEIS is available at each of the public libraries and repositories listed below. In addition, a copy of the Draft LEIS is available online at [www.nttrleis.com](http://www.nttrleis.com).

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## ACRONYMS AND ABBREVIATIONS

<b>AFB</b>	Air Force Base
<b>AFI</b>	Air Force Instruction
<b>APE</b>	area of potential effects
<b>AUM</b>	animal unit months
<b>BLM</b>	Bureau of Land Management
<b>BMPs</b>	best management practices
<b>CDNL</b>	C-weighted day-night average sound level
<b>CFR</b>	Code of Federal Regulations
<b>DNL</b>	day-night average sound level
<b>DNWR</b>	Desert National Wildlife Range
<b>DoD</b>	Department of Defense
<b>DOE</b>	Department of Energy
<b>ECR</b>	Electronic Combat Range
<b>GHG</b>	greenhouse gas
<b>HMA</b> s	herd management areas
<b>ICRMP</b>	Integrated Cultural Resources Management Plan
<b>ISR</b>	intelligence surveillance reconnaissance
<b>IW</b>	Irregular Warfare
<b>LEIS</b>	Legislative Environmental Impact Statement
<b>MCO</b>	Major Combat Operations
<b>MLWA</b>	<i>Military Land Withdrawal Act of 1999</i>
<b>NATCF</b>	Nellis Air Traffic Control Facility
<b>NEPA</b>	<i>National Environmental Policy Act</i>
<b>NHPA</b>	<i>National Historic Preservation Act</i>
<b>NM</b>	nautical miles
<b>NNSA</b>	National Nuclear Security Administration
<b>NTTR</b>	Nevada Test and Training Range
<b>NWR</b>	National Wildlife Refuge
<b>OHV</b>	off-highway vehicle
<b>ROI</b>	region of influence
<b>SUA</b>	Special Use Airspace
<b>UAS</b>	unmanned aerial system
<b>USAFWC</b>	U.S. Air Force Warfare Center
<b>USFWS</b>	U.S. Fish and Wildlife Service
<b>WSAs</b>	Wilderness Study Areas

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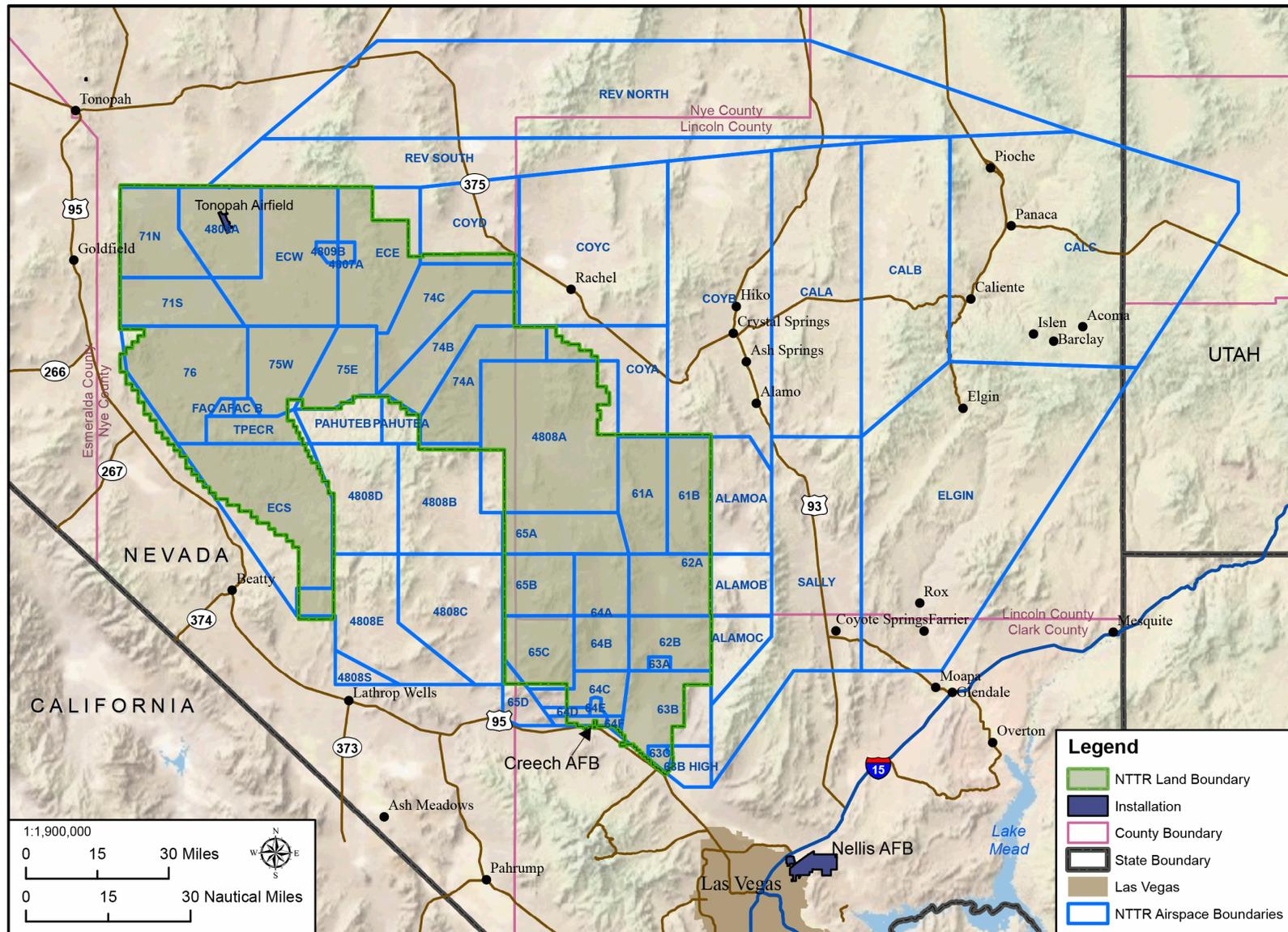
## 1 ES.1 INTRODUCTION

2 The U.S. Air Force proposes to withdraw and reserve public lands for military use to  
3 support the utilization and modernization of the Nevada Test and Training Range  
4 (NTTR) by enhancing range capability for improved training and testing. The NTTR is  
5 the preeminent range for testing and evaluation of weapons systems, tactics  
6 development, and advanced combat training. However, the range and its infrastructure  
7 are quickly becoming outdated as rates of technological development of new weapons  
8 systems and electronic warfare systems accelerate. Since enemy technology has  
9 become increasingly advanced and complex, more space is needed to replicate threat  
10 configurations. The NTTR can no longer replicate this threat environment.

11 The *Military Land Withdrawal Act of 1999* (MLWA), Public Law No. 106-65, withdrew  
12 approximately 2.9 million acres of land from public use for the current NTTR land base.  
13 The current withdrawal will expire on November 6, 2021, unless Congress enacts  
14 legislation to extend it. As a result of the evolving mission, this Legislative  
15 Environmental Impact Statement (LEIS) programmatically evaluates alternatives that  
16 would extend or expand the current military land withdrawal in order to safely execute  
17 its missions in a more realistic and operationally relevant manner. The Final LEIS will be  
18 submitted as part of the legislative proposal for the future NTTR military land  
19 withdrawal. Congress will make the final decision on whether to extend the withdrawal  
20 and/or expand the boundaries of the current NTTR land withdrawal through legislation.  
21 The Air Force is also following the applicable procedures set forth in Bureau of Land  
22 Management (BLM) regulations at Title 43 Code of Federal Regulations (CFR) Part  
23 2300 that implement the U.S. Department of the Interior's authority to process federal  
24 land withdrawal applications.

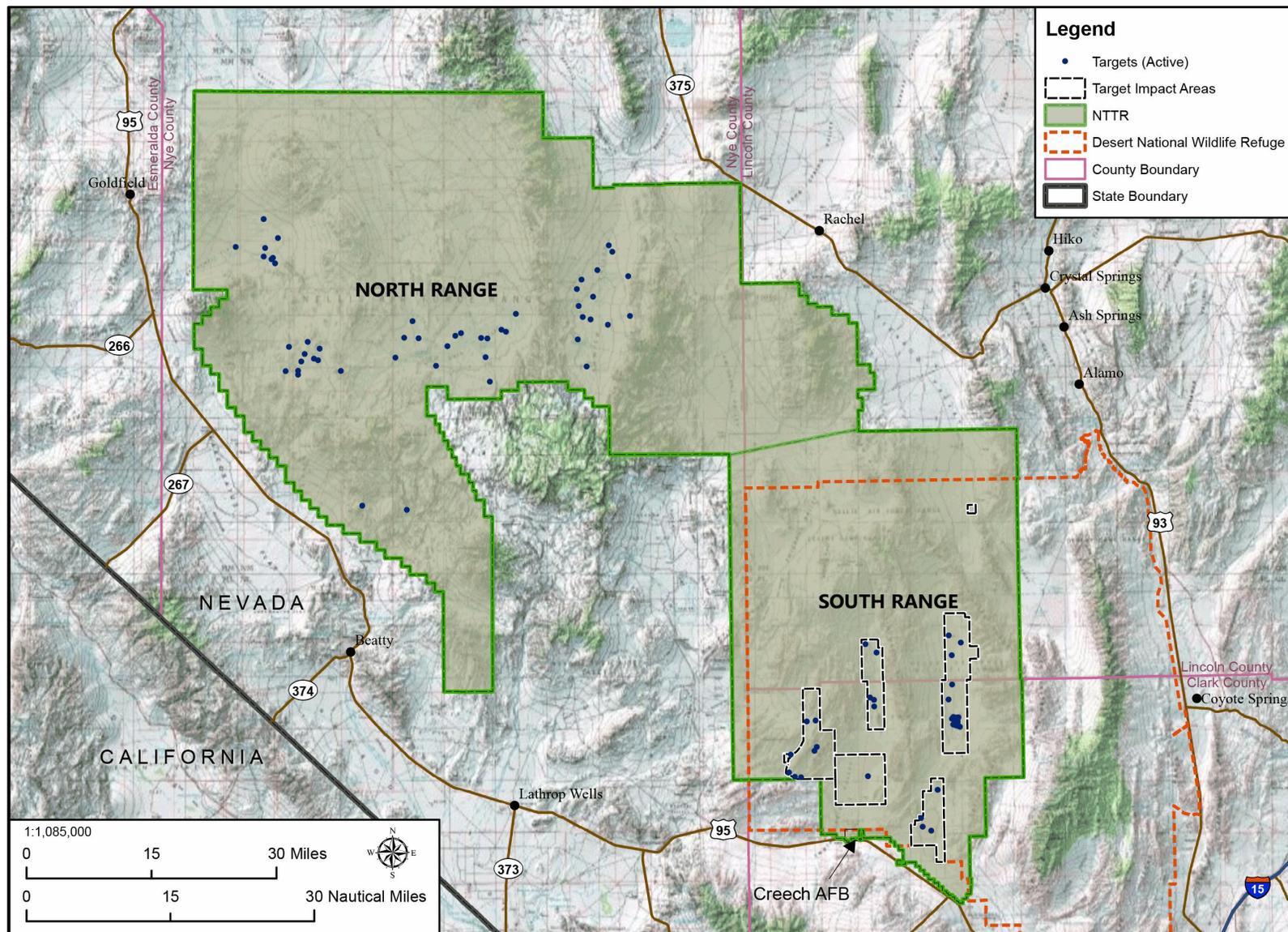
25 The Air Force is the lead agency for the LEIS, while cooperating agencies are the BLM;  
26 Department of Energy (DOE); National Nuclear Security Administration (NNSA); U.S.  
27 Fish and Wildlife Service (USFWS) National Wildlife Refuges and Ecological Services  
28 programs; Nevada Department of Wildlife; and Nevada Association of Counties. The Air  
29 Force also initiated government-to-government consultation with federally recognized  
30 tribes potentially affected by the NTTR land withdrawal, as well as appropriate Nevada  
31 state agencies and local counties and cities.

32 The NTTR is part of the U.S. Air Force's Major Range and Test Facility Base enterprise  
33 and is operated by the U.S. Air Force Warfare Center's (USAFWC's) Headquarters  
34 NTTR. As a national security infrastructure asset, the NTTR is managed by the Air  
35 Force but hosts activities associated with all Department of Defense (DoD) entities, the  
36 DOE, NNSA (including Sandia National Laboratories), and Homeland Security. The  
37 NTTR is located in southeastern Nevada and includes both the land and overlying  
38 airspace. The NTTR airspace comprises roughly 12,000 square nautical miles (NM) and  
39 is about 150 NM wide at its widest point (west to east) and 110 NM long (north to  
40 south). Figure ES-1 shows an outline of the NTTR land and airspace and its relationship  
41 to the city of Las Vegas to the south, Nellis Air Force Base (AFB), and Creech AFB.  
42 Figure ES-2 depicts the North and South Ranges of the NTTR.



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Figure ES-1. Nevada Test and Training Range Land and Airspace Boundary



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**Figure ES-2. North and South Range Operations Areas of the NTTR**

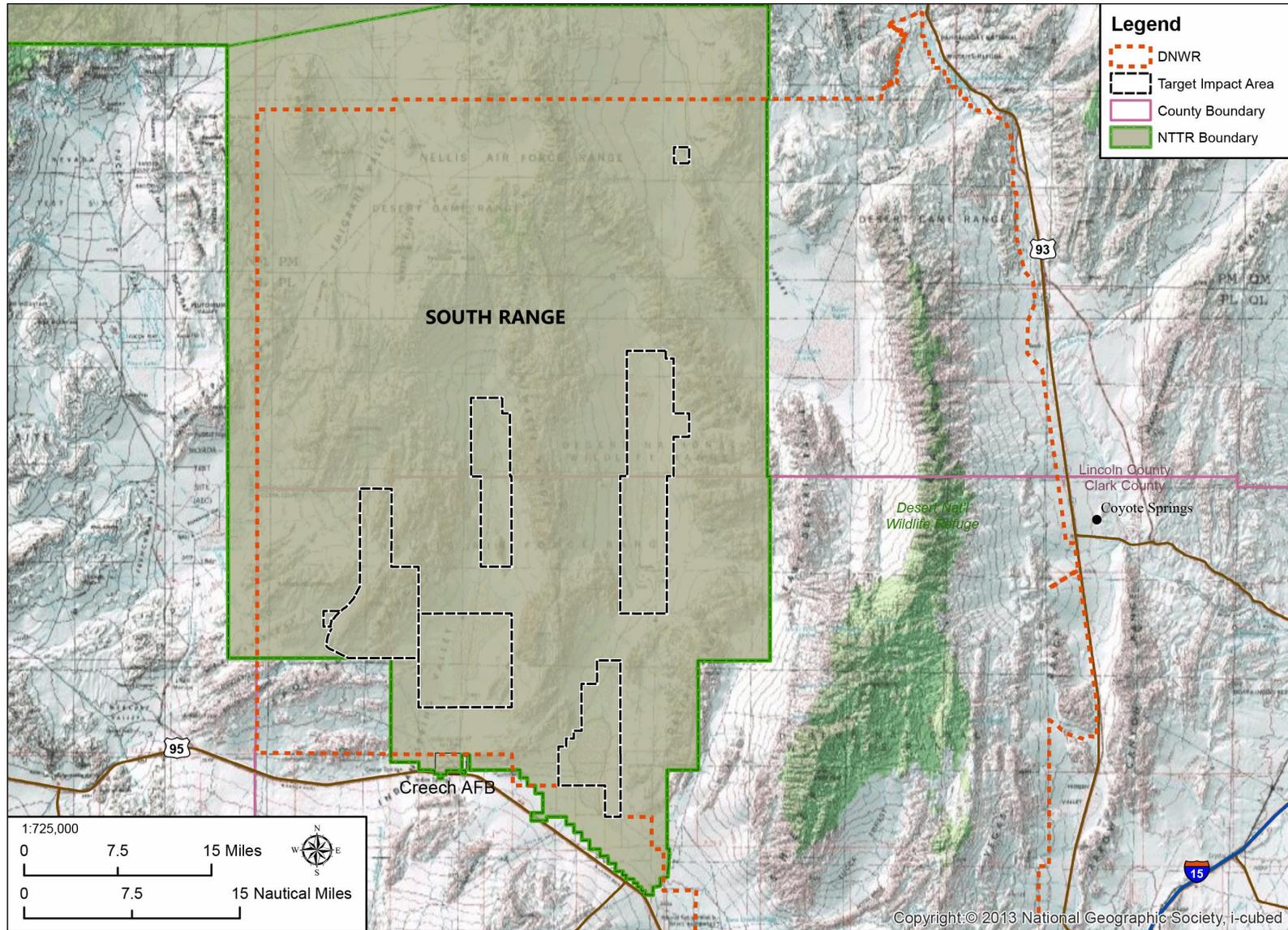
1 As shown in Figure ES-2, the NTTR is split into the North and South Ranges to facilitate  
2 overall management of Air Force operations and test and training opportunities on each  
3 range. The major facilities are Creech AFB and airfield, Tolicha Peak, and the Tonopah  
4 Test Range and airfield. Facilities also include roads, radar sites, other communication  
5 systems, and range electronic measuring devices.

6 The North Range contains mountain ranges oriented to the north and south with wide  
7 valleys, where most of the target areas are located. The North Range is approximately  
8 1.8 million acres of withdrawn land and contains approximately 1,263 targets within  
9 63 tactical target complexes (Figure ES-2). The type of weapons authorized for delivery  
10 depends on the target selected. There are multiple and dispersed facilities that support  
11 three Electronic Combat Ranges (ECRs), including Tonopah ECR, Tolicha Peak ECR,  
12 and Electronic Combat South Range (hereinafter referred to as “EC South”).

13 The South Range is approximately 1.2 million acres of withdrawn land located in the  
14 southeastern portion of the NTTR. Mountain ranges in the South Range are north/south  
15 oriented with narrow valleys that contain dry lakebeds. The South Range contains five  
16 weapons-delivery areas, which are subdivided into 74 target complexes containing  
17 approximately 1,363 targets.

18 The Desert National Wildlife Refuge Complex is one of the largest wildlife refuges in the  
19 United States, with approximately 1.6 million acres of land, and consists of three  
20 geographically separated refuges (Ash Meadows National Wildlife Refuge [NWR],  
21 Moapa Valley NWR, and Pahrangat NWR) and the Desert National Wildlife Range  
22 (DNWR). About half of the DNWR (approximately 826,000 acres) overlaps the lands  
23 withdrawn for the South Range (Figure ES-3). Almost 90 percent of the DNWR (about  
24 1.4 million acres) has been proposed as wilderness by the USFWS since 1971, and  
25 about 590,000 of those acres are in the South Range. Generally, areas proposed for  
26 wilderness areas in the South Range correspond to elevations above 4,000 feet above  
27 mean sea level. The areas proposed for wilderness on the South Range are managed  
28 as de facto wilderness by virtue of USFWS land management policy, which results in  
29 significant restriction on Air Force activities to areas below 4,000 feet. Existing roads  
30 (mountain roads/passages) other than those used below 4,000 feet are off limits, as is  
31 troop movement, ground disturbance, and the development of new locations such as  
32 emitter sites and communication sites. Previously used targets that are located in areas  
33 that were proposed as wilderness in 1971 are also off limits. Targets in the South  
34 Range are restricted to the playas (dry lakebeds) within the 60-series ranges and  
35 accommodate live and inert ordnance.

36 The MLWA (1999) directs that the Secretary of the Interior is to manage the USFWS  
37 portion of the DNWR in coordination with the Secretary of the Air Force through a  
38 memorandum of understanding that was renewed in 1997 and describes how the  
39 management responsibilities of each agency will be implemented. The memorandum  
40 delineates how the Air Force is able to use ground areas in the South Range below the  
41 4,000-foot contour line, which includes the target impact areas. Primary jurisdiction of  
42 these impact areas, also referred to as the “60-series” ranges, was transferred to the Air  
43 Force, and the Secretary of the Interior (via the USFWS) maintains secondary  
44 jurisdiction for wildlife conservation purposes.



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Figure ES-3. South Range Overlap with the DNWR

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## 1 **ES.2 PURPOSE AND NEED**

2 The Air Force's purpose and need for action is to sustain and enhance the military  
3 testing and training capacity, capability, and functionality of the NTTR through the land  
4 withdrawal process to meet current and future mission requirements while continuing  
5 environmental stewardship of the lands entrusted to it. Mission requirements include,  
6 without limitation, the following:

- 7 • Increase Major Combat Operations (MCO) test/training capability to meet the  
8 demands of strategic guidance and alleviate competition for critical MCO  
9 electronic assets
- 10 • Enhance Irregular Warfare (IW) test/training capability
- 11 • Increase NTTR operational security and safety

12 As a result of the DNWR and areas proposed for wilderness overlapping the NTTR  
13 South Range, there are significant restrictions on Air Force activities. New land  
14 management practices would allow for improved use of the South Range and efficient  
15 utilization of the associated airspace to better support military testing and training  
16 activities. In addition, the NTTR and its current infrastructure are quickly becoming  
17 outdated as rates of technological development of new weapons systems and electronic  
18 warfare systems accelerate. The NTTR can no longer replicate relevant threat  
19 environments. Thus, the Air Force proposes to withdraw and reserve public lands for  
20 military use to support the utilization and modernization of the NTTR by enhancing  
21 range capability for improved training and testing.

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### 22 **ES.2.1 INCREASE MCO TEST/TRAINING CAPABILITY TO MEET THE DEMANDS** 23 **OF STRATEGIC GUIDANCE AND ALLEVIATE COMPETITION FOR** 24 **CRITICAL MCO ELECTRONIC ASSETS**

25 The NTTR must increase MCO capabilities to meet current and future MCO test/training  
26 requirements. Section 1.4.1 of the LEIS describes the NTTR's current capacity and  
27 future requirements, based on DoD Strategic Guidance. Increasing testing and training  
28 capacity will also reduce ongoing scheduling conflicts and alleviate competition between  
29 the various users, which will improve the efficiency of conducting NTTR operations.

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### 30 **ES.2.2 ENHANCE IRREGULAR WARFARE TEST/TRAINING CAPABILITY**

31 IW operations have had an expanding role in developing aircrew and airborne systems,  
32 highlighting the critical need to integrate special operations forces and battlefield  
33 airmen. Typical IW training includes ground training supported by air and vehicle  
34 operations. To increase the realism of the training events, some training ammunition  
35 (blank small arms), hand flares, smoke grenades, or other training munitions (such as  
36 paint balls) are expended during certain operations. As described in Section 1.4.2 of the  
37 LEIS, IW operations include air and vehicle IW operations support, insertion/extraction

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1 (drop zone/landing zone) and overland navigation, and combined unmanned aerial  
2 system (UAS) and IW training.

### 3 ***Air and Vehicle IW Operations Support***

4 Airborne operations include the use of rotary- or fixed-wing aircraft for the insertion,  
5 extraction, movement, or supplying of ground troops. Ground support vehicles  
6 occasionally deliver and retrieve the participating troops or provide support and  
7 logistics. Ground vehicle movement is normally restricted to the existing road and trail  
8 network, but some training activities use all-terrain vehicles or “dune buggies.” To  
9 accommodate the very important role NTTR plays in training combat units, the following  
10 capabilities at the NTTR are required:

- 11 • Development of unique insertion and extraction points
- 12 • Overland navigation (areas with and without mountainous terrain)
- UAS coordinated efforts with overland navigation

### 13 ***Insertion/Extraction (Drop Zone/Landing Zone) and Overland Navigation***

14 The NTTR’s current capability to replicate a full battle spectrum for IW training is  
15 severely constrained and limited to the North Range. Keno Airfield in the North Range is  
16 highly utilized by Air Mobility Command, Special Operations Forces, and Marine  
17 Amphibious Forces to maintain combat mission-ready status because it is the only  
18 location on the NTTR with insertion and extraction training capabilities. Insertion and  
19 extraction activities and overland navigation cannot be conducted in the South Range  
20 because of land management restrictions associated with the overlapping areas of the  
21 DNWR and safety hazards in the impact areas under the Air Force’s primary  
22 jurisdiction.

### 23 ***Combined UAS and IW Training***

24 Similar to MCO test and evaluation and training, intelligence surveillance  
25 reconnaissance (ISR) has become a key component in IW strategies training programs.  
26 Creech AFB is at the center of UAS training and is located on the NTTR in close  
27 proximity to the South Range, making it the ideal location to test and train these assets.  
28 However, as mentioned previously, IW training in the South Range is limited due to  
29 access restrictions.

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## 30 **ES.2.3 INCREASE NTTR OPERATIONAL SECURITY AND SAFETY**

31 Over the last 20 years, the population in Clark County (Las Vegas metropolitan area)  
32 has grown significantly, primarily in the northern half of the county, which abuts the  
33 NTTR. Consequently, NTTR managers have encountered public encroachment onto  
34 the range. The USAFWC believes that increasing the buffer and adjoining it to major  
35 infrastructure, such as roads or fencing, would help the public more readily recognize  
36 the true boundaries of the NTTR and limit the potential for public intrusions, thereby  
37 increasing public safety.

## 1    **ES.3    DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

2    This LEIS evaluates alternatives that would extend or expand the current NTTR land  
3    withdrawal. As detailed in Sections 2.1 and 2.2 of the LEIS, the Air Force developed a  
4    detailed screening process to identify the alternatives carried forward in the analysis  
5    that meet the selection standards developed for each of the operational requirements  
6    summarized above in Sections ES.2.1 through ES.2.3 of this Executive Summary.

7    The programmatic analysis in this LEIS focuses mainly on the proposed use of the area  
8    from a conceptual and qualitative perspective, and site-specific NEPA analyses will be  
9    necessary in the future for specific locations and routes once a decision on withdrawal  
10    has been made and information becomes more mature. Details regarding the actions  
11    that are currently known are outlined in Section 2.3 of the LEIS. These conceptual  
12    details were the basis of analysis for the LEIS.

13    Conceptual plans are used to characterize types of impacts on a programmatic level.  
14    Site-specific NEPA analyses will be necessary in the future once a decision on  
15    withdrawal has been made. Sections ES.3.1 through ES.3.5 below provide a summary  
16    of the alternatives considered, while Section 2.3 of the LEIS provides more detailed  
17    discussion.

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### 18    **ES.3.1    ALTERNATIVE 1 – EXTEND EXISTING LAND WITHDRAWAL AND** 19    **MANAGEMENT OF THE NTTR (NORTH AND SOUTH RANGE) – STATUS** 20    **QUO**

21    Under Alternative 1, there would be no changes to the current NTTR boundary,  
22    operational activities, or land management practices. The “status quo” would meet a  
23    limited portion of the purpose and need, and the military test and training missions  
24    conducted at the NTTR would become increasingly constrained moving into the  
25    future. Although Alternative 1 significantly restricts test and training missions, it was  
26    evaluated and also used as a baseline for a comparative programmatic evaluation  
27    contrasted with all other alternatives.

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### 28    **ES.3.2    ALTERNATIVE 2 – EXTEND EXISTING LAND WITHDRAWAL AND** 29    **PROVIDE READY ACCESS IN THE NORTH AND SOUTH RANGES**

30    The NTTR boundary under Alternative 2 would be the same as with Alternative 1, but  
31    the Air Force would have “ready access” in both the North and South Ranges. Section  
32    1.4.1 of the LEIS defines “ready access” as it pertains to the LEIS. Alternative 2  
33    analyzes the potential impacts from increasing range utilization by applying a 30 percent  
34    increase in test and training activities, including aircraft operations, munitions  
35    expenditures, and motorized vehicular activities. In addition, it is assumed that there  
36    will be approximately a total of 11.5 acres of total ground disturbance.

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### 1 **ES.3.3 ALTERNATIVE 3 – EXPAND WITHDRAWAL OF PUBLIC LANDS FOR THE** 2 **NTTR**

3 There are three subalternatives analyzed under Alternative 3, shown in Figure ES-4.  
4 Each of the subalternatives includes ready access and a 30 percent increase in aircraft  
5 operations, munitions expenditures, and motorized vehicular activities. The land  
6 boundary under all subalternatives includes the current NTTR boundary and various  
7 expansion options needed for operational and safety requirements. Each of the  
8 subalternatives associated with Alternative 3 would require fencing but the fencing  
9 would be constructed to meet BLM fencing requirements, dependent on the topography  
10 and wildlife present, as outlined in BLM's H-1741-1 Fencing Manual, and the objective  
11 of the fencing would be to provide a physical barrier to prevent public access while  
12 allowing wildlife passage.

13 The Air Force recognizes that various cooperating agencies conduct ongoing studies  
14 and survey activities that are not related to this LEIS. Valuable data has been  
15 assimilated as a result of these long-term efforts, which specifically assist in managing  
16 biological and cultural issues in the areas associated with Alternative 3. Thus, the Air  
17 Force would seek to provide avenues to continue these long-term study and survey  
18 efforts as practicable within the Air Force procedures currently in place and outlined in  
19 Section 2.2.1 of the LEIS.

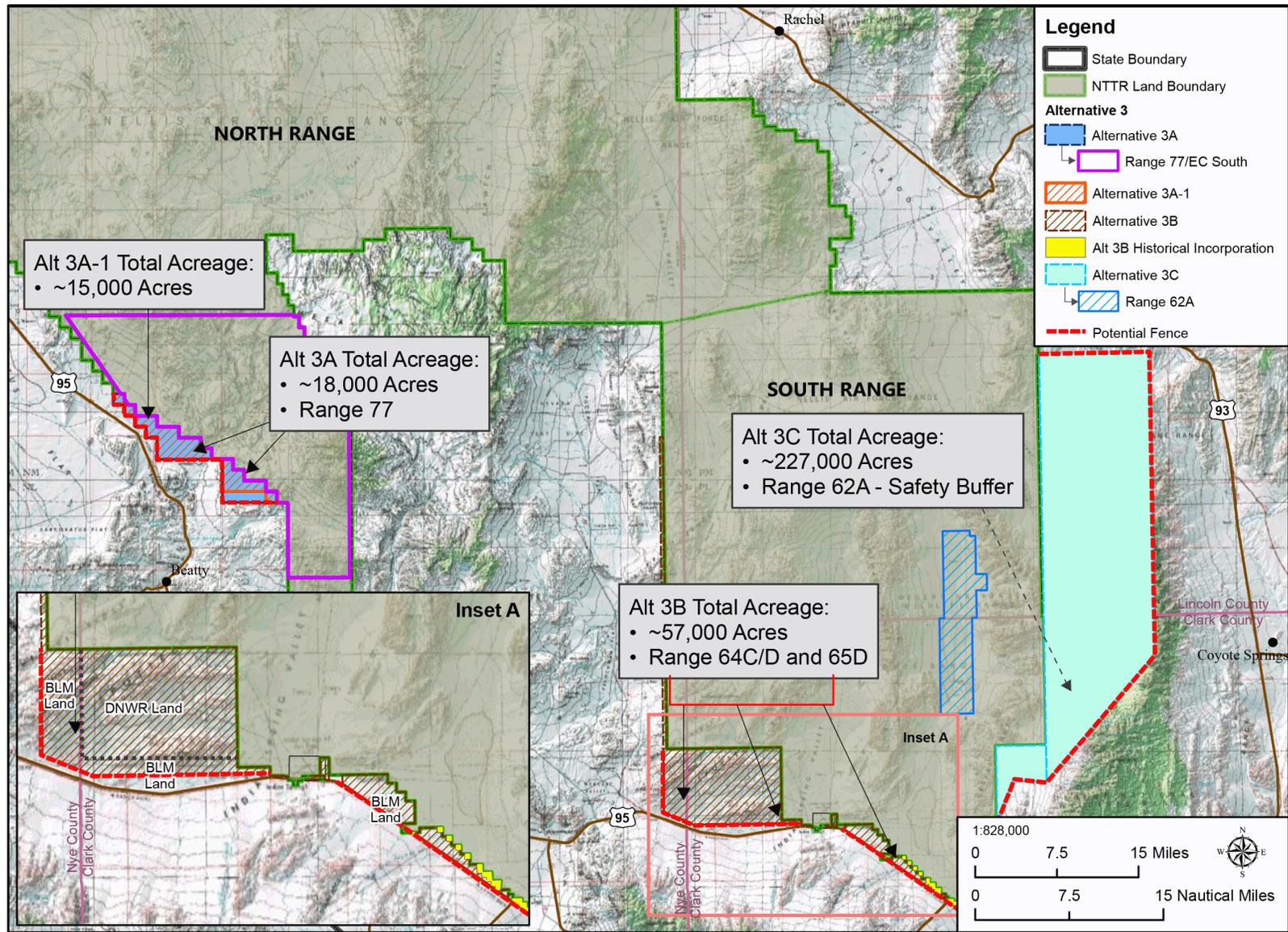
#### 20 **ES.3.3.1 Alternative 3A – Range 77 – EC South Withdrawal**

21 As indicated in Section ES.2.2 of this Executive Summary, the Air Force has identified  
22 ISR as a key component in IW strategies and has incorporated a robust training  
23 program to implement those strategies. Creech AFB is at the center of UAS training and  
24 is located on the NTTR. This provides a seamless opportunity to test and train crews  
25 and systems that are currently required for any IW operation. Ground personnel must  
26 be able to integrate ISR strategy into operations.

27 Alternative 3A would increase the NTTR boundary by approximately 18,000 acres and  
28 would be used to add buffer area to the safety footprint of the EC South area  
29 (redesignated as "Range 77"). In addition, approximately 25 miles of fencing would be  
30 constructed to preserve the safety of the public and provide wildlife passage. Munitions  
31 would not be used in this area.

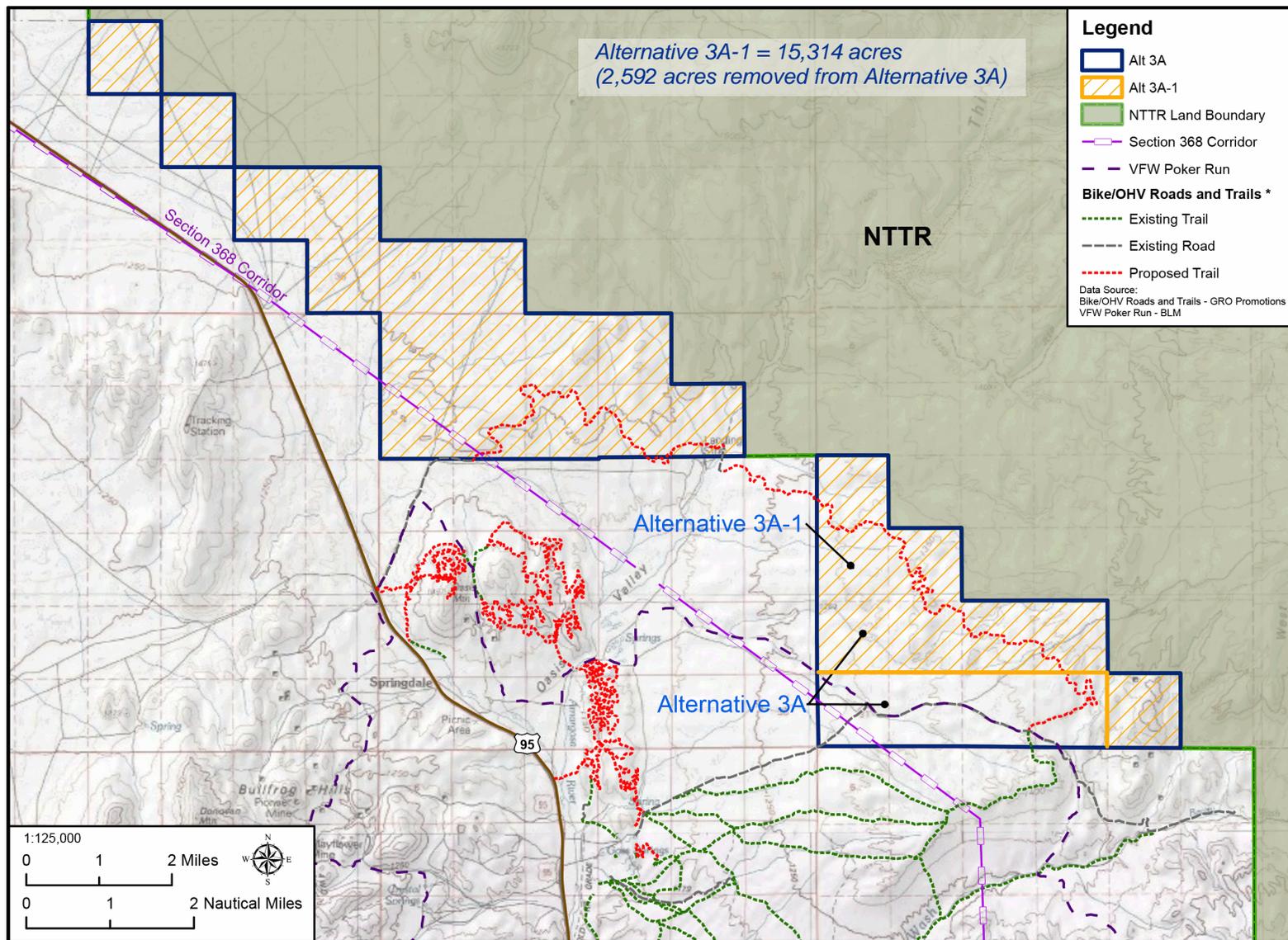
#### 32 **ES.3.3.2 Alternative 3A-1 – Amended Range 77 – EC South Withdrawal**

33 Alternative 3A-1 reduces the expansion area of Alternative 3A so that the total  
34 expansion area of Alternative 3A-1 is approximately 15,000 acres (Figure ES-5). This  
35 subalternative was created in response to public input regarding potential impacts to  
36 recreational and economic resources as well as concerns related to the proposed  
37 routes of the 368 Energy Corridor and Interstate 11.



1  
2

Figure ES-4. Alternative 3A, 3B, and 3C Locations and Acreages



**Figure ES-5. Alternative 3A and 3A-1 Locations and Acreages**

### 1 **ES.3.3.3 Alternative 3B – 64C/D and 65D Withdrawal and Administrative** 2 **Incorporation**

3 As discussed in Section ES.2.3, to address unauthorized public access incidents that  
4 have occurred in the overlap of the northern portion of Clark County and NTTR's South  
5 Range, the USAFWC evaluated those areas where the most incidents have occurred to  
6 minimize the amount of buffer area to be requested. In addition, areas that were  
7 administratively omitted by BLM during the previous land withdrawal were included so  
8 they could be formally included as part of the security buffer. The USAFWC used  
9 roadway infrastructure to establish a recognizable boundary along with airspace maps.

10 Alternative 3B would withdraw approximately 57,000 additional acres along the current  
11 NTTR boundary, including nearly 49,000 acres of area designated as 64C/D and 65D  
12 along the southern border of the NTTR and about 6,500 acres parallel to the current  
13 NTTR boundary and a U.S. Route 95 Nevada Department of Transportation right-of-  
14 way. The remaining area along the eastern edge of range areas 63B and 63 rectifies  
15 the omission of this area during the 2001 land withdrawal. Approximately 30 miles of  
16 fencing would be constructed to reduce public access yet provide wildlife passage.

### 17 **ES.3.3.4 Alternative 3C – Alamo Withdrawal**

18 For Alternative 3C, the Air Force is requesting the withdrawal of approximately  
19 227,000 acres of the DNWR, which corresponds with potential weapons safety  
20 footprints associated with moving targets within the existing target impact areas. Live  
21 munitions would only be used specifically in the target impact areas.

22 During public scoping, concerns were raised about the loss of public access to the  
23 DNWR. As a result, the Air Force proposed to maintain public access to key  
24 recreational areas such as Hidden Forest Cabin, Corn Creek Field Station, Cow Camp  
25 trailhead, and Joe May trailhead, as well as springs such as Corn Creek, Cow Camp,  
26 Upper Deadman, Lower Deadman, and Sawmill, among others. Limited access to the  
27 remaining areas under this subalternative expansion, based on current practices, would  
28 be granted on a case-by-case basis.

29 In addition, Alternative 3C would include the construction of two austere runways (one  
30 active and one as a "mock-up" used for training) and approximately 60 miles of fencing.  
31 Proposed training activities would be associated with various aircraft, and Forward Area  
32 Arming and Refueling Points would be used in austere areas such as a dry lake bed.  
33 Consequently, it is anticipated that there would be 24.5 acres of total ground  
34 disturbance for Alternative 3C, which was the upper limit used in analyses of the  
35 affected resources in Chapter 3. It should be noted that there will be no new target  
36 impact areas created in any proposed expansion areas. However, small-arms blank  
37 munitions and inert weaponry activities would occur in the proposed expansion area  
38 associated with Alternative 3C.

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## 1 **ES.3.4 ALTERNATIVE 4 – ESTABLISH THE PERIOD OF WITHDRAWAL**

2 There are three subalternatives analyzed under Alternative 4. The only difference  
3 among the three subalternatives is the length of the new withdrawal period, which would  
4 begin upon the conclusion of the existing withdrawal period that is currently scheduled  
5 to expire on November 6, 2021. In order to implement any of the Alternative 4  
6 subalternatives, it would have to be paired with one or more of the other alternatives or  
7 subalternatives presented above.

### 8 **ES.3.4.1 Alternative 4A – 20-Year Withdrawal Period**

9 Under Alternative 4A, the new withdrawal would expire after 20 years.

### 10 **ES.3.4.2 Alternative 4B – 50-Year Withdrawal Period**

11 Under Alternative 4B, the new withdrawal would expire after 50 years.

### 12 **ES.3.4.3 Alternative 4C – Indefinite Withdrawal Period**

13 Under Alternative 4C, the new withdrawal would not expire.

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## 14 **ES.3.5 NO ACTION ALTERNATIVE**

15 Under the No Action Alternative, Congress would exercise its constitutional authority to  
16 not take action to extend the withdrawal legislation. The proposed withdrawal duration  
17 of the No Action Alternative would end on November 6, 2021. Section 2.4 of the LEIS  
18 describes the management implications for the former NTTR lands and the various  
19 actions that could be taken by the Secretary of the Interior and Secretary of the Air  
20 Force to establish future uses of the land area. Management of and access to all other  
21 lands would be under jurisdiction of the BLM or USFWS and subject to the multiple  
22 resource management objectives dependent on the managing agency. In addition,  
23 prohibitions previously placed in effect by the MLWA would expire and appropriate  
24 land uses such as mining, mineral leasing, or livestock grazing could potentially be  
25 reintroduced. Management of the former NTTR lands would continue as currently  
26 directed until new management planning under *Federal Land Policy and Management*  
27 *Act* (FLPMA) and NEPA regulations could be completed. Existing land use  
28 management objectives of BLM lands on the perimeter or the vicinity of the NTTR would  
29 continue. Implementation of the No Action Alternative would require the Secretary of the  
30 Interior and the Secretary of the Air Force to undertake various actions to establish  
31 future uses of the former NTTR lands.

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## 1 **ES.4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL** 2 **CONSEQUENCES**

3 A summary of the potential impacts for each resource that may be affected by the  
4 alternatives, including the Proposed Action, is presented below, with detailed discussion  
5 provided in Chapters 3 and 4 of the LEIS. The scope of the LEIS includes consideration  
6 of 14 resource areas.

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### 7 **ES.4.1 AIRSPACE**

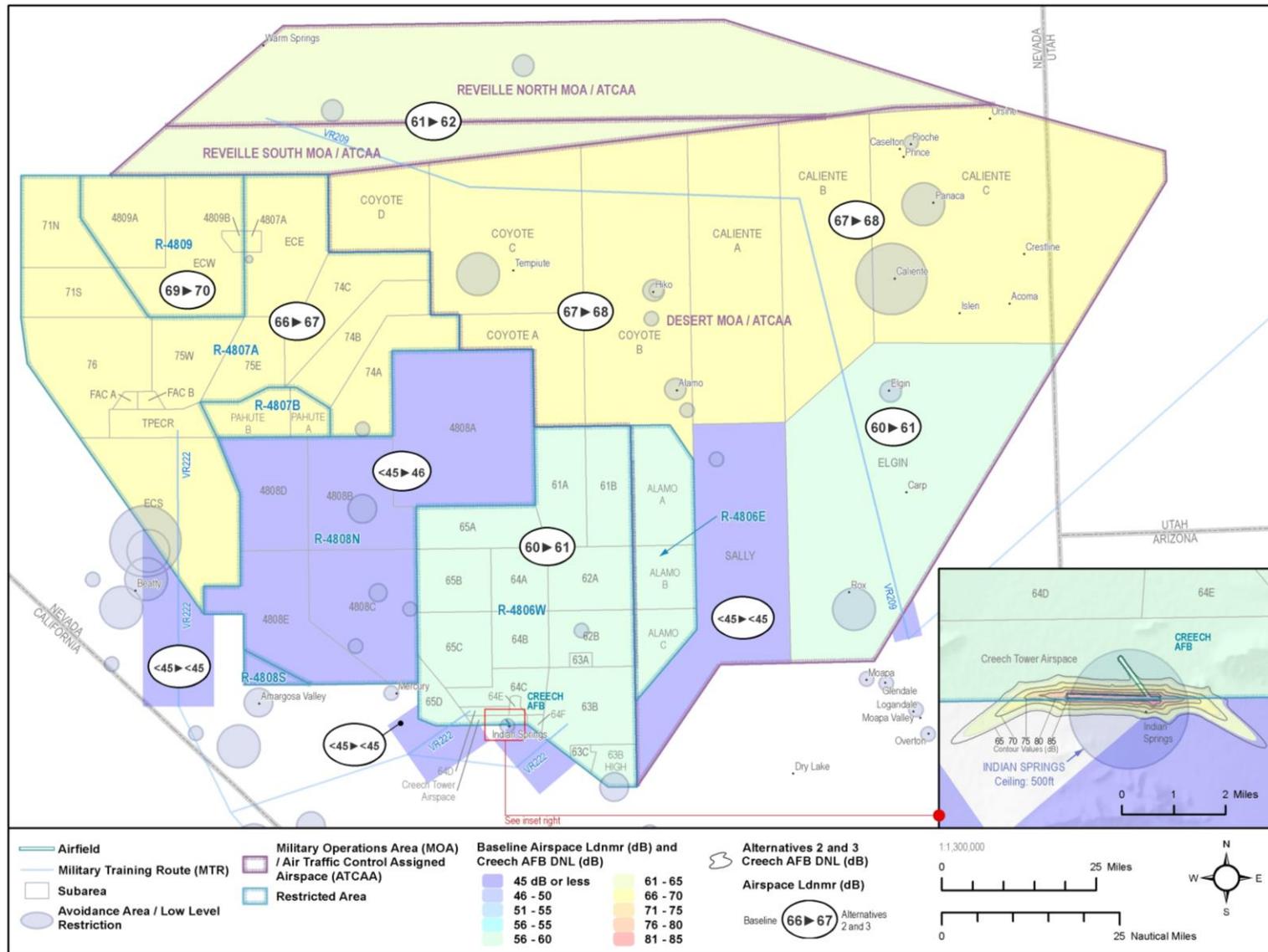
8 The specific airspace areas controlled by the Nellis Air Traffic Control Facility (NATCF)  
9 and considered in the analysis are defined in Sections 3.1.1.3 through 3.1.1.8 of the  
10 LEIS. None of the proposed alternatives would involve physical changes (external  
11 boundaries, dimensions, altitudes, etc.) to any airspace currently controlled by the  
12 NATCF. The LEIS only analyzes potential changes to how the airspace is used. Under  
13 Alternative 1, congestion, range constraints, and the inability to properly test and train  
14 would continue across the NTTR. Under Alternative 2, aircraft operations would  
15 increase; however, the existing airspace would be more efficiently utilized under ready  
16 access, which would reduce airspace scheduling conflicts. Expansion Alternatives 3A,  
17 3A-1, 3B, and 3C would increase aircraft operations over the respective land areas,  
18 however, impacts to airspace would be similar to those addressed under Alternative 2.  
19 No specific airspace impacts are associated with any subalternatives of Alternative 4;  
20 impacts would be the same as those described for the other action alternatives, with  
21 Alternative 4 defining the timeframe over which those impacts may occur. Under the No  
22 Action Alternative, existing airspace would not be affected by not extending the land  
23 withdrawal. However, without control of ground areas, the restricted airspace could not  
24 be used for its intended purpose.

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### 25 **ES.4.2 NOISE**

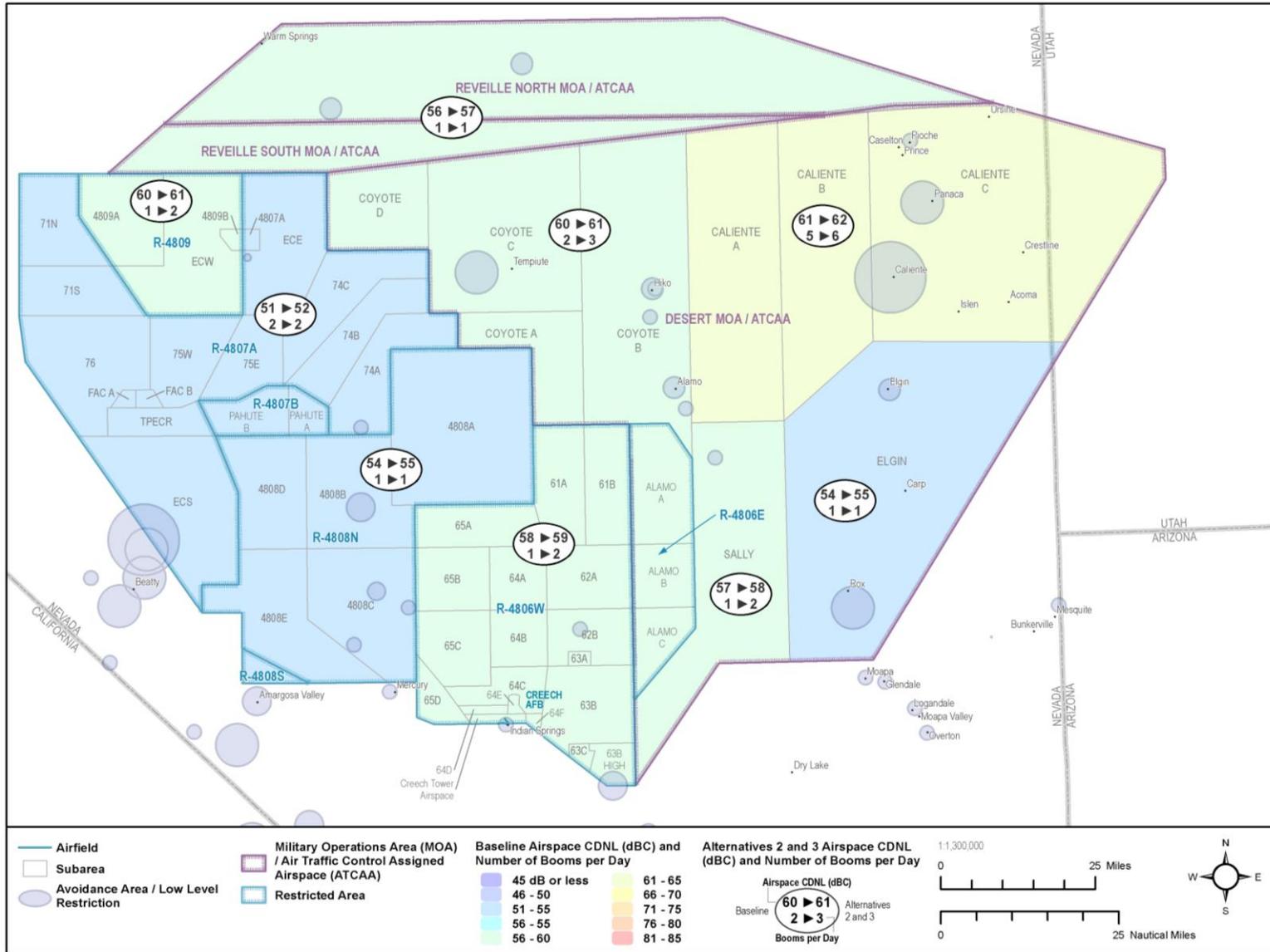
26 The noise analysis in Section 3.2 of the LEIS considers potential impacts that could  
27 result in annoyance, speech interference, sleep disturbance, human health effects  
28 (auditory and nonauditory), wildlife impacts, and structural damage. Noise models were  
29 used to analyze aircraft operations (sonic and supersonic noise), large-caliber weapon  
30 noise, construction noise associated with ground disturbance activities, and emitter  
31 operations noise. Figure ES-6, Figure ES-7, and Figure ES-8 depict the results from the  
32 noise analysis for subsonic, supersonic, and large-caliber weapon noise, respectively.

33 For Alternative 1, operational tempo is anticipated to remain at the baseline levels,  
34 which at this time is considered to result in no adverse impacts. Aircraft operations  
35 under Alternatives 2, 3A, 3A-1, 3B, and 3C were analyzed as an increase of 30 percent;  
36 however, increases in noise levels would be minimal (less than 1 decibel [dB]).



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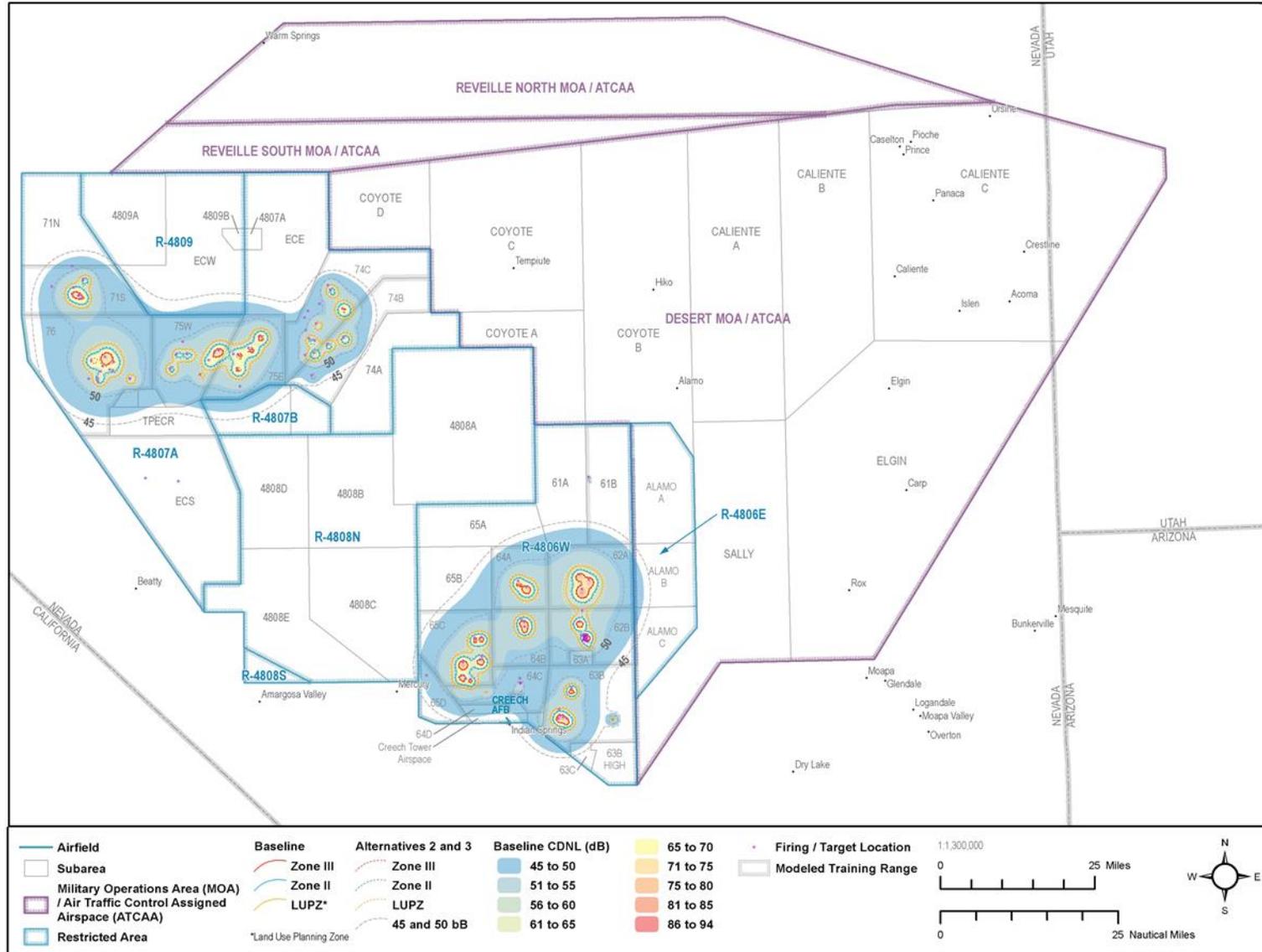
Figure ES-6. Subsonic Noise Exposure Within the NTTR



1

2

Figure ES-7. Supersonic Noise Exposure Within the NTTR



**Figure ES-8. Large-Caliber Weapons Noise Exposure Within the NTTR**

1  
2

- 1 Refer to Table ES-1 and Table ES-2 for the noise modeling results for Alternatives 2
- 2 and 3. There would be no adverse impacts from noise associated with aircraft
- 3 operations under Alternatives 2, 3A, 3A-1, 3B, and 3C.

4 **Table ES-1. Summary of L<sub>dnmr</sub> Values for SUAs**

SUA Name	Baseline	Alternative 2	Alternative 3
	L <sub>dnmr</sub> (dBA)	L <sub>dnmr</sub> (dBA) (Change)	L <sub>dnmr</sub> (dBA) (Change)
R-4806	60	61 (+1)	61 (+1)
R-4807	66	67 (+1)	67 (+1)
R-4808	<45	46 (+1)	46 (+1)
R-4809	69	70 (+1)	70 (+1)
Caliente	67	68 (+1)	68 (+1)
Coyote	67	68 (+1)	68 (+1)
Elgin	60	61 (+1)	61 (+1)
Reveille	61	62 (+1)	62 (+1)
Sally	<45	<45 (+0)	<45 (+0)
VR-209	<45	<45 (+0)	<45 (+0)
VR-222	<45	<45 (+0)	<45 (+0)

< = less than; dBA = A-weighted decibels; L<sub>dnmr</sub> = onset-rate adjusted monthly day-night average sound level; SUA = Special Use Airspace

5 **Table ES-2. Summary of Sonic Boom CDNL Values for SUA**

SUA Name	Baseline		Alternative 2		Alternative 3	
	CDNL (dBC)	Booms per Day	CDNL (dBC) (Change)	Booms per Day (Change)	CDNL (dBC) (Change)	Booms per Day (Change)
R-4806	58	1	59 (+1)	2 (+1)	59 (+1)	2 (+1)
R-4807	51	2	52 (+1)	2 (+0)	52 (+1)	2 (+0)
R-4808	54	1	55 (+1)	1 (+0)	55 (+1)	1 (+0)
R-4809	60	1	61 (+1)	2 (+1)	61 (+1)	2 (+1)
Caliente	61	5	62 (+1)	6 (+1)	62 (+1)	6 (+1)
Coyote	60	2	61 (+1)	3 (+1)	61 (+1)	3 (+1)
Elgin	54	1	55 (+1)	1 (+0)	55 (+1)	1 (+0)
Reveille	56	1	57 (+1)	1 (+0)	57 (+1)	1 (+0)
Sally	57	1	58 (+1)	2 (+1)	58 (+1)	2 (+1)

CDNL = C-weighted day-night average sound level; dBC = C-weighted decibels; SUA = Special Use Airspace

- 6 Munitions use and emitter operations would not occur within areas associated with
- 7 Alternatives 3A, 3A-1, or 3B. Increases in noise levels from ground-disturbing activities
- 8 would be minimal (less than 1 dB). As shown in Table ES-3, activities proposed under
- 9 Alternative 3C would also result in a less than 1-dB increase in noise levels.

10 **Table ES-3. Construction Noise Level Expected from Each Emitter Pad Construction Site**

Distance to Receptor (feet)	L <sub>max</sub> (dBA)	L <sub>10</sub> (dBA)
100	79.0	82.6
200	73.0	76.6
300	69.4	73.0
400	66.9	70.5
500	65.0	68.6
600	63.4	67.0

dBA = A-weighted decibels; L<sub>10</sub> = loudest 10% noise level; L<sub>max</sub> = maximum noise level

1 No specific noise impacts are associated with any subalternatives of Alternative 4;  
2 impacts would be the same as those described for the other action alternatives, with  
3 Alternative 4 defining the timeframe over which those impacts may occur.

4 Under the No Action Alternative, noise associated with military activities would decrease  
5 greatly initially. Over time, appropriative land uses could potentially be reintroduced  
6 which could result in noise impacts, but the level of significance cannot be determined  
7 at this time.

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### 8 **ES.4.3 AIR QUALITY**

9 As detailed in Section 3.3.1 of the LEIS, the region of influence (ROI) for the air quality  
10 analysis includes Clark, Lincoln, and Nye Counties. Section 3.3.2.1 of the LEIS outlines  
11 the methodology used for the air quality analysis. Under Alternative 1, operational  
12 tempo would continue at baseline levels, which are not considered to result in significant  
13 adverse impacts to air quality. For Alternative 2, aircraft operations, vehicle operations,  
14 and munitions use were all assumed to increase by approximately 30 percent from  
15 those levels stated for Alternative 1. However, increases in criteria pollutant and  
16 greenhouse gas (GHG) levels would be minimal and those from construction activities  
17 would be temporary, resulting in less than significant impacts to regional air quality.  
18 Emissions associated with ground-disturbing activities, vehicle use, and installation of  
19 perimeter fencing proposed under Alternatives 3A, 3A-1, and 3B would only result in  
20 minimal increases in criteria pollutant and GHG levels. Blank munitions use, emitter  
21 operations ground disturbance, vehicle use, and construction activities proposed under  
22 Alternative 3C would also minimally increase criteria pollutant and GHG levels.  
23 Therefore, no significant adverse impacts to regional air quality under Alternatives 3A,  
24 3A-1, 3B, and 3C are anticipated. Table ES-4 lists the emissions associated with each  
25 alternative as it relates to emissions generated. No specific air quality impacts are  
26 associated with any subalternatives of Alternative 4; impacts would be the same as  
27 those described for the other action alternatives, with Alternative 4 defining the  
28 timeframe over which those impacts may occur. Emissions are analyzed on an annual  
29 basis, and there are no known or anticipated changes to criteria pollutants or GHG  
30 emissions affected by the period of withdrawal. Under the No Action Alternative, criteria  
31 pollutant and GHG emissions associated with military activities would decrease greatly  
32 initially, and air quality would likely improve overall. Over time, industrial activities such  
33 as mining and cleanup activities requiring heavy machinery use could be associated  
34 with increased air emissions overall. Further, public use in these areas could also  
35 contribute to increased overall air emissions through vehicle operation, firearms use,  
36 and other recreational activities. Air quality impacts may occur under the No Action  
37 Alternative, but significance cannot be determined at this time.

1

**Table ES-4. Alternatives Comparison of Emissions**

Source	Pollutant (tons/year)						
	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>	VOC	CO <sub>2e</sub>
Alternative 1 Emissions	823.14	2,464.28	548.47	513.11	122.61	142.55	464,003
Alternative 2 Emissions	322.00	770.36	225.87	155.41	37.15	51.14	149,802
Alternative 3 Emissions	348.49	778.96	293.81	155.73	37.18	53.86	153,388
<b>Total Alternative 1, 2, and 3 Emissions</b>	<b>1,493.63</b>	<b>4,013.61</b>	<b>1,068.16</b>	<b>824.26</b>	<b>196.94</b>	<b>247.55</b>	<b>767,193</b>
<b>Total ROI Baseline</b>	<b>398,567</b>	<b>53,433</b>	<b>69,705</b>	<b>17,576</b>	<b>7,417</b>	<b>501,115</b>	<b>12,179,548</b>
<b>Percent of ROI</b>	<b>0.37%</b>	<b>7.51%</b>	<b>1.53%</b>	<b>4.69%</b>	<b>2.66%</b>	<b>0.05%</b>	<b>6.30%</b>

CO = carbon monoxide; CO<sub>2e</sub> = carbon dioxide equivalent; NO<sub>x</sub> = nitrogen oxides; PM<sub>10</sub> or PM<sub>2.5</sub> = particulate matter with a diameter less than or equal to 10 or 2.5 microns, respectively; ROI = region of influence; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compound

<sup>1</sup> Source: (EPA, 2016c)

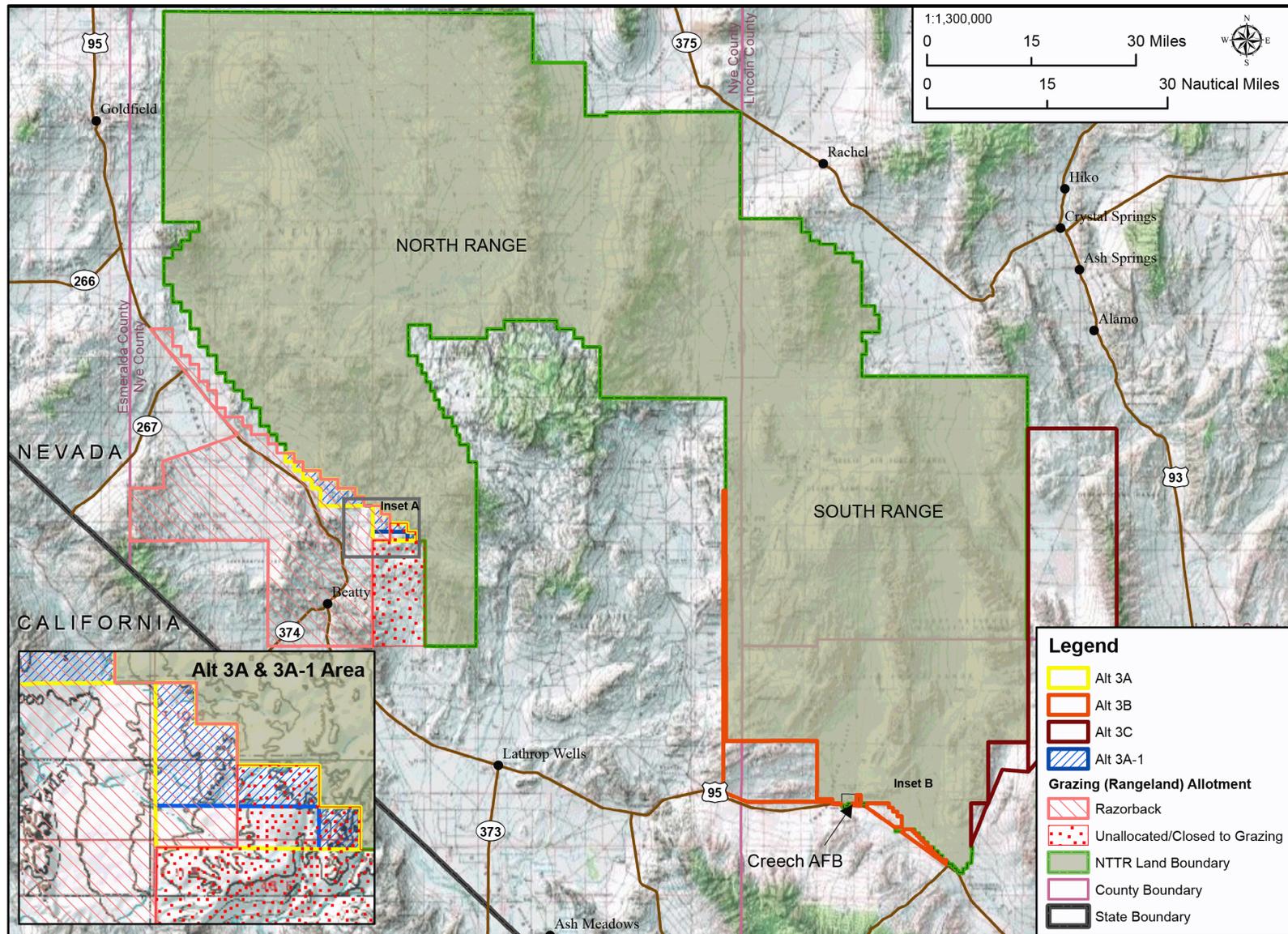
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## **ES.4.4 LAND USE, RECREATION, AND VISUAL RESOURCES**

3 Land use generally refers to the management and use of land by people, often for  
 4 residential or economic purposes. General land use, ownership, and management plans  
 5 associated with the NTTR ROI are described in Section 3.4.1.3 of the LEIS. Figure ES-9  
 6 shows BLM grazing allotments that occur within the proposed withdrawal areas for  
 7 Alternatives 3A and 3A-1. Recreational resources primarily include outdoor recreational  
 8 activities that occur away from an individual's place of residence. Refer to Section  
 9 3.4.1.4 of the LEIS for a description of recreation and special use areas considered in  
 10 the analysis. Figure ES-10 depicts the Nevada Wild Horse Range and herd  
 11 management areas (HMAs) that occur within the NTTR ROI. Figure ES-11 and  
 12 Figure ES-12 show recreational resources within the NTTR ROI. Visual resources  
 13 include both natural and man-made features of the landscape visible from public  
 14 viewpoints, such as topography, water, vegetation, man-made features, as well as the  
 15 degree of panoramic views available. Section 3.4.1.5 of the LEIS describes visual  
 16 resources included in the analysis. The methodology used to assess impacts to these  
 17 resources is described in Section 3.4.2.1 of the LEIS.

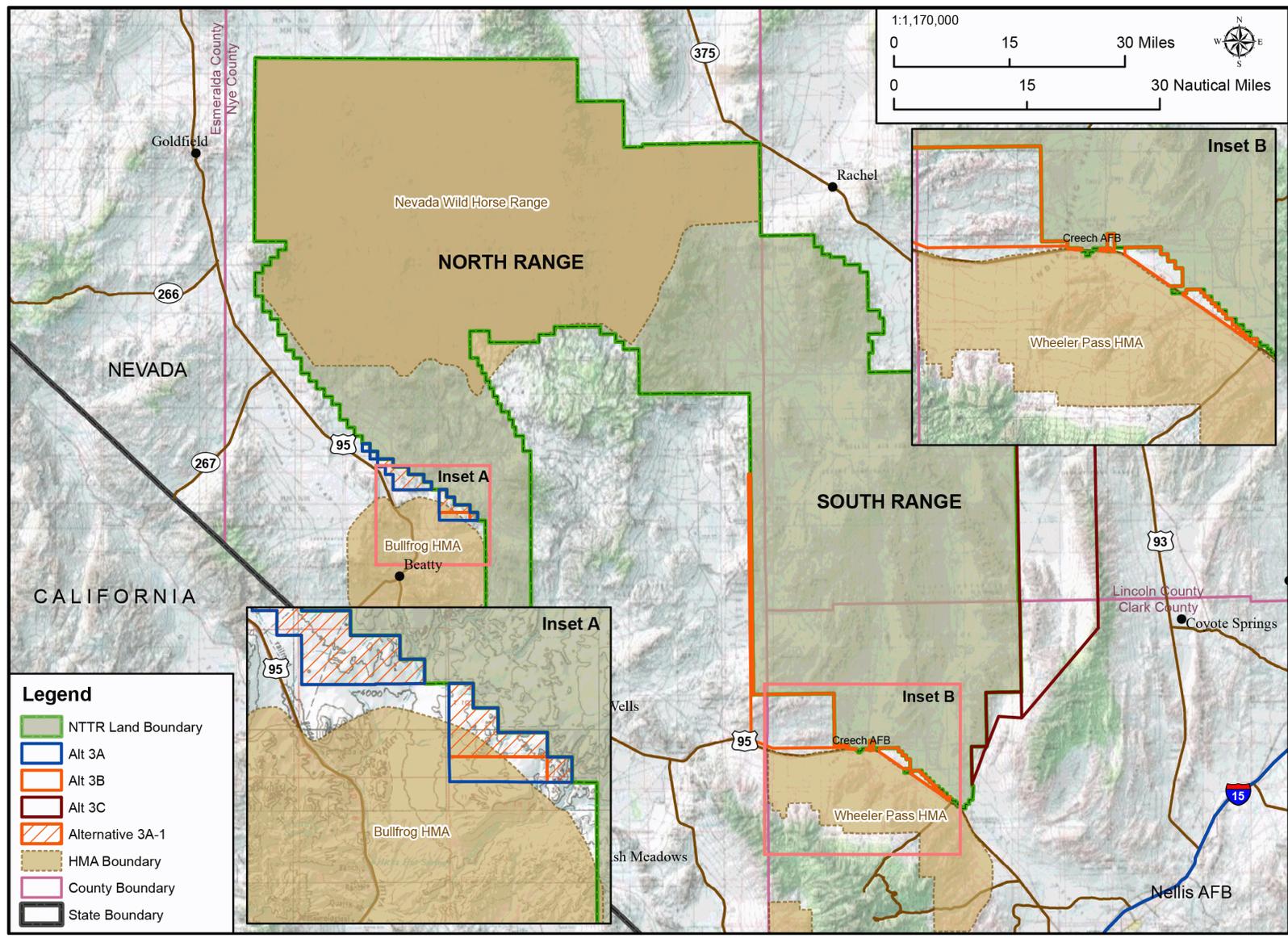
18 For Alternative 1, land use, recreation, and visual resources on the NTTR would  
 19 continue as described under current baseline conditions, including implementation of  
 20 existing land and visual resource management plans.

21 Land use under Alternative 2 would remain relatively unchanged in the North Range,  
 22 but would change significantly in the South Range under ready access, to where the  
 23 areas proposed for wilderness would no longer be managed as wilderness. The Air  
 24 Force would continue to allow limited bighorn sheep hunting during the currently  
 25 designated hunting season. Changing land management in the South Range to provide  
 26 ready access under Alternative 2 would allow for implementation of previously restricted  
 27 activities, which may significantly depart from the existing visual context of an  
 28 "untrammled" natural environment free of human modification, as well as introduce  
 29 new lighting sources that could permanently affect the natural night skies through the  
 30 creation of light pollution and sky glow.



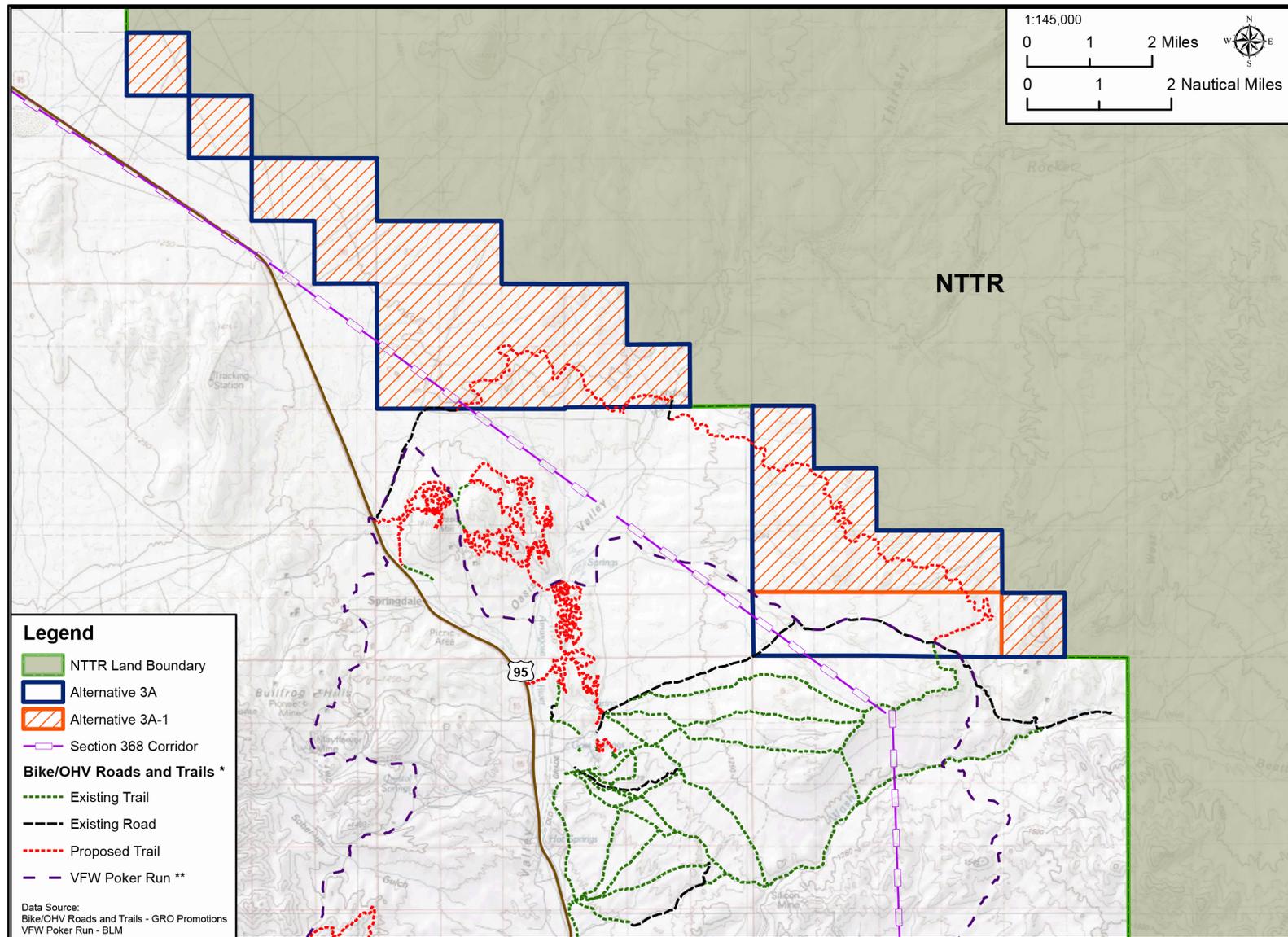
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**Figure ES-9. BLM Grazing Allotments Within the Range 77 – EC South Withdrawal Area**



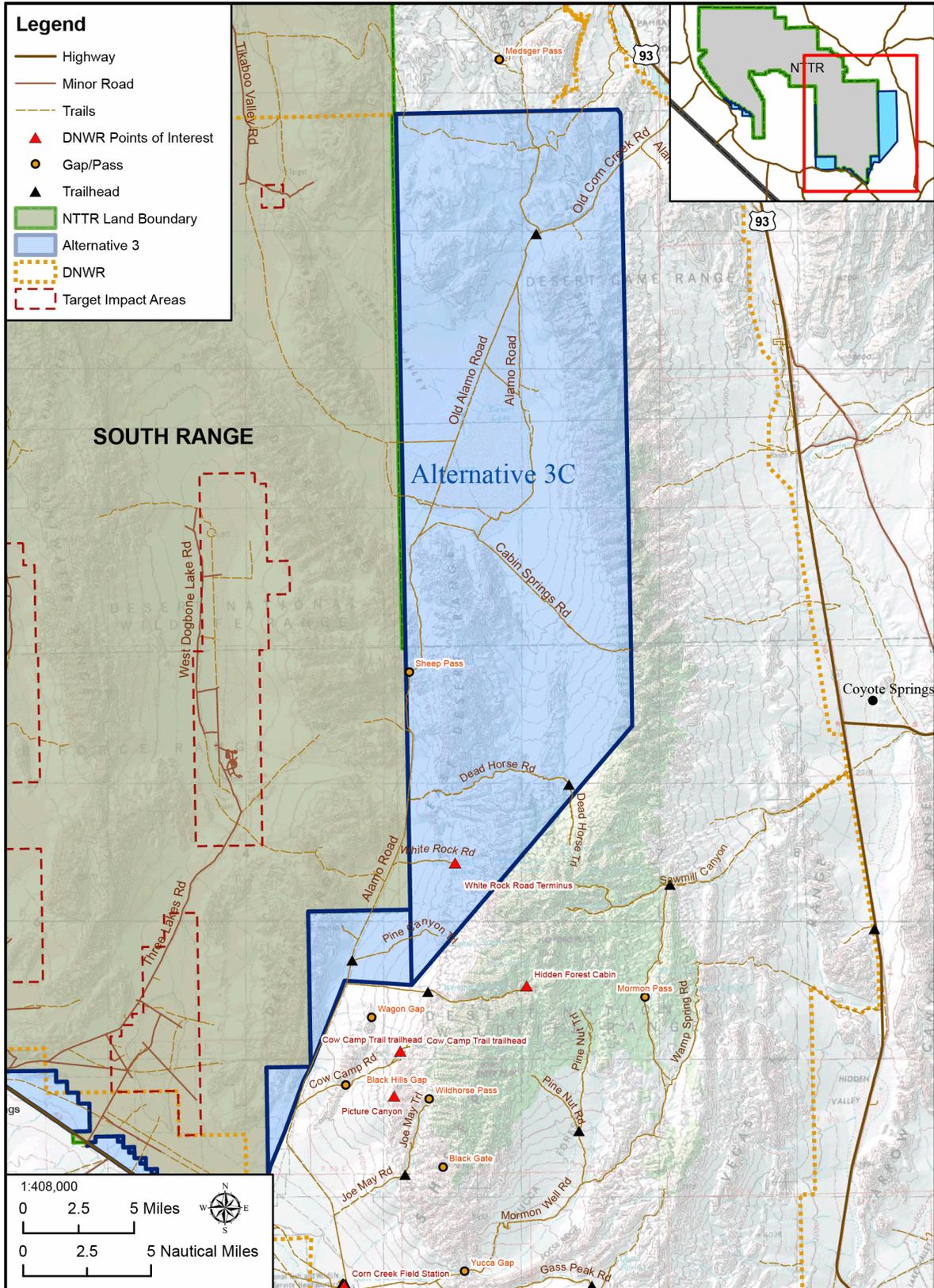
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Figure ES-10. Nevada Wild Horse Range and Herd Management Areas



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**Figure ES-11. Range 77 – EC South Withdrawal Area Bike and OHV Roads and Trails**



1

2

Figure ES-12. Roads, Parking Areas, and Trails Within Alternative 3C Boundary

1 For Alternative 3A, additional land use impacts would result from restricted access in  
2 the proposed expansion area. This would affect one active mining claim and eliminate  
3 existing recreational uses (i.e., biking and off-highway vehicle [OHV] use) within the  
4 area. Hunting is likely to continue to be allowed but it could be temporarily limited during  
5 certain military training activities. Impacts to the Bullfrog HMA are not expected but  
6 because fencing locations are not known at this time, the Air Force would need to  
7 perform site-specific NEPA analysis in those situations where fencing might overlap the  
8 HMA. There would be no changes to visual resource management designations.  
9 Changes made to prevent access, such as fencing, are consistent with existing  
10 management objectives and visual characteristics; therefore, impacts would not  
11 substantially increase over baseline conditions. The landscape changes would not  
12 introduce new light sources; therefore, impacts to natural night skies would not increase  
13 over baseline conditions.

14 As a result of the reduction in the amount of land area to be withdrawn under Alternative  
15 3A-1, there would be a reduction in the land use and recreation impacts as discussed  
16 under Alternative 3A. One active mining claim would be affected. The affected acreage  
17 of the unallocated grazing area and Razorback grazing allotment would be reduced by a  
18 total of approximately 2,600 acres. Less acreage would also be affected in the Nevada  
19 Department of Wildlife hunting unit 253 and the Bullfrog HMA. Alternative 3A-1 would  
20 eliminate the impact to an existing 4.2-mile section of the Trails-OV Transvaal Flats Trail  
21 System (Windmill Road) and 0.24-mile of the Ridgeline Trail. It would also eliminate the  
22 impact to about 4 miles of the road/trail system that is used for OHV activities like the  
23 Beatty VFW Bullfrog Poker Run and the Best in the Desert Vegas to Reno off-road race.  
24 The potential impacts to visual resources under Alternative 3A-1 would be the same as  
25 those discussed under Alternative 3A, as the amount of linear feet required to fence the  
26 area would be similar.

27 For Alternative 3B, additional impacts to land use and recreational use within the  
28 proposed expansion area would be limited due to the lack of designated roads and  
29 trails. Hunting is likely to continue to be allowed but it could be temporarily limited during  
30 certain military training activities. The Air Force would need to perform site-specific  
31 NEPA analysis if perimeter fencing would overlap the Wheeler Pass HMA. No changes  
32 to visual resource management designations would occur and use would be consistent  
33 with existing management objectives; however, minor changes to the landscape as a  
34 result of fencing and ground disturbance associated with these activities would create  
35 dispersed modification. Therefore, minor impacts to the visual qualities and the visual  
36 resources of the area are anticipated. Impacts would not substantially increase over  
37 baseline conditions because portions of this area are already characterized by human  
38 development. Non-permanent and dispersed light sources may be introduced as part of  
39 the infrastructure used in training activities; these light pollution sources could cause a  
40 small but temporary increase of adverse impacts to natural night skies over baseline  
41 conditions.

42 Under Alternative 3C, land use impacts could potentially be significant. Existing land  
43 use within the affected DNWR area would go from a wildlife management and  
44 recreation area to a military training area. Areas for current recreational activities (e.g.,

1 hiking, bird-watching, backpacking, and horseback riding) would become closed to the  
2 public for safety and security reasons. Hunting is likely to continue to be allowed but  
3 would be limited to times when there are no military training activities occurring. The  
4 change in land management as part of this alternative, which includes introduction of  
5 previously restricted activities in an otherwise untrammled landscape, would change  
6 the area from “undeveloped” to one with human development and interference. The  
7 visual resources management designations and objectives in the proposed expansion  
8 area would need to be modified in order to support the new activities. In addition, any  
9 development and infrastructure improvements could introduce permanent or persistent  
10 light-emitting sources that contribute to light pollution in the region and thus adversely  
11 impact natural night skies. Impacts to natural night skies would be worse over areas  
12 where persistent and permanent light sources are concentrated.

13 No specific land use, recreational, or visual impacts would be associated with  
14 Alternative 4; impacts would be the same as those described for the other action  
15 alternatives, with Alternative 4 defining the timeframe over which those impacts may  
16 occur.

17 Under the No Action Alternative, military activities and land use restrictions would expire  
18 and other land uses could potentially be reintroduced into previously restricted areas.  
19 The DNWR would withdraw the South Range from mining, and cleanup activities  
20 conducted by the Air Force would be localized and short-term. There could also be  
21 increased recreational use of the former NTTR lands, but due to past activities and use,  
22 certain areas would continue to have restricted access. The conditions on the South  
23 Range would be managed in the same manner as those on the east side of the DNWR.  
24 Current land use management objectives of BLM lands on the perimeter or the vicinity  
25 of the NTTR would continue, and no changes in the land status of these adjacent lands  
26 would be expected. The expiration of military activities and subsequent mitigation of  
27 contaminated sites would be consistent with the baseline landscape characteristics of  
28 the human-modified environment; therefore, no significant impacts are anticipated.  
29 Cessation of military activities and removal of the associated infrastructure may have a  
30 positive impact on the night skies by eliminating sources of light pollution.

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#### 31 **ES.4.5 WILDERNESS AND WILDERNESS STUDY AREAS**

32 Based on the legal definition of Wilderness Area, there are five qualities of wilderness  
33 character: untrammled; natural; undeveloped; solitude or primitive and unconfined  
34 recreation; and other features of value. Section 3.5.1.1 in the LEIS defines each of  
35 these qualities and identifies the criteria that must be present for an area to be  
36 considered for wilderness designation. Wilderness Areas, Wilderness Study Areas  
37 (WSAs) and areas proposed for wilderness (managed as de facto wilderness) within the  
38 NTTR ROI are described in Section 3.5.1.3 of the LEIS. Section 3.5.2.1 in the LEIS  
39 describes the methodology used to assess impacts to wilderness.

40 For Alternative 1, no changes to the land boundaries or baseline NTTR operations  
41 would occur. No impacts to untrammled, natural, and undeveloped qualities are

1 anticipated. Solitude or primitive and unconfined recreation quality of Wilderness Areas,  
2 WSAs, and areas proposed for wilderness may be adversely impacted from noise  
3 associated with aircraft operations, munitions use, and emitter operations. Impacts  
4 would not increase over baseline conditions.

5 Under Alternative 2, ready access may be directed through a Congressionally directed  
6 change and would reduce the land area managed as de facto wilderness within the  
7 DNWR by 590,000 acres (42 percent). However, based on the amount of land  
8 remaining that possess wilderness qualities in the region, Alternative 2 would not  
9 significantly reduce the opportunity of people to experience wilderness in the region.  
10 Impacts to wilderness qualities within Wilderness Areas, remaining areas proposed for  
11 wilderness, and WSAs outside the NTTR withdrawal boundaries were considered in the  
12 analysis. Similar to Alternative 1, no impacts to untrammeled, natural, and undeveloped  
13 qualities are anticipated. Solitude or primitive and unconfined recreation of surrounding  
14 areas with wilderness characteristics may be adversely impacted from noise associated  
15 with increased aircraft operations, munitions use, and emitter operations. Increased air  
16 operations would not substantially increase noise levels; therefore, impacts are not  
17 expected to appreciably increase over baseline conditions.

18 There are no Wilderness Areas, WSAs, or areas proposed for wilderness within or  
19 adjacent to the proposed Range 77 expansion area for Alternative 3A or 3A-1;  
20 therefore, there would be no impacts to wilderness associated with those alternatives.

21 For Alternative 3B, about 33,000 acres (2 percent) of areas proposed for wilderness  
22 within the DNWR would be impacted by this proposed expansion. Impacts to solitude or  
23 primitive and unconfined recreation would result from increased levels of aircraft  
24 operations and munitions use within the current NTTR (noise associated with the  
25 munitions). Impacts would not appreciably increase over baseline conditions. Ground  
26 disturbance activities associated with perimeter fencing would impact the undeveloped  
27 quality of remaining areas proposed for wilderness outside the NTTR boundary;  
28 however, impacts would not substantially increase over baseline conditions because  
29 portions of this area have already been shown to be disturbed.

30 For Alternative 3C, approximately 227,000 acres (16 percent) of areas proposed for  
31 wilderness within the DNWR would be impacted by this proposed expansion. Impacts to  
32 solitude or primitive and unconfined recreation in surrounding Wilderness Areas, areas  
33 proposed for wilderness, and WSAs would result from increased levels of aircraft  
34 operations, munitions use (associated noise), and emitter operations. Noise levels  
35 would only marginally increase; therefore, impacts would not substantially increase over  
36 baseline conditions. Ground disturbance activities associated with perimeter fencing  
37 would adversely impact the undeveloped quality of remaining areas proposed for  
38 wilderness outside the NTTR boundary.

39 Impacts to areas proposed for wilderness from the withdrawal periods proposed under  
40 Alternative 4 are dependent on the combination of alternatives selected. Selection of  
41 Alternative 1 would not result in any changes to the management of areas proposed for  
42 wilderness in the South Range. In this scenario, the length of the withdrawal period may  
43 result in an improvement of wilderness characteristics in areas proposed for wilderness.

1 Selection of Alternative 3A or 3A-1 would not affect wilderness. Selection and  
2 implementation of Alternative 2, Alternative 3B, and/or Alternative 3C would reduce the  
3 total area managed as wilderness in southern Nevada. Under those alternatives, the  
4 length of the withdrawal period is not relevant, because wilderness characteristics would  
5 no longer need to be considered. As a result, there would be no impacts to wilderness  
6 for Alternative 4A, 4B, or 4C if Alternative 2, 3A, 3B, or 3C is selected. Wilderness  
7 Areas, WSAs, and areas proposed for wilderness outside the NTTR boundaries would  
8 continue to experience impacts to solitude qualities from noise associated with military  
9 activities, but other wilderness qualities would not be impacted. Continued management  
10 practices of Wilderness Areas, WSAs, and areas proposed for wilderness outside the  
11 NTTR would conserve and improve wilderness qualities over the various time periods  
12 proposed for Alternatives 4A, 4B, and 4C.

13 Under the No Action Alternative, the absence of ground military operations at NTTR  
14 would allow for other land uses to be reintroduced to these areas, such as mining,  
15 livestock grazing, or mineral leasing. The land areas would also be subject to BLM and  
16 USFWS management objectives, which would likely improve wilderness characteristics  
17 of areas proposed for wilderness in the former South Range. Additionally, without  
18 military control of ground areas, air operation would decrease and noise impacts that  
19 affect solitude or primitive and unconfined recreation would be reduced.

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#### 20 **ES.4.6 SOCIOECONOMICS**

21 Socioeconomics refers to features or characteristics of the social and economic  
22 environment. Sections 3.6.1.3 through 3.6.1.8, as well as Appendix G, of the LEIS  
23 describe the economics, land use and ownership, population, housing, public services  
24 and facilities, and public finance associated with Clark, Lincoln, and Nye Counties,  
25 where the majority of impacts would be anticipated to occur.

26 Under Alternative 1, the total economic impact of the Nellis AFB, Creech AFB, and  
27 NTTR activities was estimated at \$5.549 billion during 2015. The Nellis AFB Economic  
28 Impact Assessment model estimates that the number of indirect and induced jobs was  
29 5,783 for 2015 with a total indirect/induced payroll of \$242.6 million. Continuing the  
30 current land withdrawal and training activities would have no further impact on the  
31 region than the baseline economic impact.

32 For Alternative 2, the estimated economic increase associated with lodging and per  
33 diem for temporary-duty personnel associated with a 30 percent increase in aircraft  
34 operations would be approximately \$67 million per year, primarily in Clark County.

35 The withdrawal of the additional acreage under Alternative 3A may have a potential  
36 impact on the Payment in Lieu of Taxes (PILT) for Nye County of approximately \$6,400.  
37 The current recreational uses of the land along with any agricultural activities such as  
38 grazing that may be taking place on those lands would likely be eliminated or available  
39 to the public on a limited basis or through specific agreements (in cases such as grazing  
40 rights). Certain recreational uses, particularly near the NTTR boundary towards the

1 town of Beatty, Nevada, including 4.88 miles of proposed bike trails and potentially  
2 portions of off-road racing routes, may be impacted depending on the routes, which vary  
3 between years. Additional expenditures from the new training configurations potentially  
4 could offset some of the resulting economic losses. The BLM Razorback grazing  
5 allotment, which is impacted by Alternative 3A, consists of 266,329 acres and has an  
6 allotment of 1,926 animal unit months (AUM<sup>1</sup>). Currently, there are 386 AUM  
7 suspended. Assuming uniform forage production within the allotment, an 18,000-acre  
8 reduction in the allotment due to Alternative 3A would be 6 percent or \$128,000.  
9 However, it should be noted that this would be an 83 percent reduction in available  
10 grazing area to the rancher leasing the AUM and would be a significant impact. The Air  
11 Force plans to work directly with the rancher to address this impact. In addition, to  
12 minimize potential conflicts between NTTR operations and population, housing, and  
13 economic activity in the region (to include grazing and mining), the Air Force would  
14 continue coordination between the military and local and regional planning departments.

15 The additional rights-of-way proposed under Alternative 3A that cross into Corridor  
16 18-224 may impact its use. BLM is currently in the process of revising their resource  
17 management plan, which is proposing corridor revisions. Plans call for the corridor to  
18 be reviewed in its entirety in 2018.

19 Impacts under Alternative 3A-1 would be similar to those stated under Alternative 3A.  
20 As a result in the reduction of land area that would be withdrawn (2,592 acres) under  
21 Alternative 3A-1, there would be an estimated reduction of approximately \$5,500 in  
22 PILT allocation to Nye County. One of the new proposed bike trails being developed in  
23 the Beatty, Nevada, area would be impacted by the proposed expansion under  
24 Alternative 3A-1. However, the Best in The Desert's Beatty-to-Dayton race route and  
25 the Section 368 Energy Corridor would no longer be impacted. Alternative 3A-1 would  
26 overlap areas of grazing allotments and reduce grazing in Nye County by about  
27 15,000 acres. The BLM Razorback grazing allotment would also be impacted by  
28 Alternative 3A-1; however, the allotment capacity reduction and potential economic  
29 impact would be approximately the same as Alternative 3A.

30 For Alternative 3B, the withdrawal of the additional acreage may have a potential impact  
31 on the PILT for Nye County of \$3,600. There are approximately 26,000 acres of BLM-  
32 managed lands that are included in Alternative 3B that could be used for hiking and  
33 recreational activities. Loss of this area would have a value of approximately \$228,020.

34 For Alternative 3C, current recreational uses of the land would likely be eliminated or  
35 available to the public on a limited basis or through specific agreements. The estimated  
36 recreational-use economic impact would be \$1,990,790 under Alternative 3C.  
37 Additional expenditures from the new training configurations potentially could offset  
38 some of the resulting economic losses.

39 With each time period proposed under Alternative 4, it is assumed that economic  
40 indicators would increase at the national average of 2.2 percent annually, which has

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<sup>1</sup> The AUM provides sufficient forage for one cow and calf for a month.

1 been the national average based on the last 17 years. Alternative 2 combined with  
2 Alternative 4 would likely include increased annual expenditures associated with the  
3 increased NTTR use and continue to provide economic stimulus throughout the region.

4 The No Action Alternative would result in the removal of Air Force and DOE/NNSA  
5 activities from the NTTR. The initial impact would be a \$500.8 million reduction in  
6 economic impact, including a \$138 million reduction in payroll, a \$340 million reduction  
7 in expenditures, and a \$21 million reduction due to the loss of jobs. The removal of all  
8 facilities and buildings from the NTTR and Creech AFB is estimated to cost  
9 \$213 million. Secondly, the cost for full decontamination of the NTTR is estimated at  
10 about \$2.5 billion. These actions would delay opening some of the NTTR land to public  
11 use by up to 18 years, particularly land where decontamination is necessary. The  
12 replacement costs of facilities on the NTTR are estimated at \$122 million and  
13 \$1.1 billion at Creech AFB. A new range location may also require moving the  
14 aggressor squadrons and facilities from Nellis AFB to the new location. The acres in  
15 Nye County eligible for PILT payments would add, at 2016 rates, an estimated  
16 \$682,000 to the Nye County PILT payments. Clark and Lincoln County payments are  
17 estimated with population limitations and would not necessarily experience such direct  
18 impacts on the magnitude of their PILT payments.

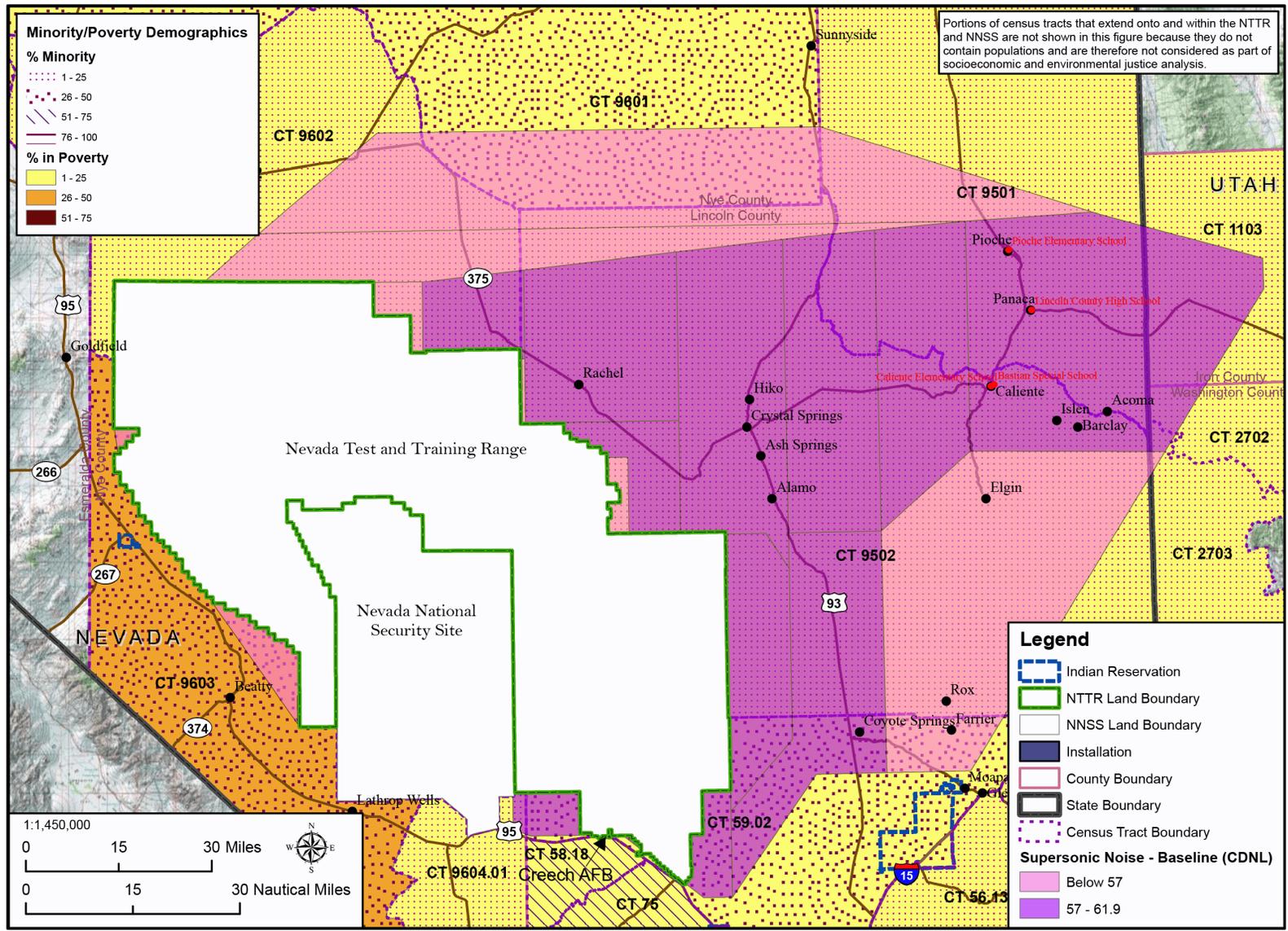
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#### 19 **ES.4.7 ENVIRONMENTAL JUSTICE**

20 Section 3.7.1 of the LEIS defines environmental justice as it pertains to the analysis,  
21 and Section 3.7.2.1 describes the methodology used to assess environmental justice  
22 impacts.

23 For Alternative 1, aircraft, operations, munitions use, ground disturbance, and emitter  
24 operations would continue as described under baseline conditions. No  
25 disproportionately high and adverse impacts to environmental justice communities and  
26 no disproportionately high and adverse environmental health and safety impacts to  
27 children are anticipated under this alternative.

28 For Alternative 2, six census tracts and the associated environmental justice and  
29 youth/elderly populations residing under the Caliente and Coyote Special Use Airspaces  
30 (SUAs) that are currently exposed to 65- to 69-dB day-night average sound level (DNL)  
31 associated with subsonic aircraft noise would continue to be exposed to this range of  
32 noise. Figure ES-13 shows environmental justice communities of concern potentially  
33 exposed to supersonic booms under Alternative 2. Munitions use would continue as  
34 under existing conditions and noise levels of 62 C-weighted DNL (CDNL) outside of the  
35 NTTR boundary would not extend into populated areas. No adverse significant noise or  
36 safety impacts associated with ground disturbance, munition use, and emitter  
37 operations have been identified that would impact the public. Therefore, no  
38 disproportionately high and adverse impacts to environmental justice communities or  
39 disproportionately high and adverse environmental health and safety impacts to children  
40 would be anticipated from aircraft operations resulting in subsonic noise over and above  
41 current baseline conditions under this alternative.



1 For Alternatives 3A, 3A-1, 3B, and 3C, the potential impacts to environmental justice  
2 and youth and elderly populations resulting from supersonic and subsonic aircraft noise,  
3 as well as munitions use, would be similar to those described for Alternative 2. Refer to  
4 Figure ES-13 for environmental justice communities of concern potentially exposed to  
5 noise associated with supersonic booms under Alternative 3. No ground disturbance  
6 activities that would impact the public or emitter operations would occur within  
7 Alternative 3A, 3A-1, or 3B's proposed expansion areas. Therefore, no  
8 disproportionately high and adverse impacts to environmental justice communities or  
9 disproportionately high and adverse environmental health and safety impacts to children  
10 from ground disturbance or emitter operations would be anticipated with these proposed  
11 expansion areas.

12 Under Alternative 3C, no adverse noise or safety impacts associated with ground  
13 disturbance have been identified that would impact the public (see LEIS Section 3.2,  
14 Noise, and LEIS Section 3.13, Health and Safety), and there would be no ground  
15 disturbance performed on or in close proximity to cultural or historical sites or other  
16 noise-sensitive areas. Additionally, no adverse noise or safety impacts associated with  
17 potential emitter operations have been identified that would impact the public (see LEIS  
18 Section 3.2, Noise, and LEIS Section 3.13, Safety). Therefore, no disproportionately  
19 high and adverse impacts to environmental justice communities or disproportionately  
20 high and adverse environmental health and safety impacts to children from ground  
21 disturbance or emitter operations would be anticipated with Alternative 3C.

22 There are no specific environmental justice impacts associated with Alternative 4,  
23 except to provide a period of time during which impacts from other chosen alternatives  
24 may occur.

25 Activities associated with the NTTR are an important economic contributor, and under  
26 the No Action Alternative there would be a loss of employment, income, and  
27 expenditures throughout the three counties. Adverse socioeconomic impacts would  
28 affect the general public and would not impact only minority, low-income, youth, and  
29 elderly populations. Therefore, no disproportionate impacts to environmental justice  
30 populations are anticipated under this alternative.

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## 31 **ES.4.8 BIOLOGICAL RESOURCES**

32 Biological resources include vegetation and wildlife species and their associated  
33 habitats, aquatic and wetland habitats, special status species and habitats, and  
34 federally listed species. These categories are described in detail in Sections 3.8.1.3  
35 through 3.8.1.6 of the LEIS. Section 3.8.1.7 of the LEIS outlines specific management  
36 guidelines for biological resources that are typically implemented prior to any proposed  
37 action. These management practices are ongoing as part of the NTTR natural  
38 resources management program and will continue to be periodically reviewed and  
39 revised, as well as implemented, to ensure management of the NTTR meets the goals  
40 and objectives of the military mission, which includes maintaining ecosystem integrity

1 through good stewardship and protecting existing biodiversity during any military  
2 planning or activities.

3 Under Alternative 1, there would be no changes to air operations or existing airspace,  
4 and no changes in land area or baseline NTTR uses are anticipated. Wildlife may be  
5 adversely impacted from noise associated with aircraft operations, munitions, and  
6 emitter operations, but impacts would not increase over baseline conditions. Therefore,  
7 impacts to biological resources would remain less than significant. Impacts associated  
8 with the continued withdrawal of the NTTR could be beneficial to biological resources as  
9 the lands would continue to be managed by the Air Force under the Sikes Act.  
10 Environmental review (NEPA analysis) and planning would be required prior to any  
11 future construction or ground clearing, which would avoid or reduce impacts to  
12 biological resources to neutral or less than significant.

13 Aircraft operations would increase under Alternative 2; however, impacts to biological  
14 resources (e.g., wildlife) from noise and aircraft strikes are not expected to appreciably  
15 increase over baseline conditions. Increased potential for direct impacts to biological  
16 resources could occur from an associated increase in use of existing target areas;  
17 construction and maintenance of new facilities, targets, or roads; placement of threat  
18 emitters; and increased ground training (including access by vehicles and personnel).  
19 Increased potential for indirect impacts could occur from soil contamination and  
20 subsequent cleanup of target impact areas; accidents such as fuel spills or fire; or non-  
21 native species invasion in areas previously inaccessible for military training. However,  
22 impacts would likely be site-specific, represent a small portion of the area within the  
23 NTTR, and be reduced through proper planning, monitoring, and maintenance. Impacts  
24 associated with potential increases in military training within the areas that were  
25 proposed for wilderness in the NTTR South Range currently managed as wilderness  
26 could be avoided or minimized through proper planning, monitoring, and maintenance,  
27 as under current Air Force management practices. Additionally, environmental review  
28 and planning would be required prior to any future construction or ground clearing,  
29 which would avoid or reduce impacts to biological resources to neutral or less than  
30 significant.

31 For Alternative 3A, impacts to biological resources (e.g., wildlife) from noise and aircraft  
32 strikes would be less than significant. No military ground operations are proposed in this  
33 area, as the area would be used as a safety buffer. The additional land would be  
34 managed the same as the existing NTTR withdrawn lands under current Air Force  
35 management practices. Environmental review and planning would be required prior to  
36 any future construction or ground clearing, which would avoid or reduce impacts to  
37 biological resources to neutral or less than significant. Perimeter fencing along the 25-  
38 mile boundary has the potential to impact biological resources by removing native  
39 vegetation or special status plant species, fragmenting wildlife habitat, creating barriers  
40 for wildlife movement, causing injury to large mammals that run into or get caught in the  
41 fence, increasing threats due to predation from supplemental perches via fencing,  
42 damming or altering streams, or creating corridors for weed dispersion. The level of  
43 impacts to biological resources from fencing may be adverse but could be avoided or  
44 minimized depending on the biological resources affected and implementation of

1 associated mitigation measures. A fence maintenance and monitoring plan that  
2 includes appropriate fence design for wildlife in the area and no fencing in mountainous  
3 areas would further avoid or reduce impacts.

4 Potential impacts to biological resources from Alternative 3A-1 would be similar to  
5 Alternative 3A. Impacts associated with the withdrawal of 15,314 acres (2,592 acres  
6 less than Alternative 3A) in the proposed EC South withdrawal area could be beneficial  
7 (an additional 15,314 acres of land would be excluded from other uses) or adverse  
8 (should construction or clearing of lands be proposed at a future date), but are likely to  
9 be low intensity and thus neutral or less than significant. Perimeter fencing along the  
10 boundary has the potential to impact biological resources, with the level of impacts (i.e.,  
11 impacts remain adverse and significant or reduced to less than significant) dependent  
12 on the biological resources directly or indirectly affected by the installation, monitoring,  
13 and maintenance of the fencing and whether mitigation measures can reduce those  
14 impacts.

15 Under Alternative 3B, impacts to biological resources (e.g., wildlife) from noise and  
16 aircraft strikes would be less than significant. The additional land would be managed  
17 under the same management practices that the Air Force employs on the existing  
18 NTTR. Environmental review and planning would be required prior to any future  
19 construction or ground clearing, which would avoid or reduce impacts to biological  
20 resources to neutral or less than significant. There would be no munitions use in this  
21 area, as it would serve as a safety buffer for live weapons deployment on the interior of  
22 the South Range and may include potential impacts due to mishaps from live weapon  
23 deployment. An emitter may be placed here, which would impact biological resources  
24 from installation of a 0.5-acre pad, road construction, and disturbance. Perimeter  
25 fencing along the 30-mile boundary has the potential to impact biological resources,  
26 similar to those described under Alternative 3A. Fencing impacts could be avoided or  
27 minimized depending on the biological resources affected and implementation of  
28 associated mitigation measures as described under Alternative 3A.

29 The additional land included in the proposed Alternative 3C expansion would be  
30 managed the same as the existing NTTR withdrawn lands under current Air Force  
31 management practices. Environmental review and planning would be required prior to  
32 any construction or ground clearing, should this be proposed at a future date, which  
33 would avoid or reduce impacts to biological resources to neutral or less than significant.  
34 Military ground operations are proposed in this area and include development of  
35 insertion points, emitter sites, and two runways, which have the potential to impact  
36 biological resources. Installation of 0.5-acre pads, generators running, road construction  
37 and maintenance of 15 half-acre pads would fracture contiguous habitat. However,  
38 impacts would likely be site-specific, represent a small portion of the area within the  
39 Alternative 3C area, and be avoided or reduced through proper planning, monitoring,  
40 and maintenance. No adverse impacts are anticipated from emitter use. Perimeter  
41 fencing along the 60-mile boundary has the potential to impact biological resources,  
42 similar to those described under Alternative 3A. The level of impact to biological  
43 resources from fencing may be adverse but avoided or minimized depending on the  
44 biological resources affected and implementation of associated mitigation measures.

1 The proposed expansion of the existing withdrawal boundaries associated with  
2 Alternative 3C would increase military activities, including in the overlying airspace,  
3 compared with the existing NTTR withdrawn lands, but it is not anticipated that this  
4 increase would have a significant effect on most vegetation, wildlife, aquatic and  
5 wetland habitats, and special status species in this region because these activities are  
6 confined to altitudes and locations where they are unlikely to cause disturbance greater  
7 than existing conditions. As a result, impacts to biological resources under  
8 Alternative 3C would be less than significant.

9 No specific biological resource impacts are associated with any subalternatives of  
10 Alternative 4; impacts would be the same as those described for the other action  
11 alternatives, with Alternative 4 defining the timeframe over which those impacts may  
12 occur.

13 Under the No Action Alternative, land use restrictions placed on the military withdrawn  
14 lands within the NTTR would expire. Access to the DNWR would be under the  
15 jurisdiction of the USFWS and would be managed to preserve desert bighorn sheep and  
16 other wildlife uses. Access to all other lands would be under the jurisdiction of the BLM  
17 and may eventually be opened for appropriative land uses (such as mining, geothermal  
18 leasing, or livestock grazing) after new management planning under FLPMA and NEPA  
19 regulations could be completed.

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## 20 ES.4.9 CULTURAL RESOURCES

21 Cultural resources were analyzed in the LEIS by assessing each resource's status of  
22 investigation and condition, then evaluating the resource as it overlaps with the area of  
23 potential effects (APE). Sections 3.9.1.3 and 3.9.1.4 of the LEIS describe the cultural  
24 resources and archaeological resources that occur within the NTTR APE. Section  
25 3.9.2.1 of the LEIS describes the regulatory *National Historic Preservation Act* (NHPA)  
26 Section 106 compliance process. For all alternatives analyzed in the LEIS, if an  
27 inadvertent discovery of cultural resources or human remains occurs during any activity,  
28 procedures described for Alternative 1 and set forth in the Nellis AFB Integrated Cultural  
29 Resources Management Plan (ICRMP) and Air Force Instruction (AFI) 32-7065 would  
30 be implemented. Additionally, under AFI 32-7065, inadvertent discoveries of Native  
31 American cultural items require installations to comply with the *Native American Graves*  
32 *Protection and Repatriation Act* and 43 CFR 10, *Native American Graves Protection*  
33 *and Repatriation Act Regulations*. (U.S. Air Force, 2012a). Furthermore, any new or  
34 proposed activities would be subjected to the Air Force's environmental impact analysis  
35 process and Section 106 of the NHPA prior to implementation.

36 For Alternative 1, there would be no additional impacts beyond currently approved  
37 activities because they are currently covered by standard operating procedures in the  
38 Nellis AFB ICRMP. No adverse effects to cultural resources within the context of the  
39 NHPA would be anticipated under Alternative 1.

1 Alternative 2 would have the same footprint as discussed for Alternative 1, but would  
2 include a 30 percent increase in operations. However, impacts to cultural resources  
3 from air operations with Alternative 2 would be similar to those discussed under  
4 Alternative 1. With the implementation of avoidance areas around specific traditional  
5 cultural properties and sacred sites and scheduling of mission activities around tribal  
6 events, no adverse effects to cultural resources would be anticipated from aircraft  
7 operations. Ready access for the South Range would result in increased potential for  
8 impacts to culturally sensitive resources as the Air Force expands military activities in  
9 these areas. However, the actual impacts to cultural resources from ground  
10 disturbance, emitter operations, and munitions use would be the same as discussed  
11 under Alternative 1, and culturally sensitive areas would be avoided to the extent  
12 practicable. No adverse effects to cultural resources within the context of the NHPA  
13 would be anticipated from aircraft operations, munitions use, or other ground-disturbing  
14 activities.

15 Under Alternatives 3A, 3A-1, 3B, and 3C, aircraft operations were assumed to increase  
16 by 30 percent and would have no direct impact on physical cultural resources; however,  
17 impacts would be similar to those described for Alternative 2. With the implementation  
18 of avoidance areas around specific traditional cultural properties and sacred sites and  
19 scheduling of mission activities around tribal events, no adverse effects to cultural  
20 resources would be anticipated from aircraft operations for Alternatives 3A, 3A-1, 3B,  
21 and 3C.

22 No munitions use would occur in the proposed expansion areas for Alternatives 3A,  
23 3A-1, and 3B, and as such, munitions use would have no effect on cultural resources  
24 with these subalternatives. Munitions use for Alternative 3C would include blanks,  
25 smoke grenades, and hand flares, among others. It is not anticipated that these  
26 activities would have an impact on cultural resources. Therefore, munitions use would  
27 have no impact on cultural resources within the proposed expansion areas for  
28 Alternatives 3A, 3A-1, 3B, and 3C. Under Alternatives 3A, 3A-1, 3B, and 3C, the Air  
29 Force would provide active management to cultural sites throughout the areas included  
30 in Alternative 3 as a whole. In addition, public access to these areas would be restricted  
31 other than the limited access allowed under current Air Force procedures. It is  
32 anticipated that the Air Force's active management and the limitation of unfettered  
33 access would reflect limited direct impacts to cultural resources through the  
34 implementation of the Air Force's ICRMP and restriction of traffic through the area,  
35 preventing intentional or accidental damage to resources.

36 Under Alternative 3C, ground disturbance associated with troop movements, emitter  
37 placement, runway construction, and fencing installation would occur. This area would  
38 fall under the management requirements of the Nellis AFB ICRMP, and culturally  
39 sensitive areas would be avoided to the extent practicable.

40 No specific cultural impacts are associated with any subalternatives of Alternative 4;  
41 impacts would be the same as those described for the other action alternatives, with  
42 Alternative 4 defining the timeframe over which those impacts may occur.

1 Under the No Action Alternative, much of the approximately 2.9 million acres currently  
2 closed to the public would potentially be open to use under BLM and USFWS  
3 administration. The potential for the public to interact with known cultural resources,  
4 traditional properties, or cultural landscapes would increase. Currently protected tribal  
5 resources could potentially be unprotected and open to potential damage from looting or  
6 vandalism. Appropriate environmental documentation and safeguards would be the  
7 responsibility of the permitting federal agency, which in this case would be the BLM and  
8 USFWS.

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#### 9 **ES.4.10 EARTH RESOURCES**

10 Earth resources include geologic resources, soil, minerals, tectonic features, landforms,  
11 and paleontological resources located within the study area, any of which can have  
12 scientific, economic, and recreational value. Sections 3.10.1.3 through 3.10.1.6 of the  
13 LEIS describe the geology, soils, mineral resources, and paleontological resources that  
14 occur within the NTTR. The analysis focuses on potential economic, physical, and  
15 chemical damage to geology, paleontology, mineral resources, and soils.

16 For Alternative 1, missions would occur in previously approved areas; therefore, aircraft  
17 operations, and munitions use, ground-disturbing activities would have no significant  
18 impact on soils, paleontological, or geologic resources within the existing withdrawn  
19 lands under Alternative 1. An extension of the withdrawal of current NTTR lands,  
20 however, could restrict economic opportunity associated with extraction of some mineral  
21 resources. Potentially valuable deposits of mineral resources are present throughout the  
22 NTTR. Safety footprints that are required to support the various military missions would  
23 necessarily restrict public and industrial access to the NTTR. In terms of mineral  
24 exploration, the withdrawal extension of the NTTR would prevent the discovery and  
25 exploitation of economically viable resources. Because this alternative would preserve  
26 the current boundaries of the NTTR and not greatly increase the intensity of activities,  
27 no significant impacts are anticipated with respect to earth resources within the NTTR.

28 Alternative 2 would have the same footprint and range of activities as discussed for  
29 Alternative 1. Ready access under Alternative 2 would allow these activities to be  
30 conducted in areas proposed for wilderness that are currently managed as wilderness.  
31 Therefore, impacts to earth resources would be similar, if not the same, as discussed  
32 under Alternative 1, although occurring in some areas previously undisturbed within the  
33 South Range. Activities would avoid to the extent practicable erosion-prone areas (e.g.,  
34 steep slopes, seep/spring banks), and future actions such as construction would be  
35 subjected to additional consideration under NEPA and other applicable regulations and  
36 may require permits and best management practices (BMPs) that could include  
37 stormwater diversion, erosion control, or any number of best practices. As with current  
38 restrictions placed on mineral exploration within the DNWR, a change in jurisdiction  
39 would result in a continuation of this situation and would reflect a neutral impact to  
40 mineral exploration.

1 For Alternatives 3A, 3A-1, and 3B, ground-disturbing activities would be limited to  
2 fencing installation and would have no significant impact on soils, paleontological, or  
3 geologic resources. Expansion within these areas would prevent the discovery and  
4 exploitation of economically viable resources. At present, there is one active mining  
5 claim within the proposed Range 77 expansion area. If the Air Force withdraws this  
6 parcel, a subsequent potential restriction of access to this active claim could potentially  
7 represent an impact to earth resources. The significance of these impacts are difficult  
8 to quantify until the final disposition of these claims are resolved between the claimants  
9 and the Air Force. An ancillary benefit of withdrawal of this area would be access control  
10 that would provide the opportunity to restrict access to sensitive paleontological or  
11 geologic resource areas and increase the opportunity for beneficial impacts to earth  
12 resources owing to this lessened potential for impacts.

13 Under Alternative 3C, ground-disturbing activities would include troop movements,  
14 emitter placement, runway construction, and fencing installation. These activities would  
15 avoid erosion-prone areas and would be subject to further NEPA and National Pollutant  
16 Discharge Elimination System requirements depending on the action and scope of  
17 activity. As a result, implementation of mitigations and BMPs resulting from further site-  
18 specific environmental evaluations and regulatory requirements would minimize impacts  
19 to soils, paleontological, or geologic resources to less than significant. With the  
20 proposed expansion in this area, restricted access to mineral exploration could impact  
21 earth resources, depending on the actual interest by industry or the public in these  
22 resources. Currently, the NTTR and USFWS-managed DNWR lands are withdrawn  
23 from mineral exploration.

24 For Alternative 4, the longer the term of the withdrawal, the greater the opportunity for  
25 future negative impacts to mineral resources due to potential lack of access to industry  
26 and the public.

27 Under the No Action Alternative, the area currently closed to the public would potentially  
28 be open to use under BLM administration. Access to mineral resources under the No  
29 Action Alternative could be less restrictive under BLM management than under Air  
30 Force administration, resulting in beneficial impacts to local mining interests. Mining  
31 access could be granted and mining decisions made by BLM with State of Nevada  
32 involvement. Conversely, potential mining in the released lands could result in removal  
33 or significant alteration of geologic features or existing topsoil.

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#### 34 **ES.4.11 WATER RESOURCES**

35 Water resources include surface waters, floodplains, groundwater, and water rights and  
36 improvements. These features are detailed in Sections 3.11.1.4 through 3.11.1.7 of the  
37 LEIS, along with water quality standards applicable to these resources. Figure ES-14  
38 depicts water resources within the NTTR ROI.

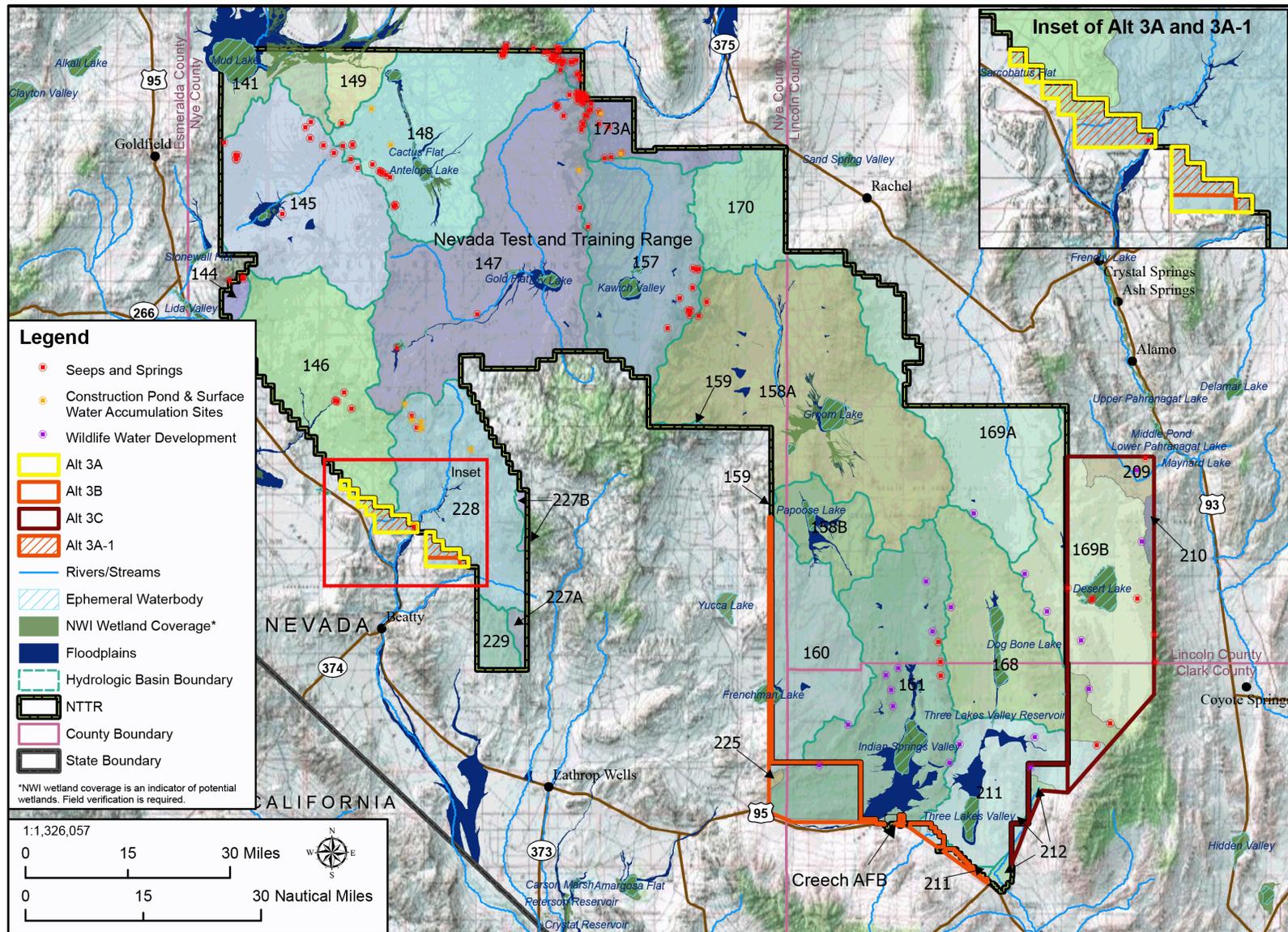


Figure ES-14. Water Resources on the Nevada Test and Training Range

1 Aircraft operations and emitter operations would not result in direct or indirect impacts to  
2 water resources and are not evaluated for this resource.

3 For Alternative 1, there would be no changes to the baseline quantity or locations of  
4 munitions use or ground-disturbing activities and, therefore, no change in the potential  
5 for water resources to be affected by erosion or deposition of metals and explosive  
6 materials. There would be no requests for additional surface or groundwater  
7 appropriations. Impacts would not increase over baseline conditions.

8 Under Alternative 2, there would be an increase in the quantity and locations of  
9 munitions use and ground-disturbing activities on the South Range. These activities  
10 would increase the potential for erosion and deposition of metals and explosive  
11 materials. However, all new activities would be subject to NEPA review and would  
12 involve applicable avoidance/minimization measures. Potential increases in water use  
13 could likely be fulfilled through current or existing water rights. Access protocols for  
14 water quality and wildlife management would be developed. With implementation of  
15 these measures, no significant impacts are anticipated.

16 The proposed expansion areas for Alternatives 3A, 3A-1, and 3B include a spring and  
17 small floodplain area, as well as a groundwater right. Alternative 3A also contains two  
18 wells. However, there would be no ordnance use or ground activities in these areas,  
19 and perimeter fencing would result in only minimal ground disturbance. Access  
20 restrictions could affect water quality sampling in the upper Amargosa River watershed;  
21 access protocols for these activities would be developed. There would be no requests  
22 for additional surface or groundwater appropriations. No significant impacts are  
23 anticipated.

24 Small floodplain areas, several wells, and one groundwater right occur within the  
25 Alternative 3B proposed expansion area. There would be no ordnance use in the area.  
26 Perimeter fencing (including crossing of intermittent surface water) would be  
27 constructed according to applicable design standards. Access protocols for water  
28 sampling would be developed. There would be no requests for additional surface or  
29 groundwater appropriations. No significant impacts are anticipated.

30 For Alternative 3C, a total of 12 springs, wildlife water developments, and surface water  
31 features (including guzzlers, enhanced springs, and stormwater catchments), as well as  
32 potential floodplains and wetlands occur in this proposed expansion area. Two  
33 additional springs occur very close to the eastern border. Increased munitions use and  
34 ground-disturbing activities would increase the potential for erosion and deposition of  
35 metals and explosive materials. However, all new activities would be subject to NEPA  
36 review and would involve applicable avoidance/minimization measures. Fuel spills could  
37 occur during Forward Area Arming and Refueling Point activities, and fuel could  
38 potentially migrate to groundwater or surface waters. However, spill response would be  
39 part of training preparation, and the potential for contamination would be reduced by the  
40 location (dry lake bed) and soil conditions of training areas. Perimeter fencing (including  
41 crossing of intermittent surface water) would be constructed according to applicable  
42 design standards. Access protocols for water sampling would be developed. Any new

1 water requirements would be evaluated by the Nevada Department of Water  
2 Resources. With these actions, no significant impacts are anticipated.

3 There are no specific water resource impacts associated with any subalternatives of  
4 Alternative 4; impacts would be the same as those described for the other action  
5 alternatives, with Alternative 4 defining the timeframe over which those impacts may  
6 occur.

7 Under the No Action Alternative, much of the water-related potential for impacts  
8 (erosion and deposition of metals, explosive materials, and depleted uranium) due to  
9 military testing and training would cease. Other appropriate land uses could be  
10 reintroduced and would likely require evaluation regarding impacts to water resources. If  
11 the land were returned to the BLM, water rights would remain the property of the Air  
12 Force unless the BLM requested that the water rights be vacated or transferred to the  
13 BLM. With implementation of appropriate mitigation measures associated with  
14 reintroduced land use, no significant impacts to water resources are anticipated.

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#### 15 **ES.4.12 HAZARDOUS MATERIALS AND SOLID WASTES**

16 Sections 3.12.1.3 and 3.12.1.4 of the LEIS describes hazardous materials and  
17 hazardous waste management for the NTTR in detail. Section 3.12.1.5 of the LEIS  
18 describes U.S. Air Force (DoD) contamination sites managed/identified by various  
19 programs, which includes the Environmental Restoration Program, the Resource  
20 Conservation and Recovery Act Facility Assessment, the Depleted Uranium Target  
21 Assessment, the Surface Soil Sampling at NTTR Bombing Targets, and Spills and  
22 Aircraft Crashes. LEIS Section 3.12.1.6 discusses the DOE Environmental Restoration  
23 Program. Solid wastes and construction debris are generated from day-to-day  
24 operations and infrastructure projects. Solid waste at the NTTR is managed according  
25 to Integrated Solid Waste Management Plans. LEIS Section 3.12.1.7 describes solid  
26 waste management at the NTTR.

27 Under Alternative 1, there would be no changes in the quantity of hazardous materials  
28 used or hazardous materials generated, and no off-site impacts related to regional  
29 disposal capacity would occur. All hazardous materials or wastes would be managed  
30 according to established procedures, and no significant impacts are anticipated.

31 Increased training operations under Alternative 2 would not result in a significant  
32 change in the quantity of hazardous materials used, the quantity of hazardous or non-  
33 hazardous waste generated, or in off-site impacts related to regional disposal capacity.  
34 Therefore, no significant impacts are anticipated.

35 For Alternatives 3A, 3A-1, and 3B, fencing that will meet BLM standards is proposed  
36 and may require maintenance. However, there would be no other activities within these  
37 proposed expansion areas that would involve hazardous materials or generate  
38 hazardous wastes. All hazardous materials or wastes would be managed according to  
39 established procedures, and no significant impacts are anticipated.

1 For the proposed expansion area under Alternative 3C, hazardous materials would be  
2 used and wastes would be generated from runway construction, installation and  
3 operation of emitters, and possibly from fencing installation and maintenance. However,  
4 all hazardous materials or wastes would be managed according to established  
5 procedures, and no significant impacts are anticipated.

6 There are no specific hazardous materials and solid waste impacts associated with any  
7 subalternatives of Alternative 4; impacts would be the same as those described for the  
8 other action alternatives, with Alternative 4 defining the timeframe over which those  
9 impacts may occur.

10 Under the No Action Alternative, hazardous materials would not be used and hazardous  
11 wastes would not be generated from maintenance processes, as these would cease.  
12 Hazardous materials would be removed from the range and disposed of or reissued  
13 elsewhere. Hazardous materials utilized in other land uses on what had been the NTTR  
14 would receive separate environmental review and would be administered by BLM.  
15 Therefore, no significant impacts are anticipated.

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#### 16 **ES.4.13 HEALTH AND SAFETY**

17 The health and safety analysis in Section 3.13 of the LEIS addresses ground, flight, and  
18 munitions safety for activities conducted by units operating within the ROI. Ground  
19 safety considers fire risk and management, as well as safety issues associated with  
20 training operations. Other ground safety concerns include operational safety, lasers, and  
21 electromagnetic radiation and radio frequency emissions. Flight safety considers aircraft  
22 flight risks such as aircraft mishaps and bird/wildlife-aircraft strike hazards (i.e., BASH).  
23 Munitions safety considers the use and handling of ordnance associated with operations  
24 and training activities.

25 Under Alternative 1, there would be no changes in the operational tempo. All actions  
26 would continue to be performed by technically qualified personnel in accordance with  
27 applicable safety requirements; consequently, there would be no significant impacts  
28 related to aircraft mishaps, munitions use, or emitter operations over the baseline  
29 condition.

30 Under Alternative 2, test and training activities would increase by 30 percent. As a  
31 result, there may be slight increases in risk potentials relative to any increase in  
32 operational tempo. However, all actions would be performed by technically qualified  
33 personnel in accordance with applicable safety requirements; consequently, there would  
34 be no significant impacts related to aircraft mishaps, munitions use, or emitter  
35 operations.

36 For Alternatives 3A, 3A-1, 3B, and 3C, aircraft operations would increase with the  
37 availability of these proposed expansion areas; consequently, the potential for aircraft  
38 mishaps and from mishap-related fires would incrementally increase when compared to  
39 Alternative 1. Safety impacts resulting from training-initiated fires would not occur, as no  
40 air-to-ground or ground-based munitions training would occur in Alternatives 3A, 3A-1,

1 or 3B. All actions would be performed by technically qualified personnel in accordance  
2 with applicable safety requirements; consequently, no significant impacts would occur.  
3 For Alternative 3C, ground disturbance has the potential to result in an expansion of  
4 invasive annual grass that could result in increased wildfire risk. Reduced access for  
5 the purposes of safety and security into this area could increase or delay response  
6 times, which could result in larger fires. Airspace de-confliction could increase where a  
7 wildfire response would include civilian firefighting aircraft.

8 There are no specific health and safety impacts associated with any subalternatives of  
9 Alternative 4; impacts would be the same as those described for the other action  
10 alternatives, with Alternative 4 defining the timeframe over which those impacts may  
11 occur.

12 Under the No Action Alternative, potential impacts related to air-to-ground and ground-  
13 based activities would not occur, as these operations would cease; however, air-to-air  
14 training would still be possible. This may result in a decrease in overall flight operations;  
15 consequently, the potential for mishaps or bird/wildlife aircraft strikes would be reduced,  
16 resulting in an overall decrease in risks associated with aircraft flight training. Fire  
17 response times would decrease because of increased access, possibly decreasing fire  
18 size due to timely suppression actions. Fire reporting would improve, also allowing  
19 more timely fire response and more accurate fire records. Overall fire management  
20 activities would increase.

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#### 21 **ES.4.14 TRANSPORTATION**

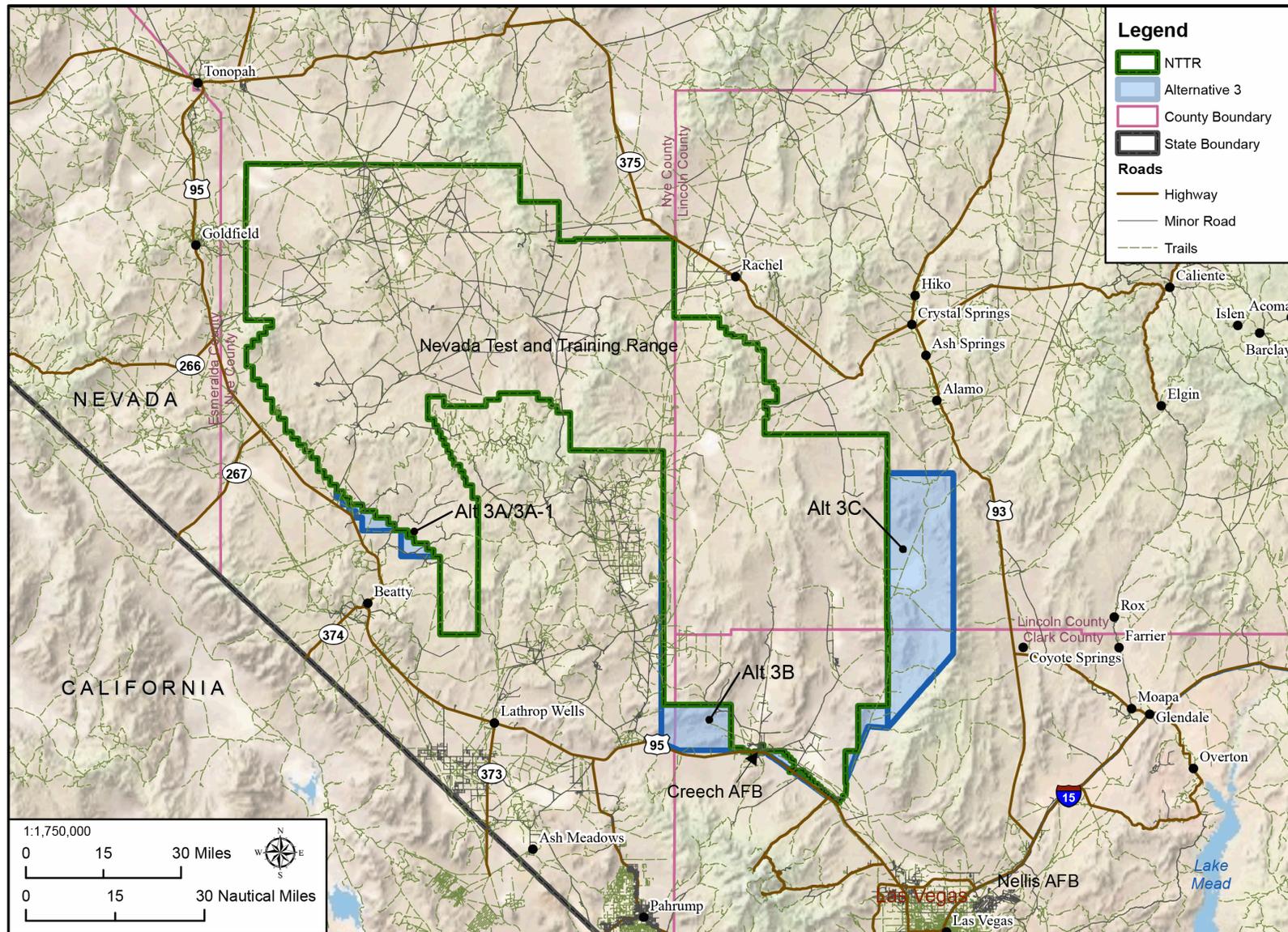
22 Transportation resources include the infrastructure required for the movement of  
23 people, materials, and goods. The ROI for transportation includes the highways  
24 surrounding the NTTR within Clark, Lincoln, Nye, and Esmeralda Counties.  
25 Figure ES-15 shows the highway and road networks within the NTTR ROI.

26 Under Alternative 1, impacts on existing NTTR roads would not be expected to change,  
27 and there would be no interaction with existing transportation infrastructure, current  
28 levels of service, or traffic patterns in the surrounding area beyond existing baseline  
29 conditions.

30 For Alternative 2, ready access could include improvements to existing roads and trails  
31 along with possible road/trail relocations especially within the South Range. Troop  
32 movements on NTTR roads and surrounding highways would not result in any adverse  
33 transportation issues.

34 Alternatives 3A, 3A-1, and 3B would have no interaction with the existing transportation  
35 infrastructure, current levels of service, or traffic patterns within the NTTR or the  
36 surrounding area. For Alternative 3C, in addition to baseline transportation conditions  
37 there is the potential for new road construction within the proposed Alamo withdrawal  
38 areas. Addition of safety buffers could also require DNWR road closures (primarily  
39 Alamo Road and smaller intersecting roads and trails.

- 1 Alternative 4 would not result in any interaction with the existing transportation
- 2 infrastructure, current levels of service, or traffic patterns within the NTTR or the
- 3 surrounding area.
- 4 The No Action Alternative could result in impacts to the existing transportation
- 5 infrastructure, current levels of service, and traffic patterns within and surrounding the
- 6 former NTTR lands. However, potential impacts would depend on the future land use
- 7 planning and resource management objectives for the BLM-administered public lands
- 8 and management of the DNWR by the USFWS.



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**Figure ES-15. NTTR Highway and Road Network**

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The Draft LEIS for the NTTR Land Withdrawal is provided on the CD located below. To view the LEIS on CD, you will need Adobe Acrobat® Reader. If you do not already have Adobe Acrobat® Reader, you can download it at [www.adobe.com](http://www.adobe.com).

To review the Draft LEIS:

- Insert the CD in your computer's CD drive and double-click on the file in the CD directory.
- Scroll through the document, or click on a heading in the Table of Contents and it will take you to that section of the LEIS.

The CD files are read-only, which means you may view and/or print them from the CD. A copy of the Draft LEIS is available at each of the public libraries and repositories listed on the inside front cover of this Executive Summary.

**PRIVACY ADVISORY**

*This Draft Legislative Environmental Impact Statement (LEIS) is provided for public comment in accordance with the National Environmental Policy Act (NEPA), the President's Council on Environmental Quality (CEQ) NEPA Regulations (40 Code of Federal Regulations [CFR] §§1500–1508), and 32 CFR §989, Environmental Impact Analysis Process (EIAP).*

*The EIAP provides an opportunity for public input on Air Force decision-making, allows the public to offer inputs on alternative ways for the Air Force to accomplish what it is proposing, and solicits comments on the Air Force's analysis of environmental effects.*

*Public commenting allows the Air Force to make better, informed decisions. Letters or other written or oral comments provided may be published in the LEIS. As required by law, comments provided will be addressed in the LEIS and made available to the public. Providing personal information is voluntary. Any personal information provided will be used only to identify your desire to make a statement during the public comment portion of any public meetings or hearings or to fulfill requests for copies of the LEIS or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the LEIS. However, only the names of the individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final LEIS.*

*You can submit comments on the web at [www.nttrleis.com](http://www.nttrleis.com) or via mail:  
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***Deadline for comments submittal (postmarked):  
March 8, 2018***

*Questions can be directed to Nellis Public Affairs office at 702-652-2750  
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