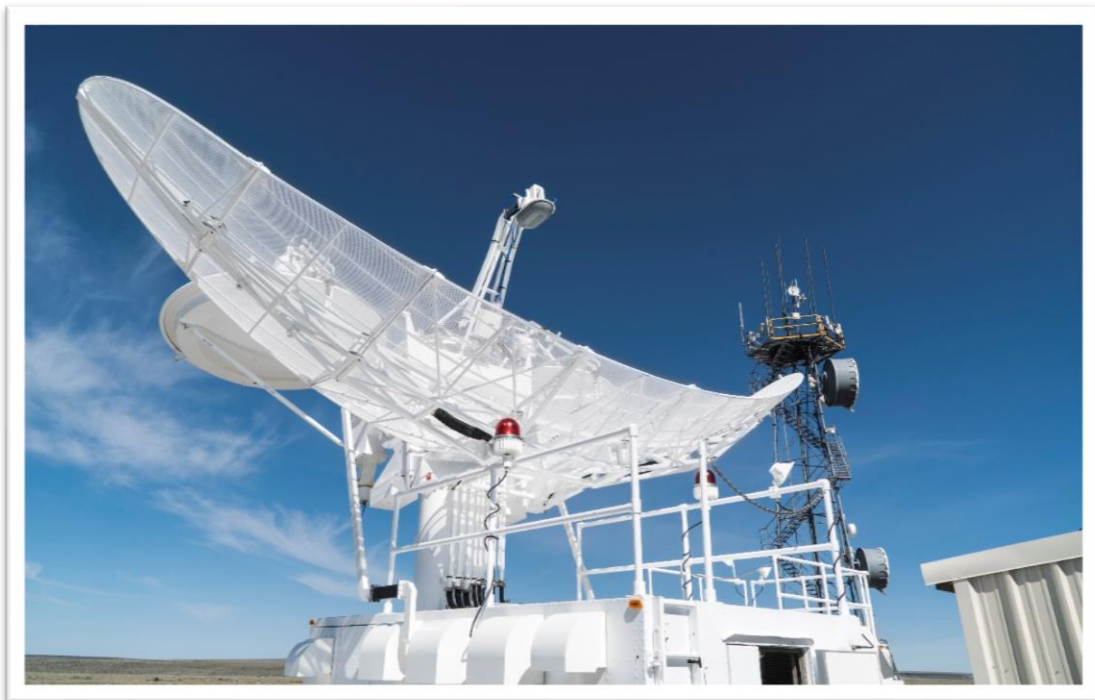


**Draft
Environmental Assessment
Juniper Butte Land Withdrawal Extension
Mountain Home Air Force Base, Idaho**

April 2019



**United States Air Force
366th Fighter Wing**



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PRIVACY ADVISORY

This EA 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 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 EA. As required by law, comments provided will be addressed in the EA 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 EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of EA; 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 Personal home addresses and phone numbers will not be published in the EA.

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COVER SHEET

DRAFT ENVIRONMENTAL ASSESSMENT FOR JUNIPER BUTTE LAND WITHDRAWAL EXTENSION, MOUNTAIN HOME AIR FORCE BASE, IDAHO

- a. *Responsible Agency:* United States Air Force (Air Force)
- b. *Cooperating Agency:* Department of Interior, Bureau of Land Management
- c. *Proposals and Actions:* The environmental assessment (EA) analyzes the Proposed Action to extend the public lands withdrawal established in October 1998 under the *Juniper Butte Withdrawal Act of 1999*, Public Law (PL) 105-261 at Mountain Home Range Complex associated with Mountain Home Air Force Base (AFB), Idaho. The Proposed Action would include the extension of the withdrawal for 25 years of approximately 11,816 acres of public land from the Department of Interior, Bureau of Land Management to the Air Force for continued military training.
- d. *For Additional Information:* Public Affairs, 366 Fighter Wing, 366FW.PA.PublicAffairs@us.af.mil or 208-828-6800.
- e. *Designation:* Draft EA
- f. *Abstract:* This EA been prepared pursuant to provisions of the *National Environmental Policy Act*, Title 42 United States Code §§ 4321-4347, implemented by Council on Environmental Quality Regulations, Title 40, Code of Federal Regulations (CFR) § 1500-1508, and 32 CFR § 989, *Environmental Impact Analysis Process*. Potentially affected environmental resources were identified in coordination with local, state, and federal agencies. Specific environmental resources with the potential for environmental consequences include airspace management and use; noise; land use and visual resources; air quality; geology and soils; water resources; biological resources; cultural resources; hazardous materials and wastes, contaminated sites, and toxic substances; safety; socioeconomics; and environmental justice and protection of children.

The purpose of the Proposed Action is to ensure Mountain Home AFB aircrews continue to have the available infrastructure on the Juniper Butte Range portion of the Mountain Home Range Complex for realistic training to achieve and maintain combat readiness. Specifically, the Air Force must be able to provide integrated combat-effectiveness training based on realism and flexibility, alleviate competing demands on airspace and land used for effectiveness training, and balance environmental and cultural resource protection with training needs. The need for the Proposed Action is to maintain ready access to a dedicated area of land near to Mountain Home AFB, which would continue to provide a suitable location for ground assets in relationship to established airspace.

The analysis indicates that by continuing the environmental protection measures and best management practices associated with the Proposed Action, there would be no significant impacts from extending the land withdrawal for the Juniper Butte Range portion of the Mountain Home Range Complex for Mountain Home AFB. The resource areas analyzed as part of this determination included airspace management and use; noise; land use and visual resources; air quality; geology and soils; water resources; biological resources; cultural resources; hazardous materials and wastes, contaminated sites, and toxic substances; safety; socioeconomics and environmental justice; and protection of children. In addition, no significant cumulative impacts associated with the Proposed Action when considered with past, present, or reasonably foreseeable future projects would be anticipated.

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DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)

JUNIPER BUTTE LAND WITHDRAWAL EXTENSION MOUNTAIN HOME AIR FORCE BASE, IDAHO

Pursuant to provisions of the *National Environmental Policy Act* (NEPA), 42 United States Code (U.S.C.) §§ 4321-4370h; Council on Environmental Quality (CEQ) Regulations, 40 Code of Federal Regulations (CFR) §§ 1500-1508; and 32 CFR § 989, *Environmental Impact Analysis Process*, the United States Air Force (Air Force) prepared the attached Draft Environmental Assessment (EA) to address the potential environmental consequences associated with extending the withdrawal of public lands for 25 years from the Department of Interior, Bureau of Land Management (BLM) to the Air Force for continued military training use.

Purpose and Need

The purpose of the Proposed Action is to ensure Mountain Home Air Force Base (AFB) aircrews continue to have the available infrastructure on the Juniper Butte Range portion of the Mountain Home Range Complex for realistic training in order to achieve and maintain combat readiness. Specifically, the Air Force must be able to provide integrated combat-effectiveness training based on realism and flexibility, alleviate competing demands on airspace and land used for effectiveness training, and balance environmental and cultural resource protection with training needs.

The need for the Proposed Action is to maintain ready access to a dedicated area of land near Mountain Home AFB, which would continue to provide a suitable location for ground assets in relationship to established airspace. Extending the land withdrawal allows aircrews to continue use of the dedicated area to accomplish high quality, realistic, combat training to the maximum extent practicable.

Description of Proposed Action and Alternatives

The Proposed Action would extend the withdrawal of public lands as described in Public Law (PL) 105-261 at the Mountain Home Range Complex, Idaho, for an additional 25 years. The *Juniper Butte Range Withdrawal Act* reserved public land for military use including a tactical training range, no-drop targets, and emitter sites. Withdrawn lands under the Proposed Action include the Juniper Butte Range – 11,152 acres; ND-1 site – 640 acres; ND-4, ND-5, and ND-7 sites – 5 acres each; and nine emitter sites – 1 acre each.

No Action Alternative

Under the No Action Alternative, the withdrawal of public lands would not be extended for military training use, and the lands described under the Proposed Action would be relinquished back to the BLM. Building infrastructure would either be demolished or removed, and boundary and interior fencing would be dismantled. As required under PL 105-261, all necessary environmental remediation would be completed to ensure lands are safe for nonmilitary uses and comply with the BLM's mission "to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations." Without the land withdrawal, training activities that take place at the Juniper Butte Range, no-drop targets, and emitter sites would move to the Saylor Creek Range and other no-drop targets and emitter sites in the Mountain Home Range Complex, or to out-of-state Department of Defense ranges. No changes to the airspace are proposed; Jarbidge North Military Operations Area and Restricted Areas R-3204A, B, and C would be retained by the Air Force; however, training activities would exclude ordnance drops. While the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, this alternative was retained to provide a comparative evaluation against the Proposed Action, as required under CEQ regulations (40 CFR § 1502.14).

Summary of Findings

Potentially affected environmental resources were identified through communications with state and federal agencies and review of past environmental documentation. Specific environmental resources with the potential for environmental consequences include airspace management and use; noise; land use and visual resources; air quality; geology and soils; water resources; biological resources; cultural resources; hazardous materials and wastes, contaminated sites, and toxic substances; safety; socioeconomics; and environmental justice and protection of children.

Airspace use and management would not change under the Proposed Action. Military use would continue and existing restrictions and limitations on civilian, and commercial flights would remain. The Proposed Action would not increase aircraft noise levels and the noise exposure would remain as it currently exists. No impacts related to airspace management and use or noise would occur under the Proposed Action.

Under the Proposed Action, there would be no change to land use at the Juniper Butte Range, no-drop targets, or emitter sites. Segregation of the withdrawn lands from appropriate land uses (such as mining or geothermal leasing) would continue. Military training activities would continue, grazing activities would be allowed through leases on the Juniper Butte Range and ND-1, and withdrawn lands would continue to be managed by the Air Force; therefore, there would be no impacts on land use from the Proposed Action. Further, no impacts would be expected to visual resources under the Proposed Action as there would be no change to the existing facilities or the land use.

Aircraft operations would be expected to remain at present levels under the Proposed Action and there would be no changes to operations or aircraft; therefore, no significant increases in air emissions or violation of ambient air quality standards would occur.

Under the Proposed Action, there would be no change or impact to geology and soils at the Juniper Butte Range, no-drop targets, or emitter sites. Mission activities under the Proposed Action with potential to impact water resources include mission support activities such as road maintenance as well as cattle grazing, erosion, and wildland fire; however, the lack of surface water features and depth to groundwater make any negative effects to water quality and water resources from these activities unlikely. A minor, short-term increase in soil erosion and resulting deterioration of water quality would be expected under the Proposed Action; however, these impacts would be minimized by implementing best management practices. There would be no impacts to floodplains or groundwater from the Proposed Action.

There would be no change to activities that may impact biological resources under the Proposed Action. Negligible impacts to biological resources resulting from training activities on the Juniper Butte Range and maintenance activities associated with the upkeep of the range, emitter sites, and no-drop targets would continue. Similarly, only minor, long-term impacts to biological resources may occur from wildland fire and livestock grazing. The impacts to vegetation under the Proposed Action would be negligible because existing disturbed areas would be utilized to the maximum extent practicable. Potential impacts to slickspot peppergrass would continue to be managed by implementing conservation measures outlined in the United States Fish and Wildlife Service slickspot peppergrass Biological Opinion and the Mountain Home AFB Integrated Natural Resource Management Plan. As no changes in the extent or intensity of air operations, training, construction, or maintenance within the Region of Influence under the Proposed Action, impacts to wildlife would be negligible.

The Proposed Action would not result in adverse effects to cultural resources. Under the Proposed Action, management and protection of cultural resources would continue in accordance with the requirements of federal laws including Sections 106 and 110 of the *National Historic Preservation Act* and the *Archaeological Resources Protection Act*.

Under the Proposed Action, hazardous material and wastes would be handled, stored, and disposed following the Mountain Home AFB Hazardous Waste Management Plan and would ensure management in accordance with all federal, state, and local laws and regulations; therefore, no impacts from hazardous materials and wastes would be expected.

There would be no change to safety under the Proposed Action. Procedures and regulations that ensure safe flight, explosive, and ground operation would continue. Bird/wildlife aircraft strike hazard management actions would continue to be carried out in accordance with applicable Air Force guidance and the Mountain Home AFB Bird/Wildlife Aircraft Strike Hazard Plan. In addition, there would be no change to fire risk and management on the Juniper Butte Range.

There would be no change or impact on the local or regional economy resulting from the Proposed Action. Under the Proposed Action, there would be no disproportionate impact to low-income or minority populations or children in Owyhee and Twin Falls Counties.

Cumulative impacts

The EA considered cumulative impacts that could result from the incremental impact of the Proposed Action when added to other past, present, or reasonably foreseeable future actions. No potentially significant cumulative impacts were identified for the withdrawn lands.

Mitigations

The analysis concluded that the Proposed Action would not result in significant environmental impacts; therefore, no additional mitigation measures would be required. Best management practices, standard operating procedures, and environmental commitments would continue where applicable.

Conclusion

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of NEPA; CEQ regulations; and 32 CFR § 989, *Environmental Impact Analysis Process*, and which is hereby incorporated by reference, I have determined that the proposed activities to extend the withdrawal of approximately 11,816 acres of public lands from the BLM to the Air Force for military use for 25 years, would not have a significant impact on the quality of the human or natural environment. Accordingly, an Environmental Impact Statement will not be prepared. This decision has been made after considering all submitted information, including a review of public and agency comments submitted during the 60-day public comment period, and considering a full range of practical alternatives that meet project requirements and are within the legal authority of the Air Force.

JOSEPH D. KUNKEL, Colonel, USAF
Commander, 366th Fighter Wing

DATE

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LIST OF ACRONYMS AND ABBREVIATIONS

366 FW	366th Fighter Wing
Air Force	United States Air Force
AFB	Air Force Base
AFI	Air Force Instruction
AGL	above ground level
BASH	bird/wildlife aircraft strike hazard
BDU	Bomb Dummy Unit
BLM	Bureau of Land Management
CAA	<i>Clean Air Act</i>
CDNL	C-weighted Day-Night Average Sound Level
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalent
dB	decibel(s)
dba	A-weighted decibel(s)
dbc	C-weighted decibel(s)
DNL	Day-Night Average Sound Level
DNL _{mr}	Onset Rate Adjusted Day-night Sound Level
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ERP	Environmental Restoration Program
ESA	<i>Endangered Species Act of 1973</i>
FONSI	Finding of No Significant Impact
L _{eq}	Equivalent Sound Level
L _{max}	Maximum Sound Level
MOA	Military Operations Area
MSL	above mean sea level
NAAQS	National Ambient Air Quality Standards
ND	no-drop target
NEPA	<i>National Environmental Policy Act of 1969</i>
NO _x	nitrogen oxides
PL	Public Law
PM _{2.5}	particulates equal to or less than 2.5 microns in diameter
PM ₁₀	particulates equal to or less than 10 microns in diameter
ppm	part(s) per million
ROI	Region of Influence
RSAF	Republic of Singapore Air Force
SEL	Sound Exposure Level
SO ₂	sulfur dioxide
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VOC	volatile organic compound

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CHAPTER 1 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

The United States Air Force (Air Force) and 366th Fighter Wing (366 FW) propose to extend the withdrawal of public lands established in October 1998 under the *Juniper Butte Range Withdrawal Act of 1999*, Public Law (PL) 105-261, at Mountain Home Range Complex associated with Mountain Home Air Force Base (AFB), Idaho. Under PL 105-261, 11,816 acres of public land from the Department of Interior, Bureau of Land Management (BLM) was withdrawn to the Air Force for military training use. PL 105-261 will expire in 2023; therefore, the Air Force is proposing to extend the withdrawal for continued military training use. The extension would allow the Air Force to sustain its mission for enhanced readiness training as well as maintain critical existing assets that support the mission. This Environmental Assessment (EA) evaluates the potential environmental consequences for extending the withdrawal of public lands described under the *Juniper Butte Range Withdrawal Act*, PL 105-261.

Federal agencies are required to consider the potential environmental consequences of a proposed action and all reasonable alternatives in the decision-making process under the *National Environmental Policy Act of 1969* (NEPA; 42 United States Code [U.S.C.] § 4321 et seq.) and the Council on Environmental Quality's (CEQ's) implementing regulations for NEPA (40 Code of Federal Regulations [CFR] §§ 1500-1508). The Air Force also is required to consider the Air Force NEPA-implementing regulation (32 CFR 989). This EA addresses the potential environmental consequences of the Proposed Action under an extension of PL 105-261 and the No Action Alternative in accordance with NEPA and CEQ implementing regulations.

1.2 ORGANIZATION OF THIS DOCUMENT

NEPA is the basic national requirement for identifying environmental consequences of federal decisions. NEPA ensures that environmental information is available to the public, agencies, and the decision makers before decisions are made and actions are taken.

NEPA, implemented through the CEQ regulations, requires federal agencies to consider alternatives to the Proposed Action and to analyze potential impacts of alternative actions. Potential impacts of the Proposed Action and the No Action Alternative described in this document will be assessed in accordance with the Air Force Environmental Impact Analysis Process guidelines (32 CFR § 989, *Environmental Impact Analysis Process*), which requires that potential impacts to resources be analyzed in terms of their context, duration, and intensity. To help the public and decision makers understand the implications of impacts, they will be described in the short and long term, cumulatively, and within context.

Consistent with the CEQ regulations, this EA is organized into the following sections:

- Chapter 1, Purpose and Need for the Proposed Action, includes an introduction, background description, location, purpose and need statement, scope of environmental analysis, decision to be made, interagency and intergovernmental coordination and consultations, applicable laws and environmental regulations, and a description of public and agency review of the EA.
- Chapter 2, Description of the Proposed Action and Alternatives, includes a description of the Proposed Action, No Action Alternative, selection standards, and a summary of potential environmental consequences.
- Chapter 3, Affected Environment, includes a description of the natural and man-made environments defined in PL 105-261 that may be affected by the Proposed Action and No Action Alternative.
- Chapter 4, Environmental Consequences, includes definitions and discussions of potential direct and indirect impacts and environmental commitments.
- Chapter 5, Cumulative Effects, considers the potential cumulative impacts on the environment that may result from the incremental impact of the Proposed Action when added to other past, present, or reasonably foreseeable future actions.

- Chapter 6, References, contains references for studies, data, and other resources used in the preparation of the EA.
- Appendices, as required, provide relevant correspondence, studies, and modeling results.

1.3 BACKGROUND

Mountain Home AFB is located in Elmore County, Idaho (**Figure 1-1**), approximately 50 miles southeast of Boise, and 12 miles southwest of the city of Mountain Home. Mountain Home AFB has been conducting air combat training over southwestern Idaho since 1942. In 1992, Air Combat Command assumed leadership of Mountain Home AFB. As a composite wing operating fighters, bombers, and tankers, the 366 FW was established at Mountain Home AFB to focus on effective response capabilities and combat readiness.

Today, the 366 FW's mission is to provide effective, high-quality training for rapid deployment and combat readiness for conflicts around the world as well as support foreign military pilot training. Currently, Mountain Home AFB is home to two F-15E *Strike Eagle* squadrons from the 366 FW and one squadron of F-15SGs from the Republic of Singapore Air Force.

Mountain Home AFB (Main Base) encompasses 6,844 acres and is located in Elmore County. Mountain Home AFB manages the Small Arms Range (4,622 acres), Rattlesnake Radar Station (1 acre), Middle Marker (21 acres), C.J. Strike Dam Recreation Annex (3 acres), and the Mountain Home Range Complex. Mountain Home AFB managed lands are summarized in **Table 1-1**. The Mountain Home Range Complex is an integrated combat training complex supporting the 366 FW's mission with air-to-air training, air-to-ground bombing and gunnery training, and Electronic Combat training activities. In addition, there are two air-to-ground weapons ranges (Saylor Creek Range and Juniper Butte Range), no-drop targets, and emitter sites (**Figure 1-2**). Approximately 9,000 square miles of special use airspace overlies the Mountain Home Range Complex (**Figure 1-3**). This airspace is designated for military operations and imposes limitations on commercial and personal aircraft not participating in military operations (Air Force Instruction [AFI] 13-201). In addition to supporting 90 percent of Mountain Home AFB's flight training, the Mountain Home Range Complex provides training assets and airspace for other Air Force units, 124th Fighter Wing from Gowen Field Air National Guard Base in Boise, other Department of Defense units, and international partner pilots.

**Table 1-1
Mountain Home Air Force Base Managed Lands**

Site	Site Acreage
Main Base	6,844 acres
Small Arms Range	4,622 acres
Rattlesnake Radar Station	1 acre
Middle Marker	21 acres
C.J. Strike Dam Recreation Annex	3 acres
Mountain Home Range Complex Primary Ground Assets	
Saylor Creek Range	109,466 acres
Juniper Butte Range	12,112 acres (approximately)
No-Drop Targets (numerous)	658 acres
Emitter Sites (numerous)	15 acres

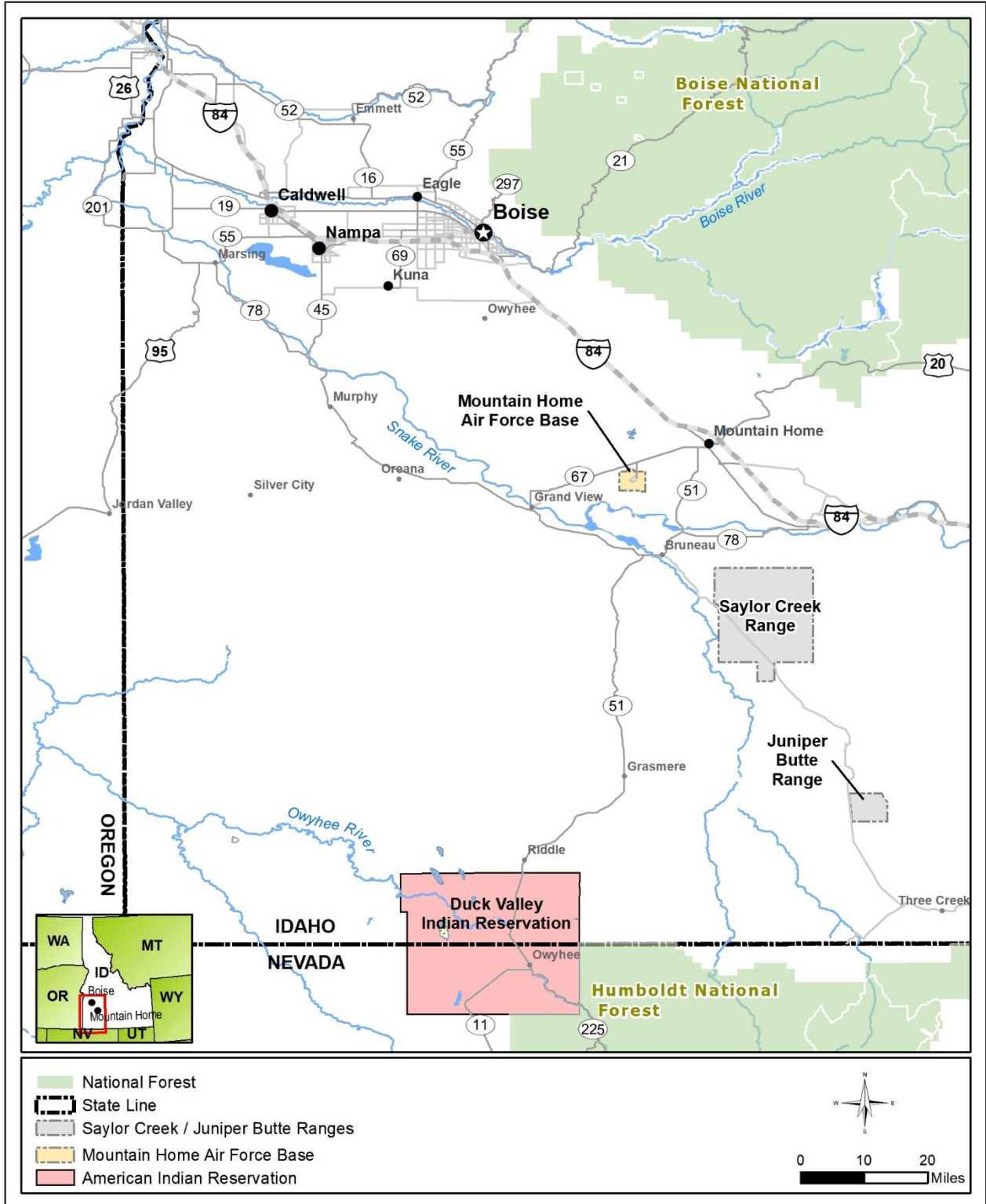


Figure 1-1. Location of the Mountain Home Air Force Base and the Mountain Home Range Complex.

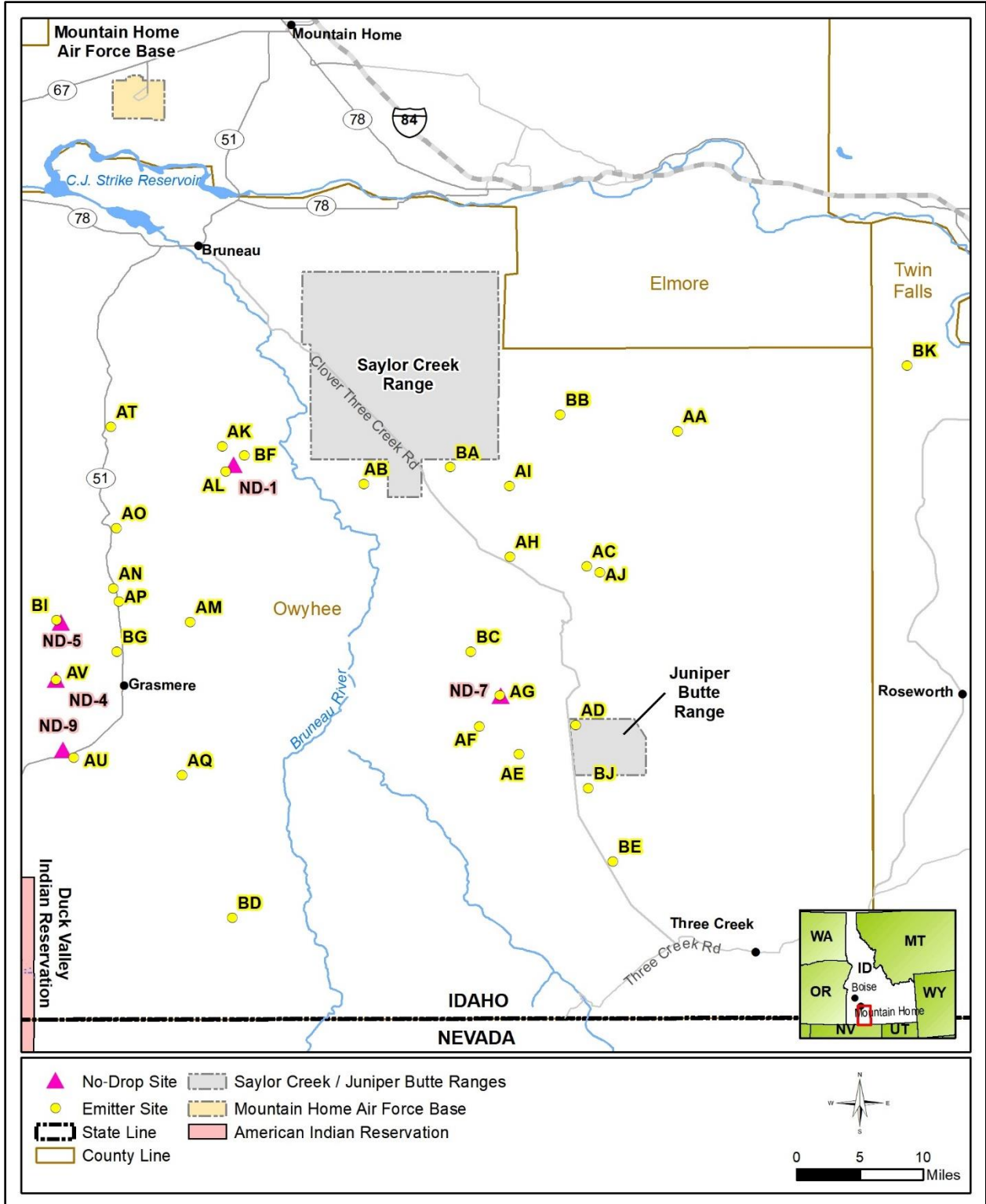
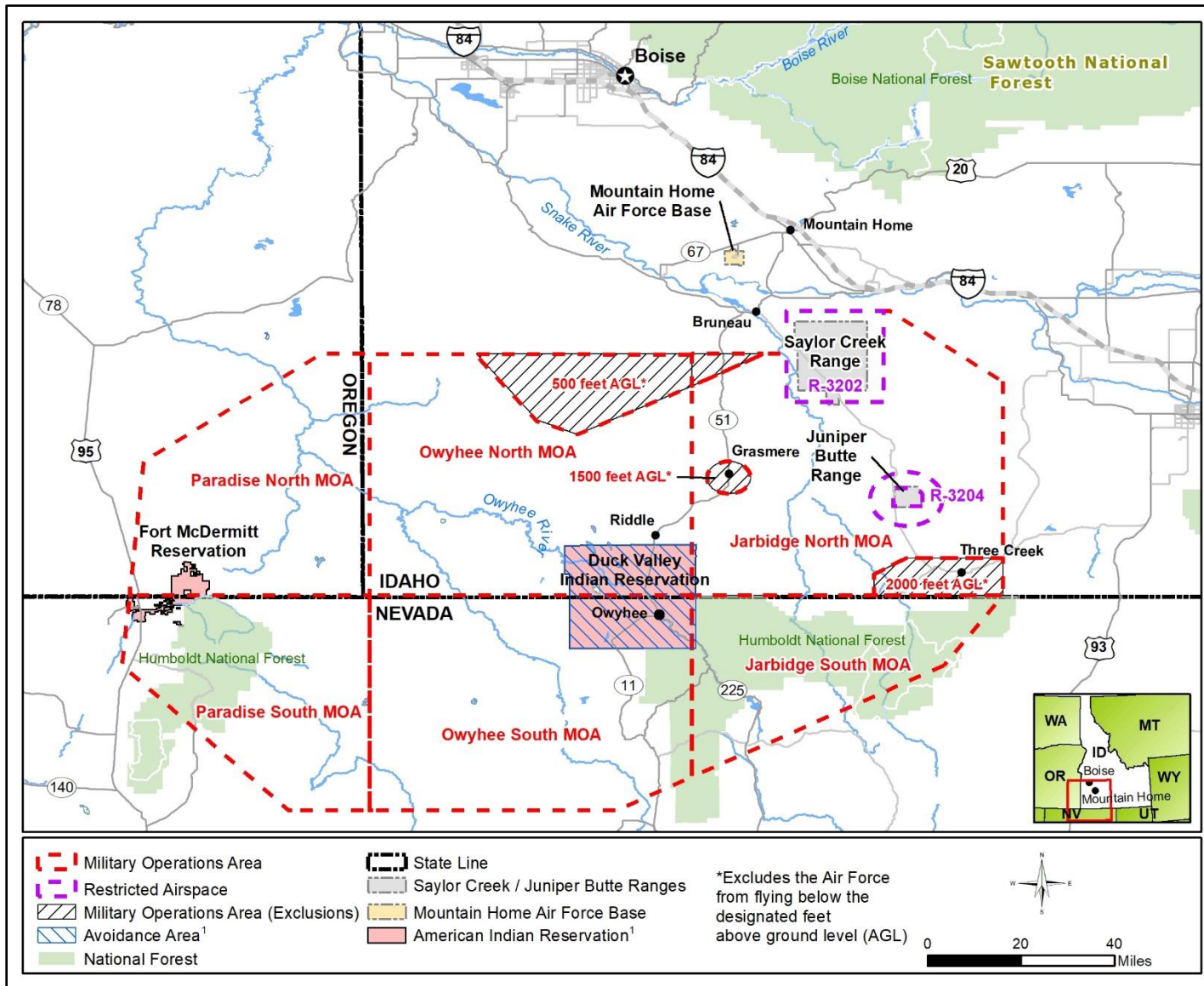


Figure 1-2. Mountain Home Range Complex Sites.



¹ Duck Valley Reservation is an avoidance area through agreements.

Figure 1-3. Special Use Airspace Associated with the Mountain Home Range Complex.

The *Final Enhanced Training in Idaho Environmental Impact Statement* (EIS) (Air Force, 1998) was prepared to evaluate various alternative approaches to enhance combat training. The EIS Record of Decision, signed 10 March 1998, selected the Juniper Butte Range as the environmentally preferred alternative. Under this alternative, a withdrawal of BLM lands was required, and the withdrawal legislation included approximately 10,600 acres of land for military training at the Juniper Butte Range, a 640-acre no-drop target, four 5-acre no-drop targets, and nine 1-acre emitter sites on Mountain Home Range Complex.

Under the *Engle Act of 1958*, Congressional approval is required for withdrawal of public lands over 5,000 acres, and, as part of that approval, an environmental review must be conducted. The withdrawal action analyzed in the *Enhanced Training in Idaho EIS* was enacted under PL 105-261 which allows reserving land for military use for a 25-year period.

1.3.1 *Public Law 105-261*

PL 105-261 was enacted in 1998 by Congress for the purpose of authorizing appropriations for the Department of Defense, military construction, and Department of Energy National Security. The *Juniper Butte Range Withdrawal Act* was enacted under PL 105-261 and provides for the withdrawal of public lands for military use, specifically for high-hazard military training. PL 105-261 identified approximately 10,600 acres of withdrawn land for the tactical range (or 11,300 acres total for all withdrawn lands); however, following a BLM survey, it was determined that the actual land withdrawal resulted in 11,816 acres being withdrawn. The *Juniper Butte Range Withdrawal Act* adopted the selected environmentally preferred alternative and is described in the *Enhanced Training in Idaho EIS Record of Decision* and otherwise referred to as the Juniper Butte Range Withdrawal. In addition, the *Juniper Butte Range Withdrawal Act* outlined commitments for managing the natural resources and existing land uses of withdrawn lands through mitigation measures specified in the Memorandum of Understanding between the BLM and the Air Force and in a subsequent Settlement Agreement (1999). The current land withdrawal will expire in 2023 unless Congress approves legislation to extend it. This EA supports the Air Force's request for an extension to be submitted to Congress.

1.4 MOUNTAIN HOME RANGE COMPLEX

The Mountain Home Range Complex ground assets are located in southwestern Idaho in Owyhee and Twin Falls Counties; the majority of the ground assets are situated in Owyhee County, while one ground asset is in Twin Falls County (see **Figure 1-2**). Components of the Mountain Home Range Complex are listed and described in **Table 1-2**.

The range complex supports the air-to-air and air-to-ground training missions for the 366 FW and other military personnel. The realistic training sites of the Mountain Home Range Complex provide for integrated airspace and ground-based training to meet Air Force requirements associated with airstrike control missions; Joint Terminal Air Controller training; Survival, Evasion, Resistance, and Escape training; Combined Arms Training mission; and Close Air Support missions.

Special use airspace consisting of six Military Operations Areas (MOAs) and two Restricted Areas provide pilot training over and around the Mountain Home Range Complex. While this airspace is critical to military training at the Mountain Home Range Complex, it is not part of PL 105-261. Of these MOAs and Restricted Areas, Jarbidge North MOA and R-3204A, B, and C overlie the areas described in the Proposed Action (refer to **Section 2.1.1**). Jarbidge North MOA extends from 100 feet above ground level (AGL) to 18,000 feet above mean sea level (MSL). R-3204 extends from the surface to 29,000 feet above MSL.

**Table 1-2
Sites of the Mountain Home Range Complex¹**

Site	Site Acreage	Portion of Site that is Withdrawn Land
Tactical Training Ranges		
Saylor Creek Range	109,466 acres	N/A ²
Juniper Butte Range	12,112 acres (approximately)	11,152 acres (approximately)
No-Drop Targets		
ND-1	640 acres	640 acres
ND-4	5 acres	5 acres
ND-5	5 acres	5 acres
ND-7	5 acres	5 acres
ND-9	3 acres (approximately)	N/A
Emitter Sites		
20 sites (0.25 acre each)	5 acres	N/A
10 sites (1 acre each)	10 acres	9 acres ³
Total acreage	122,955 acres	11,816 acres

Notes:

¹ Only 11,152 acres of withdrawn lands on the Juniper Butte Range will be analyzed in this EA.

² N/A – not applicable. These sites of the Mountain Home Range Complex are not withdrawn by PL 105-261 and are not a part of the Proposed Action.

³ Nine 1-acre emitter sites are withdrawn; one 1-acre emitter site is on state of Idaho leased land and is not part of the Proposed Action.

1.5 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.5.1 Purpose of the Proposed Action

The purpose of the Proposed Action is to ensure Mountain Home AFB aircrews continue to have the available infrastructure on the Juniper Butte Range portion of the Mountain Home Range Complex for realistic training in order to achieve and maintain combat readiness. Specifically, the Air Force must be able to

- provide integrated combat-effectiveness training based on realism and flexibility;
- alleviate competing demands on airspace and land used for effectiveness training; and
- balance environmental and cultural resource protection with training needs.

1.5.2 Need for the Proposed Action

As stipulated in PL 105-261, the initial 25-year period for the Juniper Butte Range land withdrawal will expire in 2023. The need for the Proposed Action is to maintain ready access to a dedicated area of land near to Mountain Home AFB, which would continue to provide a suitable location for ground assets in relationship to established airspace. Assigned aircrews would continue to use the dedicated area to accomplish high-quality, realistic, combat training to the maximum extent practicable. This established training involves high hazard activities, dropping non-explosive ordnance with spotting charges, electronic warfare, tactical maneuvering, Combat Air Support, and other national defense-related activities consistent with the listed training actions. Quality training requires realistic and flexible training capabilities that replicate the conditions aircrews will experience in a real-world combat situation by providing exposure to a variety of adversarial targets, tactics, weapons, defense systems, and combat support elements. Flexibility ensures the ability to keep pace with ever-changing enemy tactics and technological advances by frequently

redesigning the training environment to provide aircrews with a range of threats they must respond to and overcome.

Prior to the Juniper Butte Range land withdrawal in 1998, the 366 FW used the best available assets on Saylor Creek Range and other Department of Defense ranges and airspace to accomplish training syllabus tasks, tactics, and procedures. Scheduling training at other Department of Defense ranges and airspace, however, was challenging due to competing schedules and time-consuming travel to remote ranges; this resulted in reduced flight training hours. With these additional assets provided under the land withdrawal, the 366 FW has been able to provide the necessary training required to fulfill the Air Force's mission responsibilities.

1.6 NATIONAL ENVIRONMENTAL POLICY ACT AND OTHER COMPLIANCE REQUIREMENTS

NEPA requires agencies to consider the potential environmental effects of a proposed federal action on the natural, built, and human environment. The CEQ advises federal agencies on the procedures to ensure NEPA compliance. NEPA requires a systematic, interdisciplinary approach be used to evaluate all potential effects associated with a proposed action and alternatives. This analysis is documented in an EA and, if supported, with a Finding of No Significant Impact (FONSI). If a FONSI cannot be supported, then a Notice of Intent to prepare an EIS would be developed. Procedures for implementing NEPA are outlined in 40 CFR §§ 1500-1508, CEQ NEPA regulations.

Under 32 CFR § 989, the Air Force provides environmental impact analysis procedures for compliance with NEPA regulations. If significant impacts are anticipated under NEPA, the Air Force would decide whether to conduct mitigation to reduce impacts below the level of significance, prepare an EIS, or choose the No Action Alternative. The EA is used in the Air Force's decision-making process for implementing a proposed action.

To comply with NEPA (PL 91-190, 42 U.S.C. § 4321 et seq.), the planning and decision-making process involves a study of other relevant environmental laws, regulations, and Executive Orders (EOs). The NEPA process does not replace procedural or substantive requirements of other environmental laws; it addresses them collectively in an analysis, which enables decision makers to have a comprehensive view of major environmental issues and requirements associated with a proposed action. According to CEQ regulations, the requirements of NEPA must be integrated "with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively" (40 CFR § 1500.2). Coordination with other environmental agencies may occur for the Proposed Action.

1.7 COOPERATING AGENCIES

The Air Force is the lead agency for the preparation of this EA. The Department of Interior, BLM is a cooperating agency because it has jurisdiction over most public lands comprising the Mountain Home Range Complex and, by law, is responsible for federal land withdrawals. The proposed extension is being coordinated through the BLM Jarbidge Field Office.

1.8 INTERGOVERNMENTAL AND STAKEHOLDER COORDINATION

The environmental analysis process, in compliance with NEPA guidance, includes public and agency review of information pertinent to the proposed and alternative actions. Scoping is an early and open process for developing the breadth of issues to be addressed in an EA and for identifying significant concerns related to a proposed action. Per the requirements of EO 12372, *Intergovernmental Review of Federal Programs*, federal, state, and local agencies with jurisdiction that could potentially be affected by the proposed and alternative actions were notified during the development of this EA. Those Interagency and Intergovernmental Coordination for Environmental Planning memoranda and responses are included in **Appendix A**.

The *Intergovernmental Coordination Act* and EO 12372 require federal agencies to cooperate with and consider state and local views in implementing a federal proposal. Through the coordination process, the 366 FW sent letters to potentially interested and affected government agencies, government representatives, elected officials, and interested parties potentially affected by the Proposed Action. The recipient mailing list and agency and intergovernmental coordination letters and responses are included in **Appendix A**.

1.8.1 Agency Consultations

Compliance with Section 7 of the *Endangered Species Act of 1973* (ESA), and implementing regulations (50 CFR § 20.402), requires consultation with the United States Fish and Wildlife Service (USFWS) in cases where a federal action could affect listed threatened or endangered species and a conference where a federal action could affect species proposed or candidates for listing. The primary focus of this consultation is to request a determination of whether any of these species occur in the proposal area. If any of these species is present, a determination is made of any potential adverse effects on the species. If it is determined that ESA listed species are not likely to be adversely affected by proposed or alternative actions, no consultation is required. Letters were sent to the appropriate USFWS offices as well as relevant state agencies informing them of the proposal and requesting data regarding applicable protected species.

A federally-listed threatened species, slickspot peppergrass (*Lepidium papilliferum*), is known to occur at the Juniper Butte Range. The activities proposed would remain consistent with conservation measures outlined in the *Biological Opinion on the Effects of U.S. Air Force Ongoing Actions at Juniper Butte Range and in Owyhee County, Idaho on the Slickspot Peppergrass (Lepidium papilliferum)* (USFWS, 2010).

The Proposed Action is not a routine undertaking as defined in the installation Programmatic Agreement for compliance with Section 106 of the *National Historic Preservation Act* and its implementing regulations (36 CFR § 800); consultation with the Idaho State Historic Preservation Office and consulting parties is ongoing.

All agency correspondence is included in **Appendix A**.

1.8.2 Government-to-Government Consultation

The *National Historic Preservation Act* and its implementing regulations (36 CFR § 800) require federal agencies consult with stakeholders, including federally-recognized Indian tribes when an undertaking has the potential to adversely affect properties of religious and/or cultural significant to Indian tribes. In addition, under Department of Defense Instruction 4710.02, *Interactions with Federally-Recognized Tribes*, and AFI 90-2002, *Air Force Interaction with Federally-Recognized Tribes*, federally-recognized tribes historically affiliated with lands in the vicinity of proposed and alternative actions have been invited to consult on all proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes.

The tribal consultation process is distinct from the NEPA interagency coordination process and requires separate notification. The Mountain Home AFB point-of-contact for Native American tribes is the Wing Commander. The tribal governments that have been consulted with regarding the Proposed Action are listed, along with correspondence, in **Appendix A**. Tribes were asked for input on any concerns or information of traditional resources within the project area potentially impacted by the Proposed Action.

1.9 PUBLIC AND AGENCY REVIEW OF ENVIRONMENTAL ASSESSMENT

A Notice of Availability and Federal Register Notice of the Draft EA and unsigned FONSI were published in *The Idaho Statesman*, *The Mountain Home News*, and *The Twin Falls Times-News* announcing the availability of the EA for a 60-day public review period, as established in PL 106-261. The Notice of Availability and Federal Register Notice invited the public to review and comment on the Draft EA. Copies of the Draft EA

and FONSI were made available for review on the Mountain Home AFB website as well as at the following locations:

- Mountain Home Public Library, 790 N 10th E Street, Mountain Home, Idaho 83647
- Mountain Home AFB Library, 480 5th Avenue, Building 2610, Mountain Home AFB, Idaho 83648
- Twin Falls Public Library, 201 Fourth Avenue East, Twin Falls, Idaho 83301

Also, a public meeting is scheduled during the public review period. The public and agency comments received throughout the process are provided in **Appendix A**.

CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Air Force proposes to extend the withdrawal of public land as described in PL 105-261 at the Mountain Home Range Complex, Idaho, for an additional 25 years. The *Juniper Butte Range Withdrawal Act* reserved public land for military use including a tactical training range, no-drop targets, and emitter sites. The Proposed Action is comprised of two key components:

- the withdrawn lands described by PL 105-261 (**Table 2-1**) and
- the commitments made by the Air Force as outlined in PL 105-261 and the Enhanced Training in Idaho EIS Record of Decision, Supplemental Record of Decision, Memorandum of Understanding, and Settlement Agreement.

**Table 2-1
Proposed Action Sites**

Proposed Action	Site Name	Area for Withdrawal Extension
Tactical training range	Juniper Butte Range ¹	11,152 acres ²
No-drop targets ³	ND-1	640 acres
	ND-4	15 acres (5 acres each)
	ND-5	
	ND-7	
Emitter sites	BA	9 acres (1 acre each)
	BB	
	BC	
	BD	
	BE	
	BF	
	BG	
	BI	
	BK	
Total acreage²		11,816 acres²

Notes:

¹ The Juniper Butte Range is 12,112 acres with 960 acres leased from the state of Idaho and a power line right-of-way under a separate action. The Proposed Action includes Bureau of Land Management lands only.

² Approximate acreage

³ ND-8 was revoked and replaced by ND-9. Neither are part of the Proposed Action.

2.1.1 *Withdrawn Lands*

The Juniper Butte Range comprises approximately 12,112 acres, 960 of which are leased from the state of Idaho in addition to acreage for a powerline right-of-way. These leased lands and powerline right-of-way are not part of PL 105-261 and therefore not considered part of the Proposed Action. The Proposed Action evaluates approximately 11,152 acres on the Juniper Butte Range withdrawn from the BLM, as well as 664 acres on the Mountain Home Range Complex for no-drop targets and emitter sites. The locations of these sites are depicted on **Figure 2-1**.

While PL 105-261 included four 5-acre no-drop targets for withdrawal from BLM, the Supplemental Record of Decision (September 1998) to the Enhanced Training in Idaho EIS Record of Decision identified a conservation partners' request to revoke one no-drop target (ND-8) and replace it with an alternative location (ND-9). Impacts to ND-9 were evaluated (Air Force, 2001), and ND-9 was established on 2.66 acres of leased private land. In 2010, ND-8 was relinquished back to BLM under Public Land Order 7747.

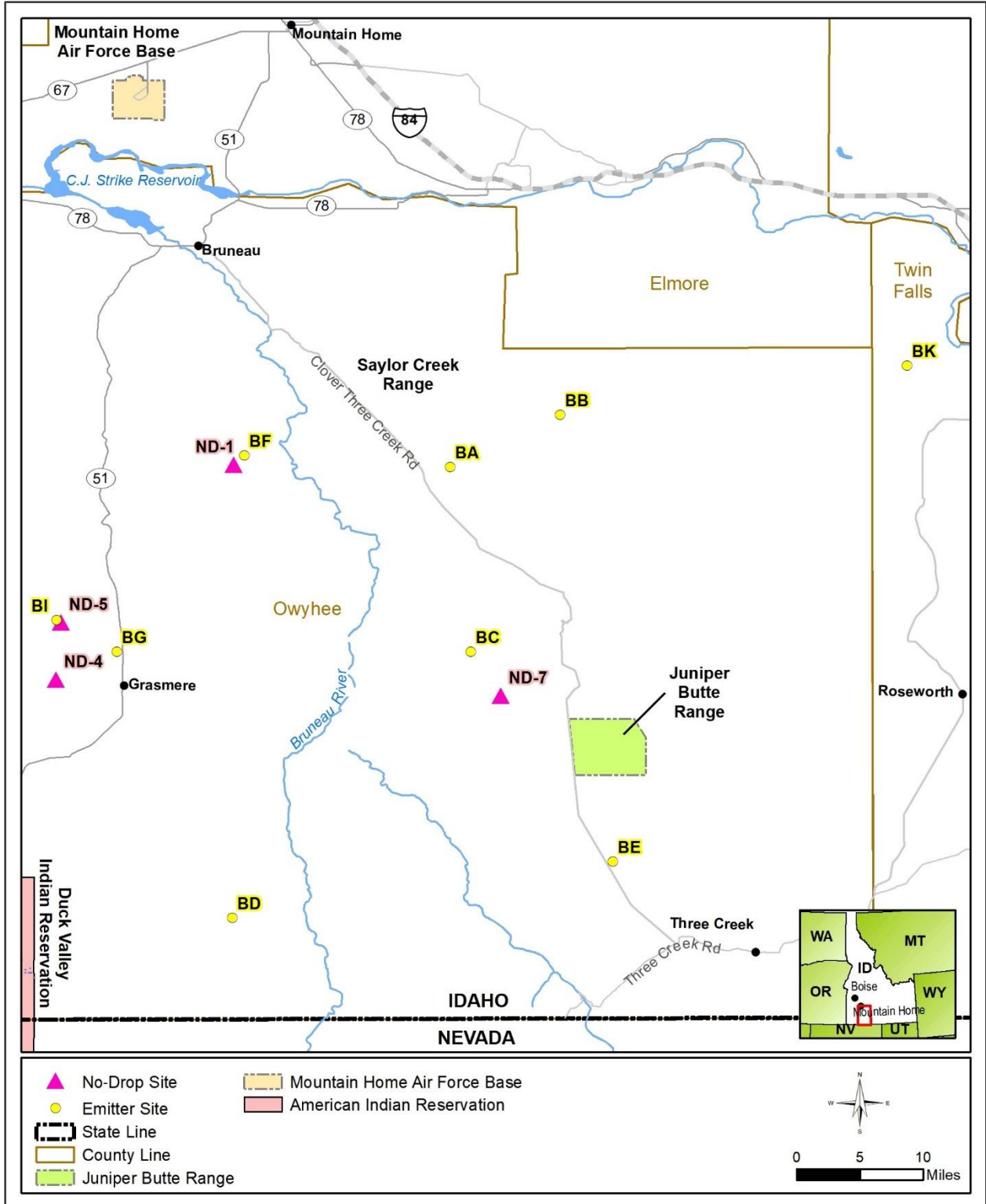


Figure 2-1. Locations of the Proposed Action Sites.

2.1.1.1 Juniper Butte Range

The Juniper Butte Range is an approximately 12,112-acre tactical training range which serves as a day/night multiuse air-to-ground training range consisting of approximately 11,152 acres of withdrawn BLM lands and approximately 960 acres of lands leased from the state of Idaho. The withdrawn BLM lands, as defined in PL 105-261, are considered part of the Proposed Action. A 662-acre fenced impact area supports 88 targets, weapons and supply storage buildings, fuel tanks, battle tanks, and railroad cars within an industrial complex. The fenced impact area has two surface-to-air missile sites, one north and one south; convoy areas to support ground-based convoy training; a large-scale target scoring system tower; an Explosive Ordnance Disposal demolition site; and a weapons impact scoring system tower. Some of the targets are no-drop targets or are limited in the number of bomb drops. Targets are infrared heated by small electrical heaters in the targets. The Cold Spot Expended Bomb Dummy Unit (BDU)-33, chaff, and flares are the only authorized ordnance for use in the Juniper Butte Range impact area.

Ordnance and Defensive Countermeasure Use

The Cold Spot Expended BDU-33 is a nonexplosive training ordnance used to simulate actual bombs with similar flight and delivery behavior to operational munitions (GlobalSecurity, 2011). It is constructed with cast-iron and steel with a spotting charge that releases a cloud of smoke upon impact. The BDU-33 contains signal devices to aid in visual scoring that are generally “hot” or “cold.” Only the “cold” signal devices are allowed in the Juniper Butte Range impact area. Cold signals use titanium tetrachloride and produce smoke. Unlike the “hot” signal, the “cold” signal does not produce a flame on impact; therefore, the “cold” signal cannot be used for night scoring in training (GlobalSecurity, 2011).

Chaff is an electronic countermeasure designed to reflect radar waves and obscure aircraft, ships, and other equipment from radar tracking sources. Chaff consists of non-hazardous aluminum-coated glass fibers. When ejected from the aircraft, millions of fibers disperse widely in the air, forming an electromagnetic screen that temporarily hides the aircraft from radar and forms a radar decoy, allowing the aircraft to defensively maneuver or leave the area.

Flares are defensive countermeasures consisting of magnesium pellets ejected from military aircraft and provide high-temperature heat sources that act as decoys for heat-seeking weapons targeting the aircraft. Flares are used to keep aircraft from being successfully targeted by or escape from weapons such as surface-to-air missiles, air-to-air missiles, anti-aircraft artillery, and other aircraft. Chaff and flares are released in the Mountain Home Range Complex airspace above 2,000 feet AGL. When the Fire Danger Level is classified as Very High or above, a release must be above 5,000 feet AGL.

Facilities on the Juniper Butte Range

Existing facilities at the Juniper Butte Range include the Operations and Maintenance Complex (Building 10), Water Pump House (Building 20), Generator Building (Building 30), and gravel vehicle parking. The Operations and Maintenance Complex is approximately 7,380 square feet and includes administrative office space and vehicle maintenance. The Water Pump House is approximately 482 square feet and includes the water pump system, water tank storage, and sprinkler system. The Generator Building houses the electrical generation systems and backup generators to the electrical system. There are two non-potable water tanks: a 10,000-gallon tank for Building 10 and a 50,000-gallon above ground water tank for firefighting. Overhead power lines supply electrical power to the Juniper Butte Range from a commercial utility company with a backup generator on site. Four above ground 1,000-gallon propane tanks power the backup generators. Vehicle fuel supplies are available with four 250-gallon fuel tanks, three gasoline tanks, and one diesel tank. Expended BDU-33s are stored in a fenced holding area.

2.1.1.2 640-Acre No-Drop Target

The Proposed Action includes a 640-acre no-drop target on the Mountain Home Range Complex (referred to as ND-1 on **Figure 2-1**). No-drop targets allow aircrews to practice locating and aiming at a target without

dropping any ordnance. Targets simulate a typical combat environment and provide varying levels of difficulty. No-drop targets are critical to combat training and provide tactical practice in a realistic setting. The perimeter of the 640-acre no-drop target is fenced with wildlife fencing and contains targets such as battle tanks and other military vehicles. Two 1,000-gallon propane tanks are located onsite with tank and vehicle targets.

2.1.1.3 No-Drop Targets (5-Acre)

The Proposed Action includes three 5-acre no-drop targets on the Mountain Home Range Complex (ND-4, ND-5, and ND-7), which are depicted on **Figure 2-1**. As described in **Section 2.1.1.2**, no-drop targets allow aircrews to practice without dropping any ordnance. These sites simulate surface-to-air missiles, early warning radars, and simulated industrial complexes. All three no-drop targets (ND-4, ND-5, and ND-7) have two enclosed 1,000-gallon propane tanks, while ND-4 and ND-5 also have simulated industrial sites.

2.1.1.4 Emitter Sites

The Proposed Action includes nine 1-acre emitter sites on the Mountain Home Range Complex. These sites are named BA, BB, BC, BD, BE, BF, BG, BI, and BK (refer to **Figure 2-1**). These emitter sites are 1-acre, unfenced gravel surfaces with grounding rods at each site. Vehicle-mounted electronic emitters provide realistic scenarios that can be moved around from site to site to simulate enemy movement. The emitter electronically simulates a threat to aircrews. A 192-square-foot electrical power building, a 448-square-foot building, and a 1,000-gallon sewage septic tank have been constructed on each emitter site.

2.1.1.5 Access Roads

Access to the Juniper Butte Range, no-drop targets, and emitter sites are provided by a network of two-lane, gravel roads. Under PL 105-261, the Air Force entered into an agreement with two highway districts for road maintenance: the Owyhee County Highway District #3 and Three Creek Highway District. Through the agreements, renewed every 5 years, the Air Force is responsible for all costs associated with road maintenance.

The Owyhee County Highway District #3 is responsible for road maintenance on approximately 74 miles in length of access roads to the Proposed Action sites. The Three Creek Highway District is responsible for road maintenance on 7.2 miles in length of access roads (**Table 2-2**). Roads are surfaced with gravel and designed for vehicle traffic at 35 miles per hour or single pass of 25 miles per hour.

**Table 2-2
Access Roads**

Proposed Action Site	Highway District	Distance (miles)
Juniper Butte Range	Three Creek Highway District	1.0
ND-1 (640-acre no-drop target)	Owyhee County Highway District #3	2.01
ND-4	Owyhee County Highway District #3	49.65
ND-5	Owyhee County Highway District #3	4.52
ND-7	Three Creek Highway District	3.0
Emitter site – BA	Owyhee County Highway District #3	2.29
Emitter site – BB	Owyhee County Highway District #3	13.75
Emitter site – BC	Three Creek Highway District	2.3
Emitter site – BD	Owyhee County Highway District #3	0.22
Emitter site – BE	Three Creek Highway District	0.9
Emitter site – BF	Owyhee County Highway District #3	0.48
Emitter site – BG	Owyhee County Highway District #3	0.29
Emitter site – BI	Owyhee County Highway District #3	0.33

2.1.2 *Commitments*

As part of establishing the Juniper Butte Range, the Air Force entered into agreements and commitments outlined in PL 105-261 and the Enhanced Training in Idaho EIS Record of Decision, Supplemental Record of Decision, Memorandum of Understanding, and Settlement Agreement (**Appendix B**). The Proposed Action encompasses these environmental, operational, and stakeholder commitments.

Environmental commitments are related to natural and cultural resources management such as monitoring special-status species, fire management, or range management. The operational commitments are associated with training operations such as airspace scheduling restrictions, use of defensive countermeasures, and access road maintenance. Stakeholder commitments are focused on engagement and outreach to various stakeholders. These commitments ensure the Air Force's ability to maintain and enhance military readiness by providing realistic training opportunities on the withdrawn lands in conjunction with the Air Force's role of environmental stewardship.

2.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, the withdrawal of public lands would not be extended for military training use, and the lands described under the Proposed Action would be relinquished back to the BLM. The 366 FW would not benefit from using the existing assets that support continuance of the mission for effective combat training and rapid deployment. Prior agreements with federal, state, and local agencies as well as Tribal governments would be revised or abandoned to reflect that the Air Force would no longer be managing the land.

Upon termination of the land withdrawal, under PL 105-261, lands would be relinquished to the BLM. Approximately 12,500 square feet of building infrastructure would either be demolished or removed, and approximately 62,082 linear feet of boundary and interior fencing would be dismantled and removed. As required under PL 105-261, all necessary environmental remediation would be completed to ensure lands are safe for nonmilitary uses and comply with the BLM's mission "to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations."

Without the land withdrawal described in **Section 2.1.1**, training activities that take place at the Juniper Butte Range, no-drop targets, and emitter sites on the range complex would move to the Saylor Creek Range and other no-drop targets and emitter sites in the Mountain Home Range Complex or to out-of-state Department of Defense ranges. More transit time to training ranges outside the Mountain Home Range Complex would result in less training time. The ability to shift training to the Saylor Creek Range and other assets within the Mountain Home Range Complex is limited due to congestion, reducing the available training time.

Under the No Action Alternative, Jarbidge North MOA and R-3204A, B, and C (refer to **Section 1.4**) would be retained by the Air Force; however, training activities would exclude ordnance drops as described in **Section 2.1.1.1**. While the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, this alternative was retained to provide a comparative evaluation against the Proposed Action, as required under CEQ regulations (40 CFR § 1502.14).

2.3 SELECTION STANDARDS

In accordance with 32 CFR § 989.8(c), selection standards were developed to establish a means for determining the reasonableness of an alternative and whether an alternative should be carried forward for further analysis in the EA. Consistent with 32 CFR § 989.8(c), the following selection standards meet the purpose of and need for the Proposed Action and were used to identify reasonable alternatives for analysis in the EA. The supporting infrastructure must be

- proximate to Mountain Home AFB to maximize training time;
- available to support current and future missions for up to 25 years;
- connected to airspace currently reserved for military purposes; and
- able to provide quality and realistic training opportunities that allow the Air Force to maintain and enhance Air Force readiness.

2.4 ALTERNATIVES ELIMINATED FROM FURTHER ANALYSIS

The Utah Test and Training Range, located in northwestern Utah and maintained by Hill AFB, was considered as an alternative location for the deployment of 366 FW aircrews for combat readiness training. The Utah Test and Training Range complex is used for testing and evaluating weapons that require a large safety footprint and is the only location able to support overland testing of cruise missiles. The Utah Test and Training Range is also used for air-to-air and air-to-ground combat training as well as inert and live practice bombing in support of Air Force and other DOD units. The range complex is divided into two ranges, the North Range and South Range. The North Range is the closest military training range to Mountain Home AFB, approximately 200 miles away. The training range has a segmented, small airspace and lacks the quality and realism required to support the 366 FW mission for combat readiness. The South Range, located approximately 230 miles from Mountain Home AFB, provides larger, more extensive airspace that allows for bombing and target practice. The South Range provides a suitable training environment to support the 366 FW's mission; however, the range is currently at capacity which would make scheduling flying time difficult for the 366 FW. The Utah Test and Training Range is primarily used for weapons and aircraft testing; therefore, priority is given to those users.

Using the Utah Test and Training Range would require extended transit times from Mountain Home AFB to the Utah Test and Training Range. With transit distances of 200 to 230 miles, finite flying and training time would be reduced. As such, the Utah Test and Training Range would not meet the selection standard for proximity to Mountain Home AFB. Furthermore, the purpose of the Proposed Action is to extend the withdrawal of public lands for military use; therefore, lands or activities not stipulated under PL 105-261 would not be considered a reasonable alternative as it would not meet the purpose of or need for the extension of the land withdrawal as previously described. Since the Utah Test and Training Range would not meet the training requirements of the 366 FW nor the purpose of and need for the action or the selection standards (refer to **Sections 1.5** and **2.4**, respectively), it was dismissed from further evaluation. No other reasonable alternatives were carried forward for detailed analysis.

2.5 SUMMARY OF POTENTIAL ENVIRONMENTAL CONSEQUENCES

The potential impacts associated with the Proposed Action and the No Action Alternative are summarized in **Table 2-3**. The summary is based on information discussed in detail in **Chapter 4 (Environmental Consequences)** of the EA and includes the potential environmental impacts associated with each alternative.

**Table 2-3
Summary of Potential Environmental Consequences**

Potentially Affected Resource	Proposed Action	No Action Alternative
Airspace Use and Management	No change; no significant impacts	No significant impacts
Noise	No change; no significant impacts	No change; no significant impacts
Land Use and Visual Resources	No change; no significant impacts	Minor, long-term beneficial impacts
Air Quality	No change; no significant impacts	No change; no significant impacts
Geology and Soils	No change; no significant impacts	Negligible, direct and indirect effects
Water Resources	No change; no significant impacts	Minor short-term adverse impacts to water quality; minor long-term negative impacts to surface water; no impacts to floodplains or groundwater.
Biological Resources	No change; no significant impacts	Minor, short-term increase in soil erosion and deterioration of vegetation and wildlife habitat.
Cultural Resources	No change; no adverse effects	No adverse effects
Hazardous Materials and Wastes	No change; no significant impacts	No significant impacts
Safety	No change; no significant impacts	No significant impacts
Socioeconomics	No change; no significant impacts	Short-term beneficial impacts
Environmental Justice	No change; no significant impacts	No significant impacts

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CHAPTER 3 AFFECTED ENVIRONMENT

The Proposed Action represents the existing environmental condition which includes the environmental, operational, and stakeholder commitments agreed on as part of land withdrawal (refer to **Section 2.1.2** and **Appendix B**). In this chapter, relevant resources are defined, the geographic scope is identified, followed by a description of the existing conditions for that resource. The expected geographic scope of potential consequences is referred to as the Region of Influence (ROI). The ROI boundaries will vary depending on the nature of each resource. For example, the ROI for some resources, such as socioeconomics and air quality, extend over a larger jurisdiction unique to the resource.

3.1 AIRSPACE MANAGEMENT AND USE

3.1.1 *Definition of Resource and Regulatory Setting*

Airspace use and management address how and in what airspace the aircraft stationed at Mountain Home AFB (and elsewhere) would fly and how they would use the National Airspace System. Included in the National Airspace System are those components shared jointly with or operated by the military.

When considering the National Airspace System, it is convenient to divide it into three domains: airfield capacity and delay; air traffic control airspace; and special use airspace. As neither the Proposed Action nor the No Action Alternative is proposing any changes to fleet mix or other changes to the airfield, the principal focus is on special use airspace as opposed to air traffic control airspace or airfield capacity and delay.

Special use airspace is airspace of defined dimensions (i.e., metes-and-bounds along with an upper and lower altitude limit) within which aeronautical activities are confined because of their nature and within which operating limitations may be imposed upon aircraft that are not part of those activities. Essentially, special use airspace entails the identification (and often removal from the public domain) of a defined block of airspace for the benefit of particular user such as the military. Of the various types of special use airspace, Restricted Areas (R-) and MOAs are included in this EA. Within Restricted Areas, the nature of the activities (e.g., use of munitions) is hazardous to nonparticipating traffic and consequently flight of other aircraft is subject to restriction.

The Air Force manages airspace in accordance with processes and procedures detailed in AFI 13-201, *Airspace Management*. AFI 13-201 implements Air Force Policy Directive 13-2, *Air Traffic, Airspace, Airfield, and Range Management*, and Department of Defense Directive 5030.19, *DoD Responsibilities on Federal Aviation and National Airspace System Matters*. It addresses the development and processing of special use airspace and covers aeronautical matters governing the efficient planning, acquisition, use, and management of airspace required to support Air Force flight operations.

3.1.2 *Existing Conditions*

As depicted on **Figure 3-1**, the Jarbidge North MOA and R-3204 lie in southwest Idaho along its border with Nevada. The airspace within this is generally uncontrolled from the surface upward to 1,200 feet AGL. Above that elevation, to 17,999 feet MSL the airspace is controlled, meaning air traffic control separation services to aircraft operating under Instrument Flight Rules is available, subject to constraints on reception of radio communications for surveillance, control, and navigation purposes.

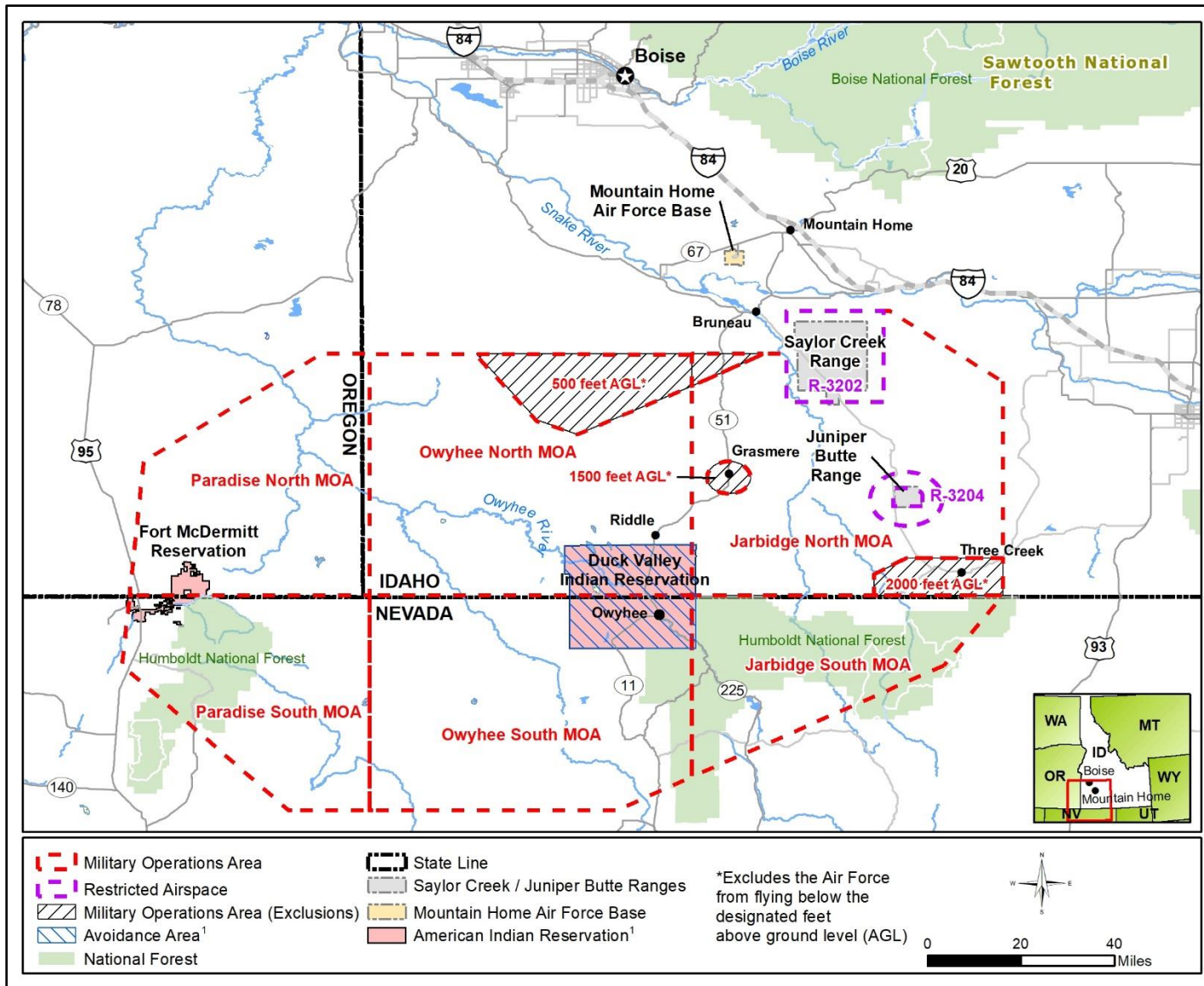


Figure 3-1. Special Use Airspace Associated with the Mountain Home Range Complex.

The ROI for airspace includes the airspace overlying the area where the boundaries of Idaho, Nevada, and Utah meet, specifically that region within 25 nautical miles of R-3204 (Juniper Buttes¹). The Restricted Area is subdivided into three portions:

- R-3204A which extends from the surface up to 100 feet AGL with lateral boundaries matching those of the range complex;
- R-3204B which extends from 100 feet AGL up to 18,000 feet above MSL and outward on a 5-nautical-mile radius from the range complex; and
- R-3204C which extends from 18,000 feet MSL up to 29,000 feet MSL and outward on a 5-nautical-mile radius from the range complex.

3.2 NOISE

3.2.1 *Definition of Resource and Regulatory Setting*

Sound is a physical phenomenon consisting of vibrations that travel through a medium, such as air, and are sensed by the human ear. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies depending on the type and characteristics of the noise, distance between the noise source and the receptor, receptor sensitivity, and time of day. Noise is often generated by activities essential to a community's quality of life, such as aircraft operations, construction, or vehicular traffic.

Sound varies by both intensity and frequency. Sound pressure level, described in decibels (dB), is used to quantify sound intensity. The dB is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level. Hertz is used to quantify sound frequency. The human ear responds differently to different frequencies. "A-weighting", measured in A-weighted decibels (dBA), approximates a frequency response expressing the perception of sound by humans. With A-weighting, low and high frequencies are de-emphasized because the ear does not respond equally to sounds of all frequencies and is less efficient at low and high frequencies than it is at medium or speech range frequencies. A-weighting is appropriate for most sounds encountered in daily life, including transportation noises such as aircraft overflights.

Impulsive noise, such as that generated from aircraft in supersonic flight (i.e., sonic booms), is dominated by intense low-frequency noise energy. Because of this low-frequency energy content, sonic booms and other impulsive noises may induce secondary effects, such as shaking of a structure, rattling of windows, and inducing vibrations. These secondary effects can cause additional annoyance and complaints. Because of this attribute, impulsive noises are better described in terms of C-weighted decibels (dBC). Relative to A-weighting, C-weighting does not apply adjustments to noise signals over most of the audible frequencies but does apply small adjustments to the very low and very high frequencies.

The sound pressure level noise metric is useful when describing steady noise levels, although very few noises are, in fact, constant; therefore, additional noise metrics have been developed to describe noise including

- Maximum Sound Level (L_{max}) – L_{max} is the maximum sound level in dB;
- Equivalent Sound Level (L_{eq}) – L_{eq} is the average sound level in dB of a given event or period of time;
- Sound Exposure Level (SEL) – SEL is a measure of the total energy of an acoustic event. It represents the level of a 1-second-long constant sound that would generate the same energy as the actual time-varying noise event such as an aircraft overflight. SEL provides a measure of the net effect of a single acoustic event, but it does not directly represent the sound level at any given time;
- Day-Night Average Sound Level (DNL) – DNL is the average A-weighted sound energy in a 24-hour period with a penalty added to the nighttime levels. Because of the potential to be particularly

¹ The authoritative Federal Aviation Administration publication containing metes-and-bounds descriptions, controlling and using agencies, and hours of use for SUA is Joint Order 7410.10. *Special Use Airspace*, most recently published on 16 February 2018. In that document, R-3204A, R-3204B, and R-3204C are all referred to as "Juniper Buttes."

intrusive, noise events occurring between 10:00 p.m. and 7:00 a.m. are assessed a 10-dB penalty when calculating DNL. DNL is a useful descriptor for aircraft noise because it averages ongoing yet intermittent noise and it measures total sound energy over a 24-hour period. DNL provides a measure of the overall acoustical environment, but, as with SEL, it does not directly represent the sound level at any given time. For well-distributed sound, L_{eq} is approximately 6.4 dBA lower than DNL;

- C-weighted Day-Night Average Sound Level (CDNL) – A C-weighted version of the standard DNL metric. CDNL is used for low-frequency impulsive sounds, such as sonic booms, heavy weapons, and other explosions because they are perceived by humans not only by the ear, but also by the whole body as pressure or vibration. When experienced indoors, impulsive sounds can create secondary noise from rattling and vibrations of the building; and
- Onset Rate Adjusted Day-night Sound Level (DNL_{mr} , symbolized as L_{dnmr} in equations) – The metric used for quantifying noise in special use airspace because aircraft operate differently than in the airport environment, often flying in a more sporadic manner and at low altitudes with speeds greater than 425 miles per hour creating the potential to surprise the receiver. With DNL_{mr} , the conventional Day-Night Average Sound Level (DNL or L_{dn}) metric is adjusted to account for the “surprise” effect of the sudden onset of aircraft noise events. Each aircraft operating in SUA/Airspace for Special Use that exhibits a high onset rate have an adjustment or penalty ranging from 0 to 11 dB applied to the normal SEL. The DNL is then determined in the same manner as for conventional aircraft noise events and is designated as Onset-Rate Adjusted Day-Night Average Sound Level. The L_{dnmr} is calculated from month with the most operations (i.e., busiest month).

Regulatory Review and Land Use Planning. The *Noise Control Act of 1972*, PL 92-574, directs federal agencies to comply with applicable federal, state, and local noise control regulations; however, the *Noise Control Act* does specifically exempt military training activities and noise from aircraft overflights from all state and local noise regulations. In 1974, the United States Environmental Protection Agency (USEPA) provided information suggesting continuous and long-term noise levels in excess of 65 dBA DNL are normally unacceptable for noise sensitive land uses such as residences, schools, churches, and hospitals. The Air Force’s land use guidelines for noise exposure are outlined in AFI 32-7063, *Air Installations Compatible Use Zone Program*, 18 December 2015. Tables A3.1 and A3.3 in AFI 32-7063 provide an overview of the recommended DNL and CDNL noise limits for subsonic and supersonic aircraft operations, respectively, for land use planning purposes. Per AFI 32-7063, noise levels in excess of 65 dBA DNL or 62 dB CDNL are normally unacceptable for noise sensitive land uses. The AFI recommended noise limits for standard DNL also apply to DNL_{mr} .

The ROI for noise for this Proposed Action includes the land within the Juniper Butte Range and underlying R-3204A, R-3204B, and R-3204C. The location and boundaries of the Restricted Area R-3204 is depicted on **Figure 3-1**.

3.2.2 Existing Conditions

Sound generated from military aircraft within the airspace includes aircraft engine and air flowing over the airframe and sonic booms generated from supersonic flight. Engine and airframe noise within an area generate sound levels much less than 65 dBA (Air Force, 2018). Sonic booms are caused by aircraft in supersonic flight and created by a rapid increase in pressure, a decrease in pressure, and then returning to normal atmospheric pressure, resulting in a “boom-boom” sound. Supersonic operations above 10,000 feet MSL are authorized in Jarbidge North MOA with a recording of approximately 50 booms per month (Air Force, 2018).

3.3 LAND USE AND VISUAL RESOURCES

3.3.1 *Definition of the Resource*

The term “land use” refers to real property classifications that indicate either natural conditions or the types of human activity occurring on a parcel. In many cases, land use descriptions are codified in local zoning laws; however, no nationally recognized convention or uniform terminology has been adopted for describing land use categories. As a result, the meanings of various land use descriptions, labels, and definitions vary among jurisdictions. County-wide land use information was provided by the BLM and Owyhee and Twin Falls Counties, Idaho, to describe the land uses on the withdrawn lands.

In addition to the land use categories identified above, lands designated as special management areas and visual resources are considered in the evaluation. Lands with special designation include those intended to preserve natural or cultural resources, contain recreational opportunities and public access, or provide for the management of public lands. Visual resources include the natural and human aspects of land use that encompass the aesthetic qualities of an area. Natural areas include uses such as forestry and agriculture, as well as conversation areas, wildlands, and parks. Human aspects include historic properties and architecture (also refer to **Section 3.9, Cultural Resources**).

The ROI for land use and visual resources includes areas within and adjacent to the land withdrawn for the Juniper Butte Range, no-drop targets, and emitter sites.

3.3.2 *Existing Conditions*

3.3.2.1 Land Use

The Juniper Butte Range is located within rural Owyhee and Twin Falls Counties, where most of the lands are federally owned and managed by the BLM. The majority of all lands in these two counties are used for agriculture. No major population centers are located near the lands where the withdrawal extension is proposed (Idaho Department of Commerce, 2010). The Juniper Butte Range, no-drop targets, and emitter sites are categorized as agricultural land uses (**Figure 3-2**). Further, grazing within the Juniper Butte Range is allowed and used as a management tool to reduce standing biomass and reduce wildland fire risk. The Air Force has a grazing lease agreement with one lessee, which is managed by 366 Civil Engineer Squadron. Grazing is permitted on 10,790 acres of the Juniper Butte Range for a maximum period of 60 days between 15 April and 15 July each year. Grazing is prohibited on the emitter sites and all but one of the no-drop targets. The no-drop targets are fenced (Mountain Home AFB, 2017). Grazing on the 650-acre ND-1 is permitted and administered under a BLM grazing permit (366 OSS/OSR, 2006). No recreational uses are permitted within the lands withdrawn for military use.

None of the Juniper Butte Range, no-drop targets, or emitter sites are located in a designated special land use area; however, designated special land use areas are located proximate to the Juniper Butte Range and below special use airspace associated with the Mountain Home Range Complex. The nearest special land use areas are the Saylor Creek Wild Horse Herd Management Area, which is located approximately 1 mile north of emitter site BB and underlies the Jarbidge North MOA, and the Hagerman Fossil Beds National Monument, which is located approximately 2 miles northeast of emitter site BK (**Figure 3-2**) but does not underlie any special use airspace and is 7 miles northeast of the Jarbidge North MOA. The BLM manages the Saylor Creek Wild Horse Herd Management Area and its associated herd of wild horses. The National Park Service administers the Hagerman Fossil Beds National Monument. The Bruneau-Jarbidge Rivers Wilderness, a designated wilderness area and the associated Bruneau and Sheep Creek Rivers, which are designated Wild and Scenic Rivers, are located approximately 10 miles west of the Juniper Butte Range (**Figure 3-2**) and underlie Mountain Home Range Complex Special Use Airspace. The Bruneau-Jarbidge Rivers Wilderness is included in the National Wilderness Preservation System and is managed by BLM.

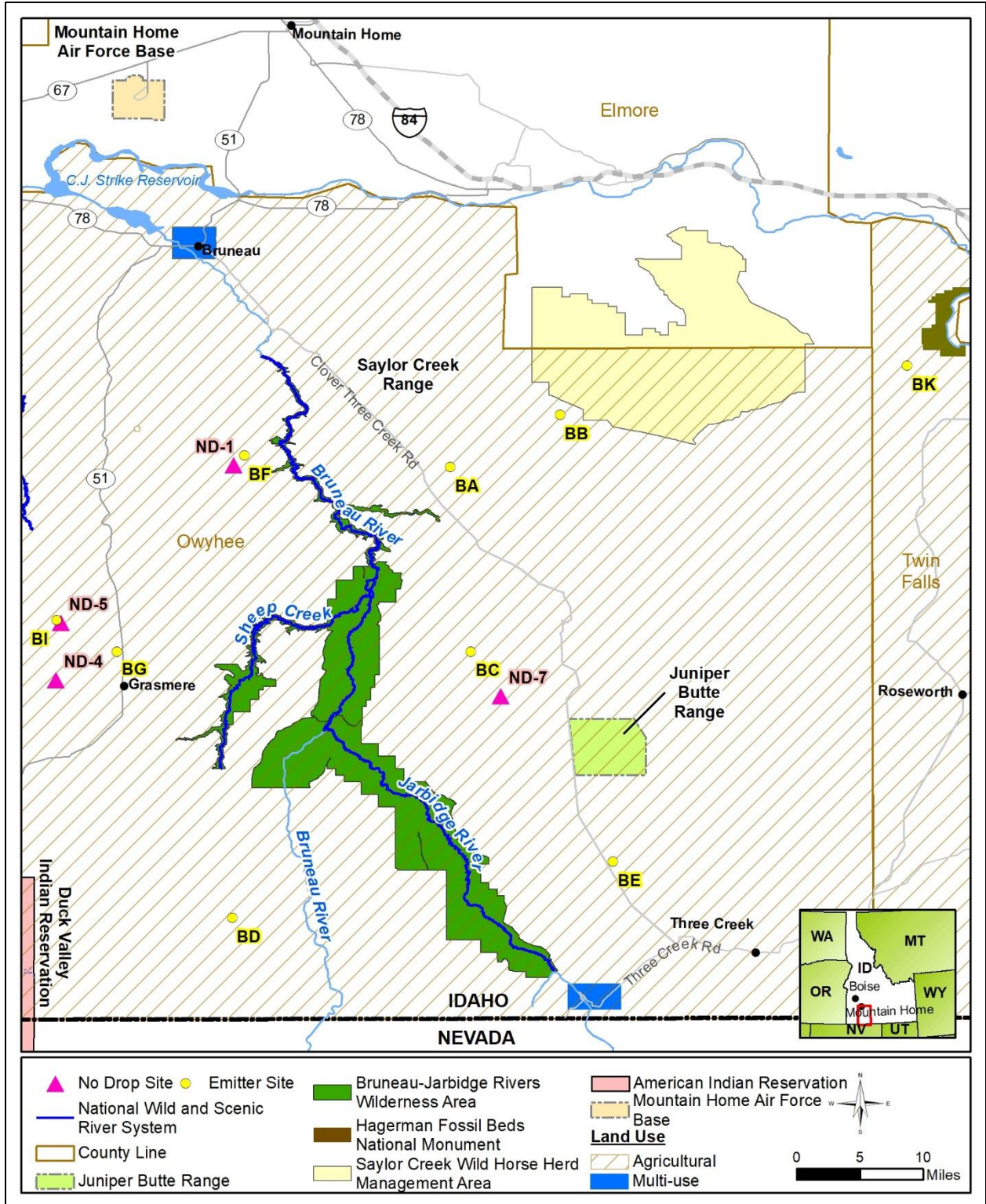


Figure 3-2. Land Use Categories and Special Land Use Areas.

3.3.2.2 Visual Resources and Recreation

Visual resources describe the scenic values of landscapes. Lands withdrawn from BLM for military training use have designated visual resource classes under the BLM Visual Resource Management system. The BLM uses its Visual Resource Management system to inventory scenic values and establish management objectives for those values on public lands. Visual Resource Management classes identify the degree of acceptable visual change within a characteristic landscape (Air Force, 2017). A classification is assigned to public lands based on the guidelines established for scenic quality, visual sensitivity, and visibility (BLM, 2015). The Visual Resource Management Class I management objective is to preserve the natural character of the landscape, and minimal visual change from human activities is allowed. Visual Resource Management Class II and III lands allow progressively greater amounts of visual change to the existing landscape, while Visual Resource Management Class IV lands provide for management activities which require major modification of the existing character of the landscape, and the level of change to the characteristic landscape can be high. Once the Visual Resource Management class is determined for a tract of BLM-administered land in the Resource Management Plan, BLM policy requires that proposed management activities on that tract must meet the requirements of the Visual Resource Management class (BLM, 2018). The Juniper Butte Range is within areas designated as Class IV, and the no-drop targets and emitter sites are within areas designated Class III and Class IV (Air Force, 1998).

3.4 AIR QUALITY

3.4.1 Definition of the Resource

Under the authority of the *Clean Air Act* (CAA) and subsequent regulations, the USEPA has divided the country into geographical regions known as Air Quality Control Regions to evaluate compliance with the National Ambient Air Quality Standards (NAAQS). All but one of the sites included in the Proposed Action are in Owyhee County, while one site is in Twin Falls County. Both counties fall within the Idaho Intrastate Air Quality Control Region (40 CFR § 81.313) which also includes the following Idaho counties: Adams, Blaine, Boise, Bonner, Boundary, Camas, Cassia, Clearwater, Custer, Elmore, Gem, Gooding, Idaho, Jerome, Lemhi, Lewis, Lincoln, Minidoka, Payette, Valley and Washington (40 CFR § 81.313).

Area emissions are contributed from the military's ground-based range activities and from overlying airspace operations. For the purposes of air quality analysis, Owyhee and Twin Falls Counties comprise the ROI. For consideration of potential air quality impacts from military aircraft operations, it is the volume of air extending up to the mixing height (3,000 feet AGL) and coinciding with the spatial distribution of the ROI that is considered. Pollutants that are released above the mixing height typically will not disperse downward and thus will have little or no effect on ground level concentrations of pollutants. The mixing height is the altitude at which the lower atmosphere will undergo mechanical or turbulent mixing, producing a nearly uniform air mass. The height of the mixing level determines the volume of air within which pollutants can disperse. Mixing heights at any one location or region can vary by the season and time of day, but for air quality applications an average mixing height of 3,000 feet AGL is an acceptable default value (40 CFR § 93.153[c][2]). Only those aircraft activities where sortie altitudes extend below 3,000 feet AGL are of concern to this air quality analysis.

3.4.1.1 Criteria Pollutants

In accordance with CAA requirements, the air quality in a given region or area is measured by the concentration of various pollutants in the atmosphere. Measurements of these "criteria pollutants" in ambient air are expressed in units of parts per million (ppm) or in units of micrograms per cubic meter. Regional air quality is a result of the types and quantities of atmospheric pollutants and pollutant sources in an area as well as surface topography, the size of the "air basin," and prevailing meteorological conditions.

The CAA directed the USEPA to develop, implement, and enforce strong environmental regulations that would ensure clean and healthy ambient air quality. To protect public health and welfare, the USEPA

developed numerical concentration-based standards, NAAQS, for pollutants that have been determined to impact human health and the environment and established both primary and secondary NAAQS under the provisions of the CAA. NAAQS are currently established for six criteria air pollutants: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (including particulates equal to or less than 10 microns in diameter (PM₁₀) and particulates equal to or less than 2.5 microns in diameter (PM_{2.5}), and lead (Pb). The primary NAAQS represent maximum levels of background air pollution that are considered safe, with an adequate margin of safety to protect public health. Secondary NAAQS represent the maximum pollutant concentration necessary to protect vegetation, crops, and other public resources in addition to maintaining visibility standards. The primary and secondary NAAQS are presented in **Table 3-1**.

**Table 3-1
National Ambient Air Quality Standards**

Pollutant	Standard Value⁶		Standard Type
Carbon Monoxide (CO)			
8-hour average	9 ppm	(10 mg/m ³)	Primary
1-hour average	35 ppm	(40 mg/m ³)	Primary
Nitrogen Dioxide (NO₂)			
Annual arithmetic mean	0.053 ppm	(100 µg/m ³)	Primary and Secondary
1-hour average ¹	0.100 ppm	(188 µg/m ³)	Primary
Ozone (O₃)			
8-hour average ²	0.070 ppm	(137 µg/m ³)	Primary and Secondary
Lead (Pb)			
3-month average ³		0.15 µg/m ³	Primary and Secondary
Particulate <10 Micrometers (PM₁₀)			
24-hour average ⁴		150 µg/m ³	Primary and Secondary
Particulate <2.5 Micrometers (PM_{2.5})			
Annual arithmetic mean ⁴		12 µg/m ³	Primary
Annual arithmetic mean ⁴		15 µg/m ³	Secondary
24-hour average ⁴		35 µg/m ³	Primary and Secondary
Sulfur Dioxide (SO₂)			
1-hour average ⁵	0.075 ppm	(196 µg/m ³)	Primary
3-hour average ⁵	0.5 ppm	(1,300 µg/m ³)	Secondary

Notes:

- ¹ In February 2010, the USEPA established a new 1-hour standard for NO₂ at a level of 0.100 ppm, based on the 3-year average of the 98th percentile of the yearly distribution concentration, to supplement the then-existing annual standard.
- ² In October 2015, the USEPA revised the level of the 8-hour standard to 0.070 ppm, based on the annual 4th highest daily maximum concentration, averaged over 3 years; the regulation became effective on 28 December 2015. The previous (2008) standard of 0.075 ppm remains in effect for some areas including Virginia. A 1-hour standard no longer exists.
- ³ In November 2008, USEPA revised the primary lead standard to 0.15 µg/m³. USEPA revised the averaging time to a rolling 3-month average.
- ⁴ In October 2006, USEPA revised the level of the 24-hour PM_{2.5} standard to 35 µg/m³ and retained the level of the annual PM_{2.5} standard at 15 µg/m³. In 2012, USEPA split standards for primary and secondary annual PM_{2.5}. All are averaged over 3 years, with the 24-hour average determined at the 98th percentile for the 24-hour standard. USEPA retained the 24-hour primary standard and revoked the annual primary standard for PM₁₀.
- ⁵ In 2012, the USEPA retained a secondary 3-hour standard, which is not to be exceeded more than once per year. In June 2010, USEPA established a new 1-hour SO₂ standard at a level of 75 ppb, based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations.
- ⁶ Parenthetical value is an approximately equivalent concentration for NO₂, O₃, and SO₂.
µg/m³ = microgram(s) per cubic meter; mg/m³ = milligram(s) per cubic meter; ppb = part(s) per billion; ppm = part(s) per million; USEPA = United States Environmental Protection Agency

The criteria pollutant O₃ is not usually emitted directly into the air but is formed in the atmosphere by photochemical reactions involving sunlight and previously emitted pollutants, or "O₃ precursors." These O₃ precursors consist primarily of nitrogen oxides (NO_x) and volatile organic compounds that are directly emitted from a wide range of emissions sources. For this reason, regulatory agencies limit atmospheric O₃

concentrations by controlling volatile organic compound pollutants (also identified as reactive organic gases) and NO_x.

The USEPA has recognized that particulate matter emissions can have different health affects depending on particle size and, therefore, developed separate NAAQS for coarse particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}). The pollutant PM_{2.5} can be emitted from emission sources directly as very fine dust and/or liquid mist or formed secondarily in the atmosphere as condensable particulate matter, typically forming nitrate and sulfate compounds. Secondary (indirect) emissions vary by region depending upon the predominant emission sources located there and thus which precursors are considered significant for PM_{2.5} formation and identified for ultimate control.

The CAA and USEPA delegated responsibility for ensuring compliance with NAAQS to the states and local agencies. As such, each state must develop air pollutant control programs and promulgate regulations and rules that focus on meeting NAAQS and maintaining healthy ambient air quality levels. When a region or area fails to meet a NAAQS for a pollutant, that region is classified as “nonattainment” for that pollutant. In such cases the affected State must develop a State Implementation Plan that is subject to USEPA review and approval. A State Implementation Plan is a compilation of regulations, strategies, schedules, and enforcement actions designed to move the state into compliance with all NAAQS. Any changes to the compliance schedule or plan (e.g., new regulations, emissions budgets, controls) must be incorporated into the State Implementation Plan and approved by USEPA.

The CAA required that USEPA draft general conformity regulations that are applicable in nonattainment areas, or in designated maintenance areas (attainment areas that were reclassified from a previous nonattainment status and are required to prepare a maintenance plan for air quality). These regulations are designed to ensure that federal actions do not impede local efforts to achieve or maintain attainment with the NAAQS. The General Conformity Rule and the promulgated regulations found in 40 CFR § 93 exempt certain federal actions from conformity determinations (e.g., contaminated site cleanup and natural disaster response activities). Other federal actions are assumed to conform if total indirect and direct project emissions are below de minimis levels presented in 40 CFR § 93.153. The threshold levels (in tons of pollutant per year) depend upon the nonattainment status that USEPA has assigned to a region. Once the net change in nonattainment pollutants is calculated, the federal agency must compare them to the de minimis thresholds.

3.4.1.2 Greenhouse Gases

Greenhouse gases (GHGs) are gases that trap heat in the atmosphere. These emissions are generated by both natural processes and human activities. The accumulation of GHGs in the atmosphere helps maintain Earth’s temperature and are believed to contribute to global climate change. GHGs include water vapor, carbon dioxide (CO₂), methane, nitrous oxide, O₃, and several hydrocarbons and chlorofluorocarbons. Each GHG has an estimated global warming potential, which is a function of its atmospheric lifetime and its ability to absorb and radiate infrared energy emitted from Earth’s surface. The global warming potential of a particular gas provides a relative basis for calculating its carbon dioxide equivalent (CO₂e) or the amount of CO₂ equivalent to the emissions of that gas. CO₂ has a global warming potential of 1 and is, therefore, the standard by which all other GHGs are measured. Potential impacts associated with GHG emissions are discussed in **Section 4.4**.

3.4.2 Existing Conditions

3.4.2.1 Regional Climate

The withdrawn lands are mostly located in Owyhee County with one site in Twin Falls County. The area can be classified as arid to semi-arid; however, areas at higher elevations (6,000 feet or above) that get adequate precipitation are excluded from that classification. Annual precipitation levels and annual snowfall totals can vary significantly depending on the area within the county. The Owyhee County also experiences severe winds and can experience great ranges in temperatures from year to year (Owyhee County, 2002).

Climatic data are not likely to be the same for all withdrawn lands spread across the ROI; therefore, climate summaries for climatological stations near withdrawn lands in Owyhee County are presented here to provide a relative picture of the current climate conditions. The region is characterized by typically hot and dry summers, with occasional thundershowers. Humidity is low, and winds occur on a regular basis during the day.

The average temperature for the year in Murphy Hot Springs, just south of the Juniper Butte Range, is 44.4 degrees Fahrenheit. The warmest month, on average, is July with an average temperature of 65.6 degrees Fahrenheit. December is the coolest month with an average temperature of 27.1 degrees Fahrenheit. The average precipitation for the year in Murphy Hot Springs is 17 inches. The month with the most precipitation, on average, is April with 2.5 inches of precipitation. The region had an average of 82.2 days of precipitation (Weatherbase, 2018).

3.4.2.2 Air Emissions

Both Owyhee and Twin Falls Counties fall within the Idaho Intrastate Air Quality Control Region. Each Air Quality Control Region has regulatory areas that are designated as an attainment area or nonattainment area for each of the criteria pollutants depending on whether it meets or fails to meet the NAAQS for the pollutant. Air quality in this region is either in “attainment” or “unclassifiable/attainment” with all criteria pollutants (40 CFR § 81.313) and as a result, General Conformity will not be applicable to the withdrawn lands. Unclassifiable areas are those areas that have not had ambient air monitoring and are assumed to be in attainment with NAAQS.

Mountain Home Range Complex by itself is not considered to be a major emission source as air emissions from the range are contributed by small, minor, individual emission sources that are considered to be insignificant. No air permits are required for its operations. The primary ground-based stationary emission sources include backup generator operations at the range facilities and ordnance use. Emissions from generator operations result from combustion of fuels, such as diesel or liquefied petroleum gas. Emissions generated by cold spot BDU-33 deployment are considered negligible. Mobile source emissions generated by government-owned vehicles and maintenance equipment within the Mountain Home Range Complex are not considered to be significant.

3.5 GEOLOGY AND SOILS

3.5.1 *Definition of Resource*

Geological resources are defined as the physiography, topography, geology, and soils of a given area. Physiography and topography pertain to the general shape and arrangement of a land surface, including its height and the position of its natural and human-made features. Geology is the study of Earth’s composition and provides information on the structure and configuration of surface and subsurface features. Soils are the unconsolidated materials overlying bedrock or other parent material. Soils typically are described in terms of their complex type, slope, and physical characteristics. Differences among soil types in terms of their structure, elasticity, strength, shrink-swell potential, and erosion potential affect their abilities to support certain applications or uses. In appropriate cases, soil properties must be examined for their compatibility with particular military activities or types of land use.

The ROI for this resource is the withdrawn lands and is further detailed in **Section 3.5.2.3**.

3.5.2 *Existing Conditions*

3.5.2.1 Physiography and Topography

The Mountain Home Range Complex is situated in the Columbia Plateau Physiographic Province in the western Snake River Plain. This province is defined by a northwest-trending basin surrounded by high-angle faults with over 105,000 cubic miles of basaltic lava flows and flat to gently rolling hills and plateaus.

This province formed most likely due to tectonic rifting that subsided 3 million years ago and hot spot volcanism between 17 to 6 million years ago with most lava surging out of vents in the first 1.5 million years (Air Force, 2011; National Park Service, 2018).

3.5.2.2 Geology

The withdrawn lands are underlain by Quaternary basalt, rhyolite, and alluvium (thickness decreases towards Snake River). The bedrock is covered with unconsolidated sand, gravel, and loess (thickness increases towards the Snake River). The stratigraphy is designated as Miocene rhyolite and latite and Pleistocene and Pliocene basaltic lava flows, ash, cinders, and sand interlayered with lacustrine silt beds of the Snake River Plain (United States Geological Survey, 1994; 2005):

- Juniper Butte Range: Pliocene basalt and lava flows with lesser Miocene rhyolite and latite
- No-drop target ND-1 and emitter site BD: Miocene rhyolite and latite with lesser Pliocene basalt and lava flows
- No-drop target ND-4: Miocene rhyolite and latite
- No-drop targets ND-5 and ND-7, and emitter sites BA, BB, BC, BE, BG, and BI: Pliocene basalt and lava flows
- Emitter site BF: Pleistocene alluvium and gravel
- Emitter site BK: Pleistocene alluvium and gravel with lesser Early Pleistocene and Late Pliocene lacustrine, fluvial, and alluvial deposits

3.5.2.3 Soils

The soils are typical of semi-arid regions and are characterized by poor drainage and lack of organic matter. Most soils at the Juniper Butte Range, no-drop targets, and emitter sites are silt, sand, and gravelly loams. The soils vary in thickness, depending on the location of bedrock and duripans but may reach over 80 inches in depth. All of the soils are well drained and typically have a low to moderate potential for wind and water erosion although soil disturbance and lack of vegetative cover increase erosion potential (United States Department of Agriculture Natural Resources Conservation Service, 2018).

Biological soil crusts are an important soil feature in arid and semi-arid ecosystems. These complex assemblages of mosses, cyanobacteria, lichens, algae, and microfungi occur in the first few millimeters of the soil surface and strongly interact with the soil (Rosentreter et al., 2007). Crusts play an important role in the environment where they affect soil stability and erosion, atmospheric nitrogen fixation, nutrient contributions to plants, soil-plant-water relations, infiltration, seedling germination, and plant growth (Belnap et al., 2001). They are important on the withdrawn lands because they stabilize the soil surface, thus, protecting it from wind erosion. Cyanobacteria and microfungi within these crusts expel polysaccharides, which bind soil particles together, creating larger soil aggregates. These larger soil aggregates require a greater wind velocity to be moved; therefore, soils with the most developed biological crusts experience the greatest resistance to wind erosion.

In terms of military operations, traffic suitability is determined by the soil properties per site and type of operation. Trafficability is the capacity of a soil to support certain vehicle classes during wet and dry periods. Estimates can be made from terrain data and soil and weather conditions (e.g., drainage, runoff potential). Military trafficability interpretations are based on procedures and criteria described in the Army Field Manual 5-430-00-1, *Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations—Road Design*, and are conservative estimates for use in operations planning. Commanders and engineers must be cautious because the interpreted results can vary greatly based on the soil's physical properties and the characteristics of the vehicle(s) utilized (e.g., contact pressures, weight, drivetrain class). Soil-vehicle interactions involving soil strength, slipperiness, stickiness, large stones on the surface, and slope are the basis for trafficability interpretations. Generally, the heavier a vehicle is, the better it will fare on the Proposed Action sites, particularly during dry weather periods. Tanks and all-terrain vehicles have a good to excellent rating while lightweight and/or rear-wheel-drive vehicles have a fair to good rating (United States Department of Agriculture Natural Resources Conservation Service, 2018).

3.6 WATER RESOURCES

3.6.1 *Definition of the Resource*

Water resources include groundwater, surface water, floodplains and wetlands. Evaluation of water resources examines their quantity and quality and potential effects to them. The ROI for water resources varies and includes multiple watersheds. The Juniper Butte Range and most of the affected no-drop targets and emitter sites are located within the Bruneau River Watershed. The no-drop targets and emitter sites BA and BB are located in the C.J. Strike Reservoir Watershed (Mountain Home AFB, 2012).

3.6.1.1 Groundwater

Groundwater is water that occurs in the saturated zone beneath Earth's surface and includes underground streams and aquifers. It is an essential resource that functions to recharge surface water and can be used for drinking, irrigation, and industrial processes. Groundwater typically can be described in terms of depth from the surface, aquifer or well capacity, water quality, recharge rate, and surrounding geologic formations. The susceptibility of aquifers to groundwater contamination relates to geology, depth to groundwater, infiltration rates, and solubility of contaminants.

Groundwater resources are regulated on the federal level by the USEPA under the *Safe Drinking Water Act* (42 U.S.C. § 300f et seq.) and on the state level by the Idaho Department of Environmental Quality under the *Ground Water Quality Rule (Idaho Administrative Procedure Act 58.01.11)*, which set standards for groundwater to protect human health. The USEPA's Sole Source Aquifer Program, authorized the *Safe Drinking Water Act*, further protects aquifers that are designated as critical to water supply and makes any proposed federal or federal financially assisted project that has the potential to contaminate the aquifer subject to USEPA review.

3.6.1.2 Surface Water and Wetlands

Surface water resources include lakes, rivers, and streams. Surface water is important for its contribution to the economic, ecological, recreational, and human health of a community or locale. Surface waters that are defined as waters of the United States are federally protected under the *Clean Water Act* (Section 404), which is administered by the USEPA and United States Army Corps of Engineers. To be considered jurisdictional, a wetland needs to be dominated by hydrophytic vegetation and have positive indicators for wetland hydrology and hydric soils and a significant nexus (connection) to a jurisdictional water of the United States (United States Army Corps of Engineers, 1987). Waters of the United States include rivers, streams, and wetlands or any channel with defined banks that is connected to a water of the United States.

Wetlands are an important natural system and habitat because of the diverse biologic and hydrologic functions they perform. These functions include water quality improvement, groundwater recharge and discharge, pollution mitigation, nutrient cycling, wildlife habitat detention, and erosion protection. The United States Army Corps of Engineers defines wetlands as "those areas that are inundated or saturated with ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions" (United States Army Corps of Engineers, 1987). Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR § 328). Wetlands are protected under EO 11990, Protection of Wetlands, to reduce adverse impacts associated with the destruction or modification of wetlands. This order directs federal agencies to provide leadership in minimizing the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

Playas or slickspots, a type of natural ephemeral water-collecting basin, are another water resource that exist on the withdrawn lands. Playas provide habitat for migratory birds, waterfowl, and other wildlife and may be home to a number of rare species (refer to **Section 3.7**).

3.6.1.3 Floodplains

Floodplains are low-lying areas along rivers, stream channels, or coastal waters and can be subject to periodic or infrequent inundation of water from rain or melting snow. Risk of flooding typically depends on local topography, the frequency of precipitation events, and the size of the watershed above the floodplain. Flood potential is evaluated by the Federal Emergency Management Agency, which defines the 100-year floodplain. The 100-year floodplain is the area that has a 1 percent chance of inundation by a flood event in a given year. Federal, state, and local regulations often limit floodplain development to passive uses, such as recreation and preservation activities, to reduce the risks to human health and safety.

EO 11988, Floodplain Management, requires federal agencies to determine whether a Proposed Action would occur within a floodplain. This determination typically involves consultation of Federal Emergency Management Agency Flood Insurance Rate Maps, which contain general information to determine the relationship of the project area to nearby floodplains.

3.6.2 Existing Conditions

3.6.2.1 Groundwater

The withdrawn lands are located in the Western Snake River Plain Aquifer, which is not designated as a sole-source aquifer (USEPA, 2018b); however, the Western Snake River Aquifer borders the Eastern Snake River Plain Aquifer, which is a USEPA sole-source aquifer. Because groundwater flow in the Western Plain generally feeds into main drainages, directed toward the Snake River and groundwater from the Eastern Plain flows west toward the Western Plain, impacts on the Western Plain Snake River Aquifer should not affect the Eastern Snake River Plain Aquifer.

Water needs on the withdrawn lands are minimal and are supplied with water from off-site locations. Other than for livestock, water is transported to the range and stored in potable (6,000-gallon) and non-potable (50,000-gallon) aboveground water tanks. Livestock water needs are satisfied by a pipeline distribution system owned by the grazing lessee (Mountain Home AFB, 2017d).

3.6.2.2 Surface Water and Wetlands

The Snake River and its tributaries are important water resources in the region. The Bruneau River is a major tributary that joins the Snake River just south of Mountain Home AFB. Clover Creek is a perennial tributary of the Bruneau River that lies less than a mile east of the northeast corner of the Juniper Butte Range. Precipitation is drained through deeply cut canyons of the major perennial rivers. Major tributaries within the Bruneau River Watershed include the Bruneau and Jarbidge Rivers, Clover Creek, and Sheep Creek. Many other minor and intermittent streams are found in the area.

The Juniper Butte Range contains no perennial drainages; however, numerous intermittent creeks including Juniper Draw, and two small isolated wetlands collect and, at least temporarily, hold water. Slickspots have been found to occur throughout the Juniper Butte Range with the exception of the bluffs, slopes, and streambed of Juniper Draw (Mountain Home AFB, 2017d) and are discussed further in **Section 3.7**. Several artificial impoundments that serve as livestock ponds are also located at the Juniper Butte Range. None of the drainages or other features were determined to be jurisdictional in the 2007 wetland delineation (CH2MHILL, 2007).

No perennial drainages are associated with the emitter sites and no-drop targets though small, intermittent and ephemeral drainages may be located on or near some of these sites. The no-drop targets and emitter sites were constructed with retention berms around their perimeters to store any water accumulation onsite, where it could then percolate down into the soil. Slickspots have been found on the rights-of-way for emitter sites BA, BB, BC, BE, BI, and BJ (Mountain Home AFB, 2017d).

3.6.2.3 Floodplains

There are no floodplains located within the Juniper Butte Range, emitter sites, or no-drop targets due to the lack of significant drainages (Federal Emergency Management Agency, 2018; Mountain Home AFB, 2017d).

3.7 BIOLOGICAL RESOURCES

3.7.1 *Definition of the Resources*

Biological resources include plant and animal species and the habitats in which they occur. The ROI for biological resources is defined as the boundaries of the Juniper Butte Range, emitter sites, or no-drop targets. The management of these resources is critical to the maintenance of functioning, intact ecosystems that are necessary to ensure the military's continued access to its land, air, and water resources for realistic military training and testing and to sustain the long-term ecological integrity of natural resources and the ecosystem services they provide (Department of Defense Instruction 4715.03, Natural Resources Conservation Program). In addition, Air Force Policy Directive 32-70 and AFI 32-7064, *Integrated Natural Resources Management*, require all Air Force installations to protect species classified as federally or state endangered or threatened.

3.7.1.1 Federally-Listed Threatened and Endangered Species

The ESA (16 U.S.C. § 1531 et seq.) established measures for the protection of plant and animal species that are federally-listed as threatened and endangered and for the conservation of habitats that are critical to the continued existence of those species. Endangered species are those species that are at risk of extinction in all or a significant portion of their range. Threatened species are those that could be listed as endangered in the near future. Federal agencies must evaluate the effects of their Proposed Actions through a set of defined procedures, which can include the preparation of a Biological Assessment and can require formal consultation with the USFWS under Section 7 of the ESA.

3.7.1.2 Migratory Bird Treaty Act

The *Migratory Bird Treaty Act of 1918* (16 U.S.C. §§ 703-712) is the primary legislation in the United States established to conserve migratory birds. The *Migratory Bird Treaty Act* prohibits the taking, killing, or possessing of migratory birds their eggs, parts, and nests unless permitted by regulation. An exemption to the *Migratory Bird Treaty Act* (72 Federal Register 8931) that allows incidental take of migratory birds by Department of Defense during military readiness activities authorizes such take, with limitations, that result from military readiness activities. Military-readiness activities include all training and operations of the Armed Forces that relate to combat, and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use. Military readiness does not include the routine operation of installation support functions (72 Federal Register 8931). If the Department of Defense determines that a proposed or an ongoing military readiness activity may result in a significant adverse effect on a population of a migratory bird species, they must confer and cooperate with the USFWS to develop appropriate and reasonable conservation measures to minimize or mitigate identified significant adverse effects.

3.7.1.3 Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds

EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds* (2001), further requires federal agencies to evaluate the effects of their actions and plans on migratory birds (with an emphasis on species of concern) in their NEPA documents. Species of concern are those identified as birds of management concern by the USFWS (USFWS, 2011a), priority species identified by Partners in Flight, and ESA-listed species.

3.7.1.4 Bald and Golden Eagle Protection Act

The *Bald and Golden Eagle Protection Act* (16 U.S.C. §§ 668-668) prohibits the taking, possession, and transportation of bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) and their parts, nests, and eggs for scientific, educational, and depredation control purposes, except as allowed by a valid permit issued by the USFWS. In September 2009, the USFWS issued a final rule authorizing limited take and establish permit provisions for bald and golden eagle under the *Bald and Golden Eagle Protection Act* where the take to be authorized is associated with otherwise lawful activities (74 Federal Register 46836).

3.7.1.5 Bureau of Land Management Sensitive Species

These sensitive species designations are used for species that occur on BLM public lands and for which BLM has the capability to significantly affect the conservation status of the species through management (BLM, 2015b). These designations are particularly important on BLM-leased lands and are assigned to animal and plant species.

3.7.1.6 United States Fish and Wildlife Service

The USFWS was mandated by the *Fish and Wildlife Conservation Act* (16 U.S.C. §§ 2901-2911) to identify all migratory nongame bird species that are likely to become candidates for listing under the ESA without additional conservation measures. The resulting 2008 list identifies species, beyond those already designated as federally threatened or endangered, that represent the USFWS's highest conservation priorities (USFWS, 2008).

3.7.1.7 State Special-Status Species

Species designated as threatened, endangered, proposed, or candidate by the Idaho Department of Fish and Game or the Idaho Governor's Office of Species Conservation (2017) and species of greatest conservation need are other special-status species that need to be considered. All state-protected wildlife species and species of greatest conservation need are identified in the Idaho State Wildlife Action Plan, which is the state's guiding document for managing and conserving at-risk species (Idaho Department of Fish and Game, 2017).

3.7.1.8 Invasive Species

In addition to these sensitive and protected species, non-native invasive species are a major component of the natural ecosystems at the Juniper Butte Range and pose a significant threat to health and integrity of these ecosystems and the special-status species that they support. Air Force policy on invasive species management is outlined in AFI 32-7064, Integrated Natural Resources Management, which establishes the requirement that invasive species management be addressed in the installation Integrated Natural Resources Management Plan (Mountain Home AFB, 2017d) and identifies requirements of the *Federal Noxious Weed Act of 1974* (as amended) (7 U.S.C. § 2814) and EO 13112, *Safeguarding the Nation from the Impacts of Invasive Species* (as amended 5 December 2016), on Air Force properties. The federal *Noxious Weed Act* requires federal land management agencies to develop a management program for control of plants that are classified under federal or state law as undesirable, noxious, or harmful and to cooperate with state governments in control of undesirable plants on federal lands. The *Idaho Noxious Weed Law of 1977* identifies and establishes a legal requirement to control weeds designated by the state as noxious.

Noxious weed control and wildfire prevention requirements specific to the withdrawn lands of the Juniper Butte Range, are further identified in the *Juniper Butte Range Withdrawal Act*, PL 105-261; the terms, conditions, and BLM Rights-of-Way Stipulations for rights-of-way granted the Air Force for training sites; and the Programmatic Agreement Regarding the Management of Historic Properties between the Idaho State Historic Preservation Office and the Mountain Home AFB, Idaho.

3.7.2 Existing Conditions

3.7.2.1 Vegetation

The Mountain Home Range Complex is located in the geographically distinct region of the Snake River Plain (McGrath et al., 2002), which is part of the Intermountain Semidesert Province (Bailey, 1995) and is dominated by sagebrush steppe ecosystem. The sagebrush steppe ecosystems of the Snake River Plain historically consisted of a mosaic of sagebrush and perennial grass species, including Wyoming big sagebrush (*Artemisia tridentata* var. *wyomingensis*), low sagebrush (*Artemisia arbuscula*), rabbitbrush (*Chrysothamnus viscidiflorus*), saltbush (*Atriplex* spp.), greasewood (*Sarcobatus vermiculatus*), bluebunch wheatgrass (*Pseudoroegneria spicata*), basin wildrye (*Leymus cinereus*), Thurber's needlegrass (*Achnatherum thurberianum*), Idaho fescue (*Festuca idahoensis*), Indian ricegrass (*Achnatherum hymenoides*) and other bunchgrasses, shrubs, and forbs (Sleeter et al., 2012). Cheatgrass (*Bromus tectorum*) and other non-native annuals are significant invasive plant species in sagebrush-grassland communities that are contributing to the conversion of sagebrush steppe to an exotic annual grass community (Wisdom and Roland, 2007).

The natural vegetation communities of the sagebrush steppe ecosystems at the Juniper Butte Range, no-drop targets, and emitter sites have been altered by current and historic land use, invasive species infestations, and altered fire regimes (Mountain Home AFB, 2017d). At the Juniper Butte Range, disturbances such as livestock grazing, fire, and range reseeding have resulted in a mosaic landscape of shrub-steppe and nonnative plant communities. Burned areas are frequently dominated by rabbitbrush shrubland and seeded grass species, including crested wheatgrass (*Agropyron cristatum*) and intermediate wheatgrass (*Thinopyrum intermedium*). Cheatgrass and other invasive annual grasses are dominant where seed applications of disturbed areas have failed or did not occur. Mixed sagebrush and rabbitbrush stands and pockets of bluebunch wheatgrass and sagebrush occur throughout the range. Common herbaceous species in these areas include clasping leaf pepperweed (*Lepidium perfoliatum*), long-leaf phlox (*Phlox longifolia*), Sandberg bluegrass (*Poa secunda*), lupine (*Lupinus* spp.), and bottlebrush squirreltail (*Elymus elymoides*). Western juniper (*Juniperus occidentalis*) also occurs in low densities in Juniper Draw on the eastern portion of the range. Russian thistle (*Salsola tragus*) and annual kochia (*Bassia scoparia*) are the primary invasive plant species treated at the Juniper Butte Range.

Vegetation in the no-drop targets and emitter sites ranges from shrub-steppe vegetation to introduced annual grasslands. Most of the sites have experienced prior disturbances and are now composed of nonnative vegetation, such as tumble mustard (*Sisymbrium altissimum*) and cheatgrass, or seeded species, such as crested wheatgrass. ND-1 is used for simulated ordnance delivery and no live ordnance is used. Fire, however, is still a factor that influences the vegetation community type and abundance and little variety in plant species occurs due to fire, grazing, military training, and historic reseeding efforts. Vegetation at ND-1 is primarily annual and seeded grassland. The dominant species are cheatgrass and crested wheatgrass. Other species present include the invasive Russian thistle, tumble mustard, halogeton (*Halogeton glomeratus*), and the native Sandberg bluegrass (Kaweck and Launchbaugh, 2014).

3.7.2.2 Wildlife

Historically, the vast areas of sagebrush-steppe habitat of the region supported herds of wildlife species such as pronghorn (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), and elk (*Cervus canadensis*), small mammals such as pygmy rabbits (*Brachylagus idahoensis*) and sagebrush voles (*Lemmiscus curtatus*), reptiles including sagebrush lizards (*Sceloporus graciosus*) and desert horned lizards (*Phrynosoma platyrhinos*), birds of prey such as golden eagles, and other species such as the greater sage grouse (*Centrocercus urophasianus*) that live nowhere else in the world (USFWS, 2014).

At the Juniper Butte Range, the native shrub-steppe and nonnative plant communities along Juniper Draw provide wildlife access point to Clover Creek and serve as a wildlife movement corridor for both seasonal and daily movements. General wildlife surveys conducted in 2006 as well as incidental observations made during other surveys have documented 68 species of animals, representing 34 families at the Juniper Butte

Range (Mountain Home AFB, 2006). Horned lark (*Eremophila alpestris*) and western meadowlark (*Sturnella neglecta*) were very common. Sage grouse, sagebrush sparrow (*Artemisiospiza nevadensis*), and sage thrasher (*Oreoscoptes montanus*) also occurred. Song sparrow (*Melospiza melodia*) was the only bird species unique to the Juniper Butte Range. An assortment of small mammals, including deer mice (*Peromyscus maniculatus*), mountain cottontail (*Sylvilagus nuttallii*), jackrabbits (*Lepus* sp.), least chipmunks (*Tamias minimus*), Great Basin pocket mice (*Perognathus parvus*), bushy-tailed woodrats (*Neotoma cinerea*), and Ord's kangaroo (*Dipodomys ordii*) rats were documented. Large mammals including mule deer, pronghorn, coyote (*Canis latrans*), and badger (*Taxidea taxus*) also occur. One cougar (*Puma concolor*) was documented in 2007. A 2009 auditory bat survey documented western pipistrelle, little brown bat (*Myotis lucifugus*), and western small-footed myotis (*Myotis ciliolabrum*) on the Juniper Butte Range. Typical reptiles include desert horned lizard (*Phrynosoma platyrhinos*), side-blotched lizard (*Uta stansburiana*), sagebrush lizard, gopher snake (*Pituophis catenifer*), and western rattlesnake (*Crotalus viridis*). Water troughs and temporary pools on the Juniper Butte Range may provide limited amphibian habitat though none have been observed (Mountain Home AFB, 2017d).

Wildlife surveys and incidental observations from 2005 at a number of remote training sites resulted in 78 species, representing 39 families, being identified (Mountain Home AFB, 2006). Mammals that have been seen on or near emitter sites and no-drop targets include feral horses (*Equus caballus*), white-tailed jackrabbit (*Lepus townsendii*), black-tailed jackrabbit, and the bobcat (*Lynx rufus*). Birds that have been on or near these sites are golden eagle, northern harrier (*Circus cyaneus*), rough-legged hawk (*Buteo lagopus*), American kestrel (*Falco sparverius*), short-eared owl (*Asio flammeus*), western screech owl (*Megascops kennicottii*), prairie falcon (*Falco mexicanus*), chukar (*Alectoris chukar*), tundra swan (*Cygnus columbianus*), merlin (*Falco columbarius*), and great-horned owl (*Bubo virginianus*), among others (Mountain Home AFB, 2017d).

3.7.2.3 Threatened, Endangered Species, and/or Species of Concern

Federally-Listed Species

A search of the USFWS Information for Planning and Conservation tool indicated three federally-listed species within the ROI; the federally-listed threatened slickspot peppergrass, bull trout (*Salvelinus confluentus*), and the federally-listed endangered Bruneau hot springsnail (*Pyrgulopsis bruneauensis*) (USFWS 2018; **Table 3-2**). While slickspot peppergrass has been documented on the Juniper Butte Range and emitter sites, the bull trout and Bruneau hot springsnail have not been documented as occurring on the Juniper Butte Range, no-drop targets, or emitter sites.

**Table 3-2
Federally-Listed Species in the Region of Influence**

Scientific Name	Common Name	Federal Status	Potential Occurrence
<i>Lepidium papilliferum</i>	Slickspot peppergrass	T	Documented on Juniper Butte Range and emitter site AE
<i>Salvelinus confluentus</i>	Bull trout	T	Not documented
<i>Pyrgulopsis bruneauensis</i>	Bruneau hot springsnail	E	Not documented

Source: USFWS, 2018

Notes:

E = Endangered; T = Threatened

Slickspot peppergrass is a small annual or biannual plant that is endemic to Idaho's Snake River Plains and adjacent foothills and primarily within slickspots. Extensive surveys have been conducted at the Mountain Home AFB sites and numerous known locations have been mapped (**Figure 3-3**). Currently, all known occupied slickspots are limited to the Juniper Butte Range (Mountain Home AFB, 2015a), though it was documented at a right-of-way at emitter site AE in 2002 and 2003 (Mountain Home AFB, 2003). This species occurs throughout the Juniper Butte Range with the exception of the bluffs, slopes, and streambed of Juniper Draw (Mountain Home AFB, 2003). Annual monitoring is conducted to assess the health and condition of slickspot peppergrass populations at the Juniper Butte Range. In the most recent monitoring report available (Conley, 2017), 16 permanent transects were assessed across three land uses (pastures, target areas, and the Juniper Butte Range enclosure) to track vegetation, percent ground cover, and slickspot peppergrass numbers and integrity. Data from 12 years of monitoring indicate no clear trend in slickspot peppergrass numbers, with total counts ranging from a low of 26 plants in 2013 to a high of 538 plants in 2005. Although the number of slickspots has been found to be greatest in the pasture areas, the number of slickspot peppergrass plants has been consistently greater in the enclosure throughout the study period. In 2016, a total of 423 slickspot peppergrass plants were documented in 70 slickspots. All slickspots are avoided during vegetation maintenance and herbicide application activities. A 2010 *Biological Opinion on the Effects of U.S. Air force Ongoing Actions at Juniper Butte Range and in Owyhee County, Idaho on the Slickspot Peppergrass (Lepidium papilliferum)* provides a detailed life history, habitat characteristics, threats, and population trends for slickspot peppergrass (USFWS, 2010). Conservation practices are also provided for the benefit of this species in this Biological Opinion and the Mountain Home AFB Integrated Natural Resources Management Plan (Mountain Home AFB, 2017d).

In addition to the Juniper Butte Range populations, slickspot peppergrass may also occur at emitter site rights-of-way where appropriate habitat has been identified. Slickspot peppergrass was found in right-of-way AE in 2002 and 2003 (Mountain Home AFB, 2017d). The same precautions that are taken at the Juniper Butte Range to protect slickspot peppergrass are also taken at these sites and rights-of-way.

State-Listed and other Species of Concern

A large number of special-status species classified as species of greatest conservation need in the Idaho State Wildlife Action Plan, BLM Sensitive Species, or birds of conservation concern by the USFWS have also been documented on Juniper Butte Range, no-drop targets, and emitter sites. Other special-status species and their documented locations and type of protection afforded each species are listed in **Table 3-3**.

Migratory Bird Treaty Act Species

Migratory birds include a large, diverse group of birds that utilize breeding grounds in the United States and Canada, and overwinter in southern North America, Central and South America, the West Indies, and the Caribbean. A complete list of all species of migratory birds protected by the *Migratory Bird Treaty Act* is in the Federal Register (50 CFR § 10.13). Nearly all native bird species found within the boundaries of the ROI are protected under the *Migratory Bird Treaty Act*. Bird species typically found in sagebrush and grassland communities include the sage thrasher, sagebrush sparrow, horned lark (*Eremophila alpestris*), and western meadowlark. Less frequently observed species include the burrowing owl (*Athene cunicularia*) and common nighthawk (*Chordeiles minor*). Cliffs and canyons in the ROI provide a unique structure for habitat that attracts raptors and other cliff-dwelling avian species such as the prairie falcon, Swainson's hawk (*Buteo swainsoni*), ferruginous hawk (*Buteo regalis*), golden eagle, and rock wren (*Salpinctes obsoletus*) (Mountain Home AFB, 2017d).

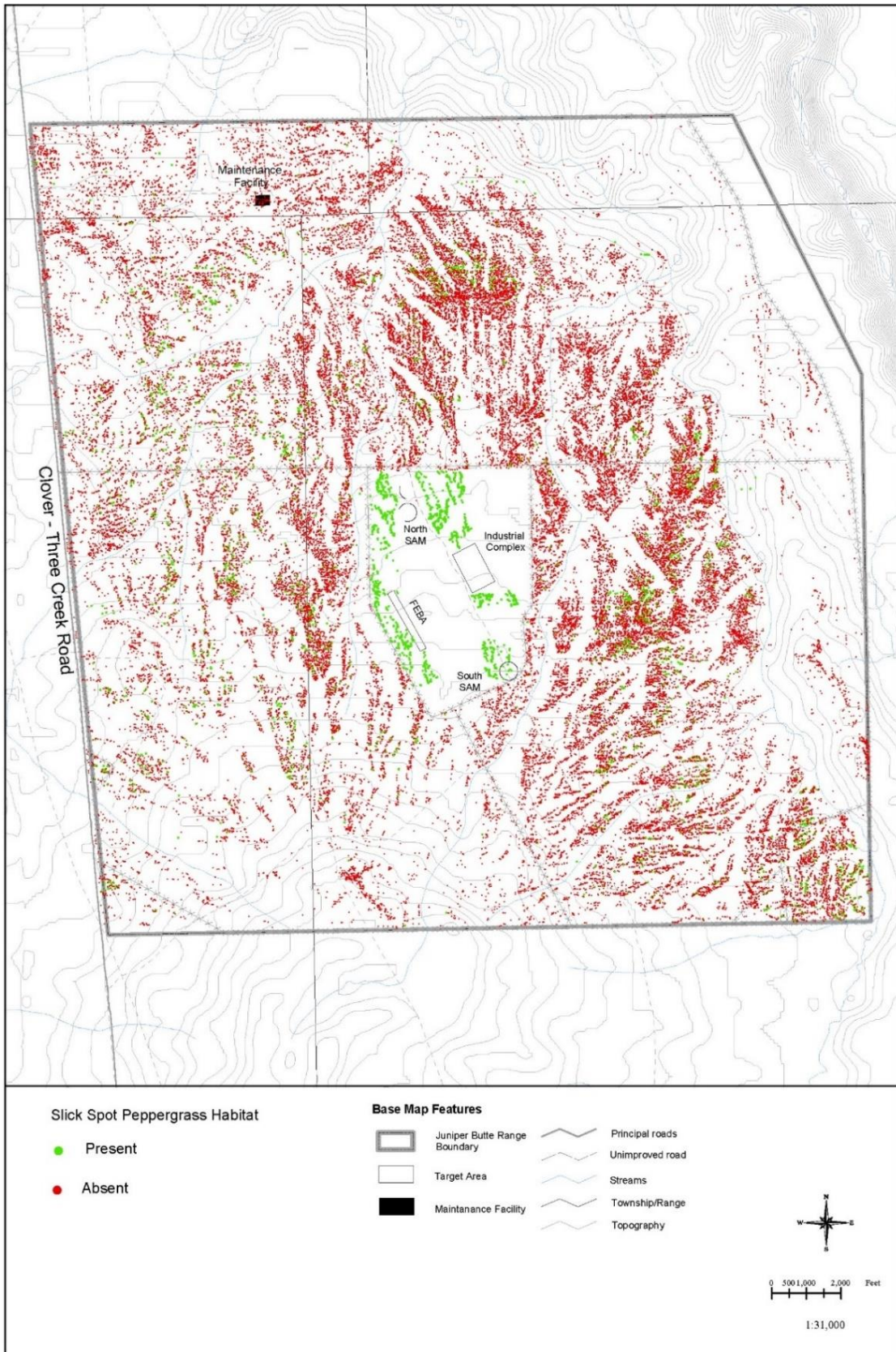


Figure 3-3. Slickspot Peppergrass Occurrence on the Juniper Butte Range.

**Table 3-3
Other Special-Status Species Known to Occur at the Juniper Butte Range, No-Drop Targets, and
Emitter Sites**

Common Name	Scientific Name	Observed Locations ¹	BLM	IDFG SGCN	USFWS
Birds					
Black-throated Sparrow	<i>Amphispiza bilineata</i>	Emitter sites	Type 2	Tier 2	-
Brewer's Sparrow	<i>Spizella breweri</i>	Juniper Butte Range; emitter site BD, ND-4	Type 2	-	BCC
Burrowing Owl	<i>Athene cunicularia</i>	Juniper Butte Range; emitter sites	Type 2	Tier 2	-
Common Nighthawk	<i>Chordeilus minor</i>	Juniper Butte Range; emitter sites	-	Tier 3	-
Ferruginous Hawk	<i>Buteo regalis</i>	Juniper Butte Range; emitter sites; ND-4	Type 2	Tier 2	BCC
Golden Eagle*	<i>Aquila chrysaetos</i>	Juniper Butte Range; emitter site BD	Type 2	Tier 2	BCC
Greater Sage-Grouse	<i>Centrocercus urophasianus</i>	Juniper Butte Range; emitter sites BB, BC, BD, BJ; ND-4, ND-7, ND-9	Type 2	Tier 1	BCC
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Juniper Butte Range; emitter site BD; ND-7	Type 2	-	BCC
Long-Billed Curlew	<i>Numenius americanus</i>	Emitter sites	Type 2	Tier 2	BCC
Sage Thrasher	<i>Oreoscoptes montanus</i>	Juniper Butte Range; emitter site BD; ND-7	Type 2	Tier 2	BCC
Sage Sparrow	<i>Amphispiza belli</i>	Juniper Butte Range; emitter site BD	-	-	BCC
Sagebrush Sparrow	<i>Artemisiospiza nevadensis</i>	Juniper Butte Range; emitter site BD	-	Tier 2	-
Sandhill Crane	<i>Grus canadensis</i>	Emitter sites	-	Tier 3	-
Short-Eared Owl	<i>Asio flammeus</i>	Juniper Butte Range; emitter sites; ND-4	-	Tier 3	-
Mammals					
Western Small-Footed Myotis	<i>Myotis ciliolabrum</i>	Juniper Butte Range	Type 2	Tier 3	-
Little Brown Bat	<i>Myotis lucifugus</i>	Juniper Butte Range	Type 2	Tier 3	-
Western (Canyon) Pipistrelle	<i>Pipistrellus hesperus</i>	Juniper Butte Range	Type 2	-	-
Kit Fox	<i>Vulpes macrotis</i>	Juniper Butte Range; emitter sites; ND-7	Type 2	-	-
Plants					
Alkali Cleomella	<i>Cleomella plocasperma</i>	Emitter sites	Type 3	-	-
Fringed Waterplantain	<i>Damasonium californicum</i>	Emitter sites	Type 4	-	-
White Eatonella	<i>Eatonella nivea</i>	Emitter sites	Type 4	-	-
Giant Helleborine	<i>Epipactis gigantean</i>	Emitter sites	Type 3	-	-

**Table 3-3
Other Special-Status Species Known to Occur at the Juniper Butte Range, No-Drop Targets, and
Emitter Sites**

Common Name	Scientific Name	Observed Locations ¹	BLM	IDFG SGCN	USFWS
Plants					
Calcareous Buckwheat	<i>Eriogonum ochrocephalum</i>	Emitter sites	Type 3	-	-
Packard's Buckwheat	<i>Eriogonum shockleyi packardiae</i>	Emitter sites	Type 4	-	-
Matted Cowpie Buckwheat	<i>Eriogonum shockleyi shockleyi</i>	Emitter sites	Type 4	-	-
White-margined Wax Plant	<i>Glyptopleura marginata</i>	Emitter sites	Type 4	-	-
Spreading Gilla	<i>Ipomopsis polycladon</i>	Emitter sites	Type 3	-	-
Davis' Peppergrass	<i>Lepidium davisii</i>	Emitter sites	Type 3	-	-
Bruneau River Prickly Phlox	<i>Leptodactylon glabrum</i>	Emitter sites	Type 3	-	-
Inch-high Lupine	<i>Lupinus uncialis</i>	Emitter sites	Type 4	-	-
Rigid Threadbush	<i>Nemacladus rigidus</i>	Emitter sites	Type 4	-	-
Simpson's Hedgehog Cactus	<i>Pediocactus simpsonii</i>	Emitter sites	Type 4	-	-
Janish's Penstemon	<i>Penstemon janishiae</i>	Emitter sites	Type 3	-	-
Spine-noded Milkvetch	<i>Peteria thompsoniae</i>	Emitter sites	Type 4	-	-

Sources: BLM 2015, 2016; IDFG 2017; Mountain Home AFB, 2006, 2017d; USFWS 2008, 2017

Notes:

¹ Emitter sites without a specific site location identified indicate that these species may be present but have not necessarily been observed. Emitter sites with a specific site identifies indicate sites in which this species has been observed.

*BGEPA = *Bald and Golden Eagle Protection Act*; BLM = Bureau of Land Management; BMC = Bird of Management Concern; IDFG = Idaho Department of Fish and Game; ND = no-drop targets; SGCN = species of greatest conservation need; USFWS = United States Fish and Wildlife Service

Special Status Animal Categories:

Type 1 = Federally-listed threatened or endangered species, essential experimental population, and critical habitat.

Type 2 = Idaho BLM Sensitive Species, including USFWS Proposed and Candidate species, ESA species delisted during the past 5 years, and ESA Experimental Non-essential populations.

Special Status Plant Categories:

Type 1 = Federally-listed Threatened or Endangered Species and designated Critical Habitat.

Type 2 = Species that have a high likelihood of being listed in the foreseeable future due to their global rarity and significant endangerment factors. Species also include USFWS Proposed and Candidate Species, ESA species delisted during the past 5 years, ESA Experimental Non-essential Species, and ESA Proposed Critical Habitat.

Type 3 = Range-wide or State-wide Imperiled - Moderate Endangerment. These are species that are globally rare or very rare in Idaho, with moderate endangerment factors. Their global or state rarity and the inherent risks associated with rarity make them imperiled species.

Type 4 = Species of Concern - These are species generally rare in Idaho with small populations or localized distribution and currently have low threat levels; however, due to the small populations and habitat area, certain future land uses in close proximity could significantly jeopardize these species.

3.8 CULTURAL RESOURCES

3.8.1 *Definition of Resource*

In accordance with the *National Historic Preservation Act of 1966* and its implementing regulations at 36 CFR 800, federal agencies are required to assess the potential for adverse effects to cultural resources as the result of a proposed action [undertaking]. Cultural resources are defined as buildings, structures, objects, prehistoric and historical archaeological sites, and traditional cultural properties. A cultural resource is considered significant/an historic property when listed in, or determined eligible for listing in, the National Register of Historic Places. National Register of Historic Places-eligibility generally requires a cultural resource to be 50 years old and have national, state, or local significance in American history, architecture, archaeology, engineering, or culture associated with one, or more of four criteria. National Register of Historic Places-eligible resources must also possess sufficient integrity that conveys the resource's significance such as

- associating with events that have made a significant contribution to the broad patterns of our history (Criterion A);
- associating with the lives of persons significant in our past (Criterion B);
- embodying of distinctive characteristics of a type, period, or method of construction; representing the work of a master; possessing high artistic values; or representing a significant and distinguishable entity whose components may lack individual distinction (Criterion C); and/or
- having yielded or being likely to yield information important in prehistory or history (Criterion D).

Other federal laws pertaining to cultural resources include the *Archaeological and Historic Preservation Act of 1960* as amended, the *American Indian Religious Freedom Act of 1978*, the *Archaeological Resources Protection Act of 1979*, the *Native American Graves Protection and Repatriation Act of 1990*, and the *National Historic Preservation Act* as amended through 2016, and associated regulations (36 CFR § 800).

Although the installation has a Programmatic Agreement with the Idaho State Historic Preservation Office for streamlined *National Historic Preservation Act* compliance (36 CFR 800.14), the Programmatic Agreement only applies to specifically designated, routine maintenance projects. Because the current undertaking is not a routine maintenance project, the agency has engaged standard procedural compliance in accordance with 36 CFR 800, and consultation is ongoing.

3.8.2 *Area of Potential Effects*

The *National Historic Preservation Act* defines an undertaking Area of Potential Effects as the geographic area or areas within which any undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. For this undertaking, the Area of Potential Effects is defined as the ROI or the 11,152 acres of comprising the Juniper Butte Range and an additional 664 acres comprised of the four no-drop targets and nine emitter sites.

3.8.3 *Existing Conditions*

Mountain Home AFB follows standard operating procedures for the management and protection of cultural resources on the withdrawn lands included within the APE. Procedures, as outlined in the Mountain Home Integrated Cultural Resources Management Plan, address mission conflicts, management and coordination for Section 106 of the *National Historic Preservation Act*, and other necessary consultation.

The Juniper Butte Range has been 100 percent surveyed for archaeological resources (Air Force Air Combat Command, 1999). Twenty-six archaeological sites have been recorded at the Juniper Butte Range (**Table 3-4**). Eight of the archaeological sites have been determined eligible for the National Register of Historic Places; these include campsites, lithic scatters, and rock cairns. A total of 146 Isolated Finds have been recorded within the Juniper Butte Range. Generally, isolated archaeological resources are not considered National Register of Historic Places-eligible due to a lack of data potential (Mountain Home AFB, 2018).

**Table 3-4
Archaeological Sites Recorded at the Juniper Butte Range**

Site Number	National Register of Historic Places Eligibility
10-OE-5847	Not Eligible
10-OE-5853/7114	Eligible
10-OE-5858	Not Eligible
10-OE-5861	Not Eligible
10-OE-5870	Not Eligible
10-OE-5873	Eligible
10-OE-5875	Not Eligible
10-OE-5876	Not Eligible
10-OE-5884	Not Eligible
10-OE-7111	Not Eligible
10-OE-7112/7113	Eligible
10-OE-7115	Not Eligible
10-OE-7116	Eligible
10-OE-7123	Not Eligible
10-OE-7128	Eligible
10-OE-7129	Not Eligible
10-OE-7132	Eligible
10-OE-7134	Not Eligible
10-OE-7141	Not Eligible
10-OE-7142	Not Eligible
13-Juniper Butte Range-01	Not Eligible
13-Juniper Butte Range-02	Not Eligible
13-Juniper Butte Range-03	Not Eligible
13-Juniper Butte Range-04	Eligible
13-Juniper Butte Range-05	Not Eligible
13-Juniper Butte Range-06	Eligible

The four no-drop targets have been 100 percent surveyed for archaeological resources (Air Force Air Combat Command, 1999). Two prehistoric isolates were recorded at ND-1. Both isolates (10-OE-6726 and 10-OE-6727) have been determined not eligible for inclusion in the National Register of Historic Places (Mountain Home AFB, 2018).

All nine emitter sites have been surveyed for archaeological resources. One of the emitter sites, BA, is located within the boundary of an archaeological site (Mountain Home AFB, 2011; Air Force Air Combat Command, 1999). Site 10-OE-6735 is an approximately 63-acre, multicomponent site with a variety of lithic materials dating to the late Prehistoric to Protohistoric Periods (1,500 to 200 years before present). Site 10-OE-6735 was determined eligible for inclusion in the National Register of Historic Places by the Keeper in 2002 (Mountain Home AFB, 2011). Emitter Site BA was constructed in a manner to avoid all ground disturbances and was constructed over a portion of Site 10-OE-6735. Cultural resources were left in place and the ground surface was first capped with a geotextile fabric and then covered with 18 inches of fill. All aspects of the construction were monitored by TALONS CRM Consultants (Mountain Home AFB, 2011).

No historic architectural resources are located on the withdrawn lands (Mountain Home AFB, 2018).

No Traditional Cultural Properties have been identified on the withdrawn lands (Mountain Home AFB, 2018). The Integrated Cultural Resources Management Plan specifies that several Indian tribes have historical ties to southern Idaho including the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, the Burns Paiute Colony, the Northwest Band of Shoshone, the Shoshone-Bannock Tribes of

the Fort Hall Indian Reservation, and the Paiute-Shoshone Tribes of the Fort McDermitt Indian Reservation (Mountain Home AFB, 2011).

3.9 HAZARDOUS MATERIALS AND WASTES, CONTAMINATED SITES, AND TOXIC SUBSTANCES

3.9.1 *Definition of the Resource*

Air Force Policy Directive 32-70, Environmental Quality, establishes the policy that the Air Force is committed to

- cleaning up environmental damage resulting from its past activities;
- meeting all environmental standards applicable to its present operations;
- planning its future activities to minimize environmental impacts;
- managing responsibly the irreplaceable natural and cultural resources it holds in public trust; and
- eliminating pollution from its activities wherever possible.

AFI 32-7086, Hazardous Materials Management, establishes procedures and standards that govern management of hazardous material throughout the Air Force. It applies to all Air Force personnel who authorize, procure, issue, use, or dispose of hazardous material, and to those who manage, monitor, or track any of those activities. Hazardous material is defined as any substance with physical properties of ignitability, corrosivity, reactivity, or toxicity that might cause an increase in mortality, serious irreversible illness, and incapacitating reversible illness, or that might pose a substantial threat to human health or the environment. Hazardous waste is defined as any solid, liquid, contained gaseous, or semi-solid waste; or any combination of wastes that pose a substantial present or potential hazard to human health or the environment.

Evaluation of hazardous materials and hazardous wastes focuses on underground storage tanks and aboveground storage tanks and the storage, transport, and use of pesticides and herbicides, fuels, and petroleum, oils, and lubricants. Evaluation might also extend to generation, storage, transportation, and disposal of hazardous wastes when such activity occurs at or near the project site of a proposed action. In addition to being a threat to humans, the improper release of hazardous materials and hazardous wastes can threaten the health and well-being of wildlife species, botanical habitats, soil systems, and water resources. In the event of release of hazardous materials or hazardous wastes, the extent of contamination varies based on type of soil, topography, and water resources.

The *Comprehensive Environmental Response, Compensation, and Liability Act*, as amended by the *Superfund Amendments and Reauthorization Act* and the *Toxic Substances Control Act*, define hazardous materials. The Occupational Safety and Health Administration is responsible for enforcement and implementation of federal laws and regulations pertaining to worker health and safety under 29 CFR § 1910. The Occupational Safety and Health Administration also includes the regulation of hazardous materials in the workplace requires appropriate training in their handling.

The *Solid Waste Disposal Act* as amended by the *Resource Conservation and Recovery Act*, which was further amended by the Hazardous and Solid Waste Amendments, defines hazardous wastes. In general, both hazardous materials and hazardous wastes include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, might present substantial danger to public health or welfare or the environment when released or otherwise improperly managed.

Through the Environmental Restoration Program (ERP) initiated in 1980, a subcomponent of the Defense ERP that became law under *Superfund Amendments and Reauthorization Act* (formerly the Installation Restoration Program), each Department of Defense installation is required to identify, investigate, and clean up hazardous waste disposal or release sites. Remedial activities for ERP sites follow the Hazardous and Solid Waste Amendment of 1984 under the *Resource Conservation and Recovery Act* Corrective Action Program. The ERP provides a uniform, thorough methodology to evaluate past disposal sites, control the

migration of contaminants, minimize potential hazards to human health and the environment, and clean up contamination through a series of stages until it is decided that no further remedial action is warranted.

Description of ERP activities provides a useful gauge of the condition of soils, water resources, and other resources that might be affected by contaminants. It also aids in identification of properties and their usefulness for given purposes (e.g., activities dependent on groundwater usage might be foreclosed where a groundwater contaminant plume remains to complete remediation).

Toxic substances might pose a risk to human health but are not regulated as contaminants under the hazardous waste statutes. Included in this category are asbestos-containing materials, lead-based paint, radon, polychlorinated biphenyls, and pesticides/herbicides. The presence of special hazards or controls over them might affect, or be affected by, a proposed action. Information on special hazards describing their locations, quantities, and condition assists in determining the significance of a Proposed Action.

Asbestos. AFI 32-1052, Facility Asbestos Management, provides the direction for asbestos management at Air Force installations. This instruction incorporates by reference applicable requirements of 29 CFR § 669 et seq., 29 CFR § 1910.1025, 29 CFR § 1926.58, 40 CFR § 61.3.80, Section 112 of the CAA and other applicable AFIs and Department of Defense Directives. AFI 32-1052 requires bases to develop an Asbestos Management Plan to maintain a permanent record of the status and condition of asbestos-containing material in installation facilities, as well as documenting asbestos management efforts. In addition, the instruction requires installations to develop an asbestos operating plan detailing how the installation accomplishes asbestos-related projects. Asbestos is regulated by the USEPA with the authority promulgated under Occupational Safety and Health Administration, 29 U.S.C. § 669 et seq. Section 112 of the CAA regulates emissions of asbestos fibers to ambient air. USEPA policy is to leave asbestos in place if disturbance or removal could pose a health threat. Based on the year of construction, asbestos-containing materials would not be expected to be present in installation facilities on withdrawn lands.

Lead-based Paint. Human exposure to lead has been determined an adverse health risk by agencies such as Occupational Safety and Health Administration and the USEPA. Sources of exposure to lead are dust, soils, and paint. In 1973, the Consumer Product Safety Commission established a maximum lead content in paint of 0.5 percent by weight in a dry film of newly applied paint. In 1978, under the *Consumer Product Safety Act*, PL 101-608 as implemented by 16 CFR § 1303, the Consumer Product Safety Commission lowered the allowable lead level in paint to 0.06 percent (600 ppm). The *Consumer Product Safety Act* also restricted the use of lead-based paint in nonindustrial facilities. Department of Defense implemented a ban of lead-based paint use in 1978; therefore, it is possible that facilities constructed prior to or during 1978 may contain lead-based paint. Based on the year of construction, the presence of lead-based paint would not be expected in installation facilities or used on other installation assets on withdrawn lands.

Radon. The United States Surgeon General defines radon as an invisible, odorless, and tasteless gas, with no immediate health symptoms, that comes from the breakdown of uranium inside Earth (United States Surgeon General, 2005). Radon that is present in soil can enter a building through small spaces and openings, accumulating in enclosed areas such as basements. No federal or state standards are in place to regulate residential radon exposure at the present time, but guidelines were developed. Although 4.0 picocuries per liter (pCi/L) is considered an “action” limit, any reading over 2 pCi/L qualifies as a “consider action” limit. The USEPA and the United States Surgeon General have evaluated the radon potential around the country to organize and assist building code officials in deciding whether radon-resistant features are applicable in new construction. Radon zones can range from 1 (high) to 3 (low).

Polychlorinated Biphenyls. Polychlorinated biphenyls are a group of chemical mixtures used as insulators in electrical equipment, such as transformers and fluorescent light ballasts. Chemicals classified as polychlorinated biphenyls were widely manufactured and used in the United States until they were banned in 1979. The disposal of polychlorinated biphenyls is regulated under the federal *Toxic Substances Control Act* (15 U.S.C. § 2601, et seq., as implemented by 40 CFR § 761), which banned the manufacture and distribution of polychlorinated biphenyls, with the exception of polychlorinated biphenyls used in enclosed systems. Per Air Force policy, all installations should have been polychlorinated biphenyl-free as of 21

December 1998. In accordance with 40 CFR § 761 and Air Force policy, both of which regulate all polychlorinated biphenyl articles, polychlorinated biphenyl articles are regulated as follows:

- Less than 50 ppm—non-polychlorinated biphenyls (or polychlorinated biphenyl-free)
- 50 ppm to 499 ppm— polychlorinated biphenyl-contaminated
- 500 ppm and greater— polychlorinated biphenyl equipment (USEPA, 2008)

The *Toxic Substances Control Act* regulates and the USEPA enforces the removal and disposal of all sources of polychlorinated biphenyls containing 50 ppm or more; the regulations are more stringent for polychlorinated biphenyl equipment than for polychlorinated biphenyl-contaminated equipment.

The ROI for hazardous materials and wastes, ERP sites, and toxic materials includes the withdrawn lands.

3.9.2 Existing Conditions

3.9.2.1 Hazardous Materials and Waste

Hazardous and toxic material procurements at Mountain Home AFB are tracked by the HAZMART. The HAZMART ensures that only the smallest quantities of hazardous material necessary to accomplish the mission are purchased and used. HAZMART is also responsible maintaining Safety Data Sheets for hazardous material. Hazardous materials used at the Juniper Butte Range and emitter sites include diesel, gasoline, and liquefied natural gas (propane) fuel for generators; oil; and lead acid batteries (Mountain Home AFB, 2017a). All materials are stored in approved containers and have Safety Data Sheets. All hazardous materials and wastes are handled according to the requirements of the 366 FW Hazardous Waste Management Plan (Mountain Home AFB, 2017b) and 366 FW Hazardous Material Emergency Response Planning and Response Plan (Mountain Home AFB, 2008). Further, the Integrated Contingency Plan for Oil Spill Prevention and Response (Mountain Home AFB, 2017c) was developed to serve as the Mountain Home AFB Spill Prevention Control and Countermeasures Plan required by 40 CFR § 112 to address the issues of spill prevention, discharge containment and cleanup, and emergency response actions. The Mountain Home AFB Fire Department responds to any hazardous materials spill considered an emergency with potential life, health, fire, or other safety hazard.

3.9.2.2 Environmental Restoration Program/Military Munitions Response Program

Mountain Home AFB initialized the ERP in 1983 (Air Force, 2011). There are no ERP sites on the Juniper Butte Range, no-drop targets, or emitter sites.

Unexploded ordnance and military munitions are not a hazardous waste when used for their intended purposes or used in training military personnel or when collected or recovered during range clearance operations. Expended munitions, munitions fragments, and unexploded ordnance rendered safe at the Juniper Butte Range by the Air Force are a solid waste and are recycled in accordance with Department of Defense Instruction 4140.62 (Mountain Home AFB, 2012). The Juniper Butte Range is closed for approximately one week each year (typically between May and October) to allow for comprehensive training ordnance cleanup. Small-scale training ordnance cleanup activities are conducted periodically depending on weather and any operational constraints (Air Force, 1998).

3.9.2.3 Toxic Substances

Asbestos. The 366 CES is primarily responsible for the 366 FW Plan 3206-15, Asbestos Operations and Management Plan (Mountain Home AFB, 2015b), that minimizes asbestos exposure to building occupants, maintenance, and contractor personnel. Based on the year of construction, facilities located on the Juniper Butte Range and emitter sites would not be expected to have asbestos-containing materials; however, an asbestos survey has not confirmed this determination.

Lead-based Paint. AFI 32-7042 requires installations to ensure that construction, renovation, or demolition involving lead-based materials are managed in accordance with applicable federal, state, and local

transportation, occupational health treatment, storage, and disposal requirements. Facilities located on the Juniper Butte Range and the emitter sites would not contain lead-based paint as they were constructed after 1978.

Radon. The USEPA radon zone for Owyhee and Twin Falls Counties, Idaho, is Zone 2 (Moderate Potential), predicted average indoor radon screening levels from 2 to 4 pCi/L (USEPA, 2018a).

Polychlorinated Biphenyls. Discarded oil products may be screened for polychlorinated biphenyls prior to disposal. Building 1296 is a polychlorinated biphenyls storage area (Mountain Home AFB, 2017a). Fluorescent light fixtures in existing facilities could also contain polychlorinated biphenyls.

3.10 SAFETY

3.10.1 *Definition of Resource*

A safe environment is necessary to prevent or reduce the potential for death, serious injury and illness, or property damage. This section addresses safety and human health issues associated with flight, ground safety, and explosives safety associated with activities conducted by the Department of Defense and allied forces operating in the ROI which is made up of the withdrawn lands. It also includes the safety and human health issues associated with removal or demolition of existing facilities, removal of fencing, and other activities associated with land use changes.

AFI 91-202, *The US Air Force Mishap Prevention Program*, and AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, implement Air Force Policy Directive 91-2, *Safety Programs*. AFI 91-202 establishes mishap prevention program requirements, assigns responsibilities for program elements and contains program management information. The purpose of the Air Force Mishap Prevention Program is to minimize loss of Air Force resources and to protect Air Force personnel from occupational deaths, injuries, or occupational illnesses by managing risks on and off duty.

3.10.2 *Existing Conditions*

3.10.2.1 Flight Safety

Aircraft using the Juniper Butte Range, no-drop targets, and emitter sites follow Air Force safety procedures and aircraft specific emergency procedures. Basic airmanship procedures also exist for handling any deviations to air traffic control procedures due to an in-flight emergency; these procedures are defined in AFI 11-202 [Volume 3], General Flight Rules, AFI 11-37 2MDS [Volume 3], Aircrew Flight Equipment Contingency Operations, and established aircraft flight manuals. The Flight Crew Information File is a safety resource for aircrew day-to-day operations which is composed of air and ground operation rules and procedures. In addition, in order to avoid non-participating aircraft within MOAs, sorties are flown using visual flight rules see-and-avoid tactics established by 14 CFR § 91. See-and-avoid tactics refers to the practice of visually locating other aircraft and avoiding them using right-of-way rules within 14 CFR § 91. All military aircraft using MOAs utilize see-and-avoid tactics to avoid civilian visual flight rules aircraft that may be travelling through MOA airspace.

Aircraft mishaps and their prevention represent a paramount concern for the Air Force. Flight “rates” are the number of mishaps per 100,000 flight hours. Air Force Policy Directive 91-2, *Safety Programs*, defines four major categories of reportable mishaps based on total cost of property damage or the degree of injury: Class A, B, C, and D mishaps. Reporting and investigation requirements for aviation mishaps are defined in AFI 91-204, *Safety Investigation and Hazard Reporting*, and Air Force Manual 91-223, *Safety: Aviation Safety Investigations and Reports*.

Historic data from fiscal year 1972 through 2017 indicate that the average historical mishap rate for every 100,000 flying hours was 2.34 for the F-15s. The 5-year Class A mishap rate has decreased for the F-15 to 1.85 (Air Force Safety Center, 2017a). Aircraft flight operations in the Juniper Butte Range are governed

by standard flight rules. Additionally, under the Commander 366 FW, the 366 Operations Group is the designated operating agency for the range and is responsible for operational monitoring, administration, and general safety of the Juniper Butte Range. The Juniper Butte Range activity must comply with AFI 13-212, *Range Planning and Operations*, Volume 1 and Major Command and base supplements. Mishap rates do not differentiate between accidents at the airfield or while training in the airspace. The mishap rate for Mountain Home AFB is 1.06, with only one Class A mishap occurred within the Mountain Home Range Complex since 2000.

3.10.2.2 Bird/Wildlife Aircraft Strike Hazard

Bird/wildlife aircraft strike hazard (BASH) and the danger it presents is a primary safety concern for aircraft operations. BASH constitutes a safety concern because of the potential for damage to aircraft or injury to aircrews or local populations if an aircraft crash should occur in a populated area. Aircraft can encounter birds at nearly all altitudes up to 30,000 feet MSL; however, most birds fly close to the ground. According to the Air Force Safety Center BASH statistics, of the known altitude the bird/wildlife strike occurred, more than 50 percent occur below 400 feet, and 93 percent occur at less than 2,500 feet AGL (Air Force Safety Center, 2017b). Of the strikes with a known location, approximately 42 percent occur in the airfield environment, while about 9 percent occur during low-level, air-to-ground aerial delivery (Air Force Safety Center, 2017b). Waterfowl present the greatest BASH potential due to their congregational flight patterns and because, when migrating, they can be encountered at altitudes up to 20,000 feet AGL. Raptors also present a substantial hazard due to their size and soaring flight patterns. In general, the threat of BASH increases during March and April and from August through November due to migratory activities.

The Air Force BASH program was established to minimize the risk for collisions of birds/wildlife and aircraft and the subsequent loss of life and property. In accordance with AFI 91-202, each flying unit in the Air Force is required to develop a BASH plan to reduce hazardous bird/wildlife activity relative to airport flight operations. The intent of each plan is to reduce BASH issues by creating an integrated hazard abatement program through awareness, avoidance, monitoring, and actively controlling bird and animal population movements. Some of the procedures outlined in the plan include issuing bird hazard warnings, initiating bird/wildlife avoidance procedures when potentially hazardous bird/wildlife activities are reported, and submitting BASH reports for all incidents.

The 366 FW maintains an aggressive program to minimize BASH potential. The 366 FW Wing Plan 9102-13 provides the guidance and responsibilities to minimize bird strike hazards on Mountain Home AFB and the local flying area, including the Mountain Home Range Complex. The airspace associated with the Mountain Home Range Complex supports many raptors, waterfowl, and upland game birds. Over the past 20 years, aircraft based at Mountain Home AFB have experienced an average of less than 10 bird strikes per year (Air Force Civil Engineer Center and Mountain Home AFB, 366th Fighter Wing, 2017). Most of these incidents resulted in little or no damage to the aircraft, and none resulted in a Class A mishap.

3.10.2.3 Explosives Safety

There are designated safety buffers that surround each target area to ensure personnel safety when the targets are active. Inert practice bombs dropped from aircraft have a safety buffer known as a Weapons Danger Zone. The size and shape of a Weapons Danger Zone is based on several parameters including type of ordnance used, speed and altitude of aircraft, and distance from the target when ordnance is dropped.

A Hazard Area is a composite of all Weapons Danger Zones, Surface Danger Zones surrounding small arms and ground-based ordnance, Laser Surface Danger Zones, and Directed Energy Weapon Danger Zones for all authorized weapon delivery events and represents operational hazards as well as residual hazards following munitions deliveries. For purposes of this EA, Weapons Danger Zones are the focus of the analysis because the only changes proposed apply to aircraft-delivered munitions. The use of chaff and flare occurs over the entire Mountain Home Range Complex, including the withdrawn lands.

The only authorized ordnance in the Juniper Butte Range impact area is the BDU-33 with cold spotting charges, as well as chaff and flares. A BDU-33 is a 25-pound cast iron and steel non-explosive practice bomb used to simulate general purpose bombs in a low-drag configuration. These practice bombs contain a spotting charge that releases a cloud of smoke on impact so that delivery accuracy can be scored. Cold spotting charges are composed of titanium tetrachloride that produces smoke on impact. Chaff is an electronic countermeasure designed to reflect radar waves and obscure aircraft, ships, and other equipment from radar tracking sources. Chaff bundles consists of millions of non-hazardous aluminum-coated glass fibers. When ejected from the aircraft, these fibers disperse widely in the air, forming an electromagnetic screen that temporarily hides the aircraft from radar and forms a radar decoy, allowing the aircraft to defensively maneuver or leave the area. Flares are magnesium pellets ejected from military aircraft and provide high-temperature heat sources that act as decoys for heat-seeking weapons targeting the aircraft. These defensive countermeasures are utilized to keep aircraft from being successfully targeted or to escape from weapons such as surface-to-air missiles, air-to-air missiles, anti-aircraft artillery, and other aircraft.

An Explosive Ordnance Disposal Range was established on the Juniper Butte Range with the sole purpose of demolishing unexploded ordnance, specifically BDU-33s and flares that are not certified safe after being dropped from the aircraft onto the Juniper Butte Range. Mountain Home AFB has two additional Explosive Ordnance Disposal ranges, one on Mountain Home AFB and one on Saylor Creek Range, which are used for the demolition of other munitions. Range clearing and munitions demolition activities on the Juniper Butte Range are carried out in accordance with Air Force Manual 91-201, *Explosive Safety Standards*, the Mountain Home AFB supplement to AFI 13-212 Air Combat Command Supplement, *Range Planning and Operations*, and all applicable Air Force technical orders.

3.10.2.4 Ground Safety

The Air Force Occupational Safety and Health program standards and definitions are consolidated in AFI 91-203, which provides the Air Force's minimum safety, fire protection and occupational health standards; assigns responsibilities to individuals or functions to help Commanders manage their safety and health programs to ensure they comply with Federal Occupational Safety and Health Administration and Air Force guidance. These instructions apply to all Air Force activities.

Day-to-day operations and maintenance activities conducted on the Juniper Butte Range, no-drop targets, and emitter sites are performed in accordance with applicable Air Force safety regulations, published Air Force Technical Orders, and standards prescribed by Air Force Occupational Safety and Health requirements.

For activities related to demolition or removal of infrastructure on the Juniper Butte Range, no-drop targets, and emitter sites, Occupational Safety and Health Administration safety guidance published in the Department of Labor 29 series CFR govern general safety requirements relating to general industry practices (§ 1910), construction (§ 1926) and elements for federal employees (§ 1960) is followed to protect personnel from occupational deaths, injuries, or illnesses.

3.10.2.5 Fire Risk and Management

Contractors operating at the Juniper Butte Range provide fire management and response for the range and associated facilities. The fire management and response staff and equipment meet the requirements of AFI 32-2001, *Fire Emergency Services Program*; however, under the Support Agreement between 366 FW and the BLM Lower Snake River District (July 2008), the BLM provides firefighting support for all lands outside the Juniper Butte Range, no-drop targets, and emitter sites. For land within the Juniper Butte Range, the BLM only supplies help when requested.

Fire activity underlying the Mountain Home Range Complex airspace, resulting from lightning, occurs regularly during the May through November fire season. Fires in the Juniper Butte Range impact area from training activities are usually small because of expeditious detection and response. Outside of the managed ranges, wildfires tend to be larger. This is because the region is remote, fires are not detected until they

have spread quite far and are creating a great deal of smoke, and the response time is long due to the distances involved (Mountain Home AFB, 2007).

Fire prevention within the Juniper Butte Range impact area includes reduction of ignition sources, management of vegetation and fuels, and maintenance of firebreaks. Fire risk is higher in the impact areas due to ordnance use and around the range facilities resulting from maintenance activities. Mountain Home AFB, therefore, employs a program of annually reducing fine fuels in the Juniper Butte Range impact area and commonly implements aggressive fire suppression June through August. During dry years, the fire season can extend from May to November (Mountain Home AFB, 2017d). Fire suppression equipment and personnel are stationed on the Juniper Butte Range for rapid response to any fires that may start. As previously discussed in Explosive Safety, the practice bombs used in the Juniper Butte Range contain cold spots that would not ignite fires. Countermeasure flares are used within the MOA above the Juniper Butte Range, no-drop targets, and emitter sites. In accordance with the Mountain Home AFB supplement to AFI 13-212 Air Combat Command Supplement, *Range Planning and Operations*, in general flares may be expended above 2,000 feet AGL in the Jarbidge North MOA and must be flare types that burn out before ground impact (e.g., MJU-7/10 and M206). The Jarbidge North MOA airspace is above the Juniper Butte Range, no-drop targets, and emitter sites. All non-Air Force users must get prior authorization to expend flares and provide details on flare type and burn characteristics. During the fire season, the minimum altitude for expending flares is 5,000 feet AGL unless advance approval is obtained from the Range Operating Authority.

3.11 SOCIOECONOMICS

3.11.1 *Definition of the Resource*

Socioeconomics is the relationship between economics and social elements, such as population levels and economic activity. There are several factors that can be used as indicators of economic conditions for a geographic area, such as demographics, median household income, unemployment rates, percentage of families living below the poverty level, employment, and housing data. Data on employment identify gross numbers of employees, employment by industry or trade, and unemployment trends. Data on industrial, commercial, and other sectors of the economy provide baseline information about the economic health of a region.

The ROI includes the two counties in southwestern Idaho where the withdrawn lands occur: Owyhee and Twin Falls Counties.

3.11.2 *Existing Conditions*

In 2017, the population of Owyhee County was estimated to be 11,628 and the population of Twin Falls County was estimated to be 85,124. This was only a 0.9 percent increase from the 2010 United States Census population estimate for Owyhee County, but a 10.2 percent increase from the population estimate for Twin Falls County (**Table 3-5**; United States Census Bureau, 2018). The state of Idaho's population was estimated to be 1,716,943 in 2017, which was a 9.5 percent increase over the 2010 United States Census population of the state. The population growth in Twin Falls County was similar to that of the state of Idaho and more rapid than the United States as a whole. Alternatively, the population of Owyhee County did not change substantially between 2010 and 2017 (**Table 3-5**).

In March 2018, the unemployment rates were 3.5 percent for Owyhee County and 2.6 percent for Twin Falls County (Idaho Department of Labor, 2018). These unemployment rates were similar to the unemployment rate for Idaho (2.9 percent) but substantially lower than the United States unemployment rate (4.1 percent).

**Table 3-5
Population in the Juniper Butte Range Region of Influence as Compared to Idaho and the
United States (2010-2017)**

Location	2010	2017	Percent Change
United States	308,758,105	325,719,178	5.5
Idaho	1,567,650	1,716,943	9.5
Owyhee County	11,526	11,628	0.9
Twin Falls County	77,230	85,124	10.2

Source: United States Census Bureau, 2018

In 2017, there were 4,905 housing units in Owyhee County and 33,252 housing units in Twin Falls County; 67 percent of housing units in both counties were owner-occupied, which is an owner-occupied housing rate similar to that of the state of Idaho and the United States (United States Census Bureau, 2018). The median value of owner-occupied housing was \$120,500 and \$149,100 in Owyhee and Twin Falls Counties, respectively. The median value of owner-occupied housing is lower in the ROI than in the state of Idaho and the United States (United States Census Bureau, 2018). The median gross monthly rent for housing in Owyhee County was \$557 and in Twin Falls County was \$735 (United States Census Bureau, 2018).

3.12 ENVIRONMENTAL JUSTICE

3.12.1 *Definition of the Resource*

EOs direct federal agencies to address disproportionate environmental and human health effects in minority and low-income communities and to identify and assess environmental health and safety risks to children. EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, pertains to environmental justice issues and relates to various socioeconomic groups and disproportionate impacts that could be imposed on them. This EO requires that federal agencies' actions substantially affecting human health or the environment do not exclude persons, deny persons benefits, or subject persons to discrimination because of their race, color, or national origin. EO 12898 was enacted to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Consideration of environmental justice concerns includes race, ethnicity, and the poverty status of populations in the vicinity of a proposed action.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, states that each federal agency "(a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks."

For the purposes of this EA, minority populations are defined as Alaska Natives and American Indians, Asians, Blacks or African-Americans, Native Hawaiians, and Pacific Islanders or persons of Hispanic origin (of any race); low-income population include persons living below the poverty threshold as determined by the United States Census Bureau; and youth populations are children under the age of 18 years.

The ROI includes the two counties in southwestern Idaho where the withdrawn lands occur: Owyhee and Twin Falls Counties. Minority, low-income, and youth populations that could be disproportionately impacted by the project are addressed. An evaluation of minority and low-income populations in the ROI forms a baseline for the evaluation of the potential for disproportionate impacts on these populations from the Proposed Action.

3.12.2 Existing Conditions

In 2017, the State of Idaho, Owyhee County, and Twin Falls County had a lower percentage of minorities than that in the United States as a whole (**Table 3-6**); however, a substantially higher percentage of the population of Owyhee County identified as American Indian or Alaska Native or as having a Hispanic or Latino origin compared to the state of Idaho and the United States. The percentage of minority populations in Twin Falls County that were American Indian or Alaska Native or as having a Hispanic or Latino origin were similar to the state of Idaho and the United States (United States Census Bureau, 2018).

In 2017, Owyhee County had a substantially higher rate of poverty than Idaho and the United States while Twin Falls County had a slightly higher rate of poverty than Idaho and the United States (**Table 3-6**). Further, a greater percentage of the population are children in Owyhee and Twin Falls Counties than in Idaho and the United States (**Table 3-6**) (United States Census Bureau, 2018).

**Table 3-6
Total Population and Populations of Concern for the Juniper Butte Range (2017)**

	Total Population	Percent Minority*	Percent Hispanic or Latino	Percent American Indian and Alaska Native	Percent below Poverty	Percent Youth
Owyhee County	11,628	31.6	26.4	4.5	17.8	26.4
Twin Falls County	85,124	20.9	16.5	1.3	14.5	28.0
State of Idaho	1,716,943	18.0	12.5	1.7	12.8	25.8
United States	325,719,178	39.3	18.1	1.3	12.3	22.6

Source: United States Census Bureau, 2018

Note: Hispanic and Latino denote a place of origin and may be of any race and percent youth are all persons under the age of 18.

*Not white or representing more than one race and Hispanic or Latino in origin.

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

This section presents an analysis of potential environmental impacts associated with the Proposed Action and No Action Alternative described in **Chapter 2**. Direct and indirect effects and their significance and means to reduce adverse environmental impacts are also discussed for each resource. Cumulative impacts for each resource are discussed in **Chapter 5**.

The specific criteria for evaluating impacts and assumptions for the analyses are presented under each resource area. Evaluation criteria for most potential impacts were obtained from standard criteria; federal, state, or local agency guidelines and requirements; and/or legislative criteria. Proposed environmental commitments (best management practices and standard operating procedures) to reduce potential impacts are included for each resource area, as appropriate.

Impacts may be direct or indirect and are described in terms of type, context, duration, and intensity, which are consistent with the CEQ regulations. “Direct effects” are caused by an action and occur at the same time and place as the action. “Indirect effects” are caused by the action and occur later in time or are farther removed from the place of impact but are reasonably foreseeable. Impacts are defined in general terms and are qualified as adverse or beneficial, and as short- or long-term.

4.1 AIRSPACE USE AND MANAGEMENT

4.1.1 *Evaluation Criteria*

This section describes the potential airspace use and management impacts associated with the Proposed Action. The impacts of the No Action Alternative are also assessed. Potential airspace impacts could occur if air traffic in the region and/or the air traffic control system were encumbered by changed flight activities associated with the Proposed Action. A significant impact to airspace management and use would occur if the Proposed Action

- restricts movement of other air traffic in the area;
- creates conflicts with air traffic control in the region;
- changes operations within airspace already designated for other purposes;
- results in a need to designate controlled airspace where none previously existed;
- results in a reclassification of controlled airspace from a less restrictive to a more restrictive classification; or
- results in a need to designate regulatory special use airspace.

The special use airspace currently used to support flying units at Mountain Home AFB consists of the MOAs and Restricted Areas depicted on **Figure 1-3**. The Saylor Creek Range (within R-3202) and Juniper Butte Range (within R-3204) contain varied target sets for supporting air-to-ground weapons training. The 366 FW maintains and operates simulated threat systems within the ranges that provide realistic electronic combat training.

4.1.2 *Proposed Action*

Under the Proposed Action, no operational changes to airspace are proposed; therefore, there would be no impacts to airspace use or management. Aircraft sorties would continue to originate from Mountain Home AFB. Approximately 13,600 day/night annual training sortie operations would continue to occur in Jarbidge North MOA (Air Force, 2018). No alteration to special use airspace would occur and the hours of use for R-3204 and Jarbidge North MOA would remain the same: 7:30 a.m. to 10:00 p.m. Monday through Friday and other times by Notice to Airmen.

4.1.3 *No Action Alternative*

Under the No Action, the land withdrawal would not be extended. Consequently, military aircraft training would not include ordnance drops as described in **Section 2.1.1.1**. The Air Force would retain R-3204;

however, without those training activities it would not actually be scheduled during times established under the Proposed Action. It still would be surrounded by the Jarbidge North MOA and the MOA would continue to be scheduled and activated as it is today. Aircraft sorties would continue to originate from Mountain Home AFB and activities within the MOA would continue as previously described. No alteration to special use airspace would occur under the No Action Alternative; therefore, no impacts to airspace use and management would be anticipated.

4.2 NOISE

4.2.1 *Evaluation Criteria*

This section discusses aircraft noise exposure associated with the Proposed Action and No Action Alternative. Aircraft operations in military training airspace generate a noise environment that is somewhat different from other community noise environments. Overflights are sporadic, occurring at random times and varying from day to day and week to week. Aircraft typically operate at higher airspeeds, and their noise can have a rapid onset and “surprise factor”. Military aircraft within the Jarbidge North MOA/R-3204 generate two types of sound: (1) sound generated by the aircraft’s engines and by air flowing over the airframe and (2) sonic booms, impulsive sounds generated during supersonic flight.

None of the potential actions examined in this EA would present a risk of adverse noise impacts, and as such no new modeling was conducted for this EA. Exposure to aircraft noise would not increase under the Proposed Action or No Action Alternative and would continue to be as described in **Section 3.2**.

4.2.2 *Proposed Action*

Under the Proposed Action, the status quo would continue and no impacts would be expected. No alteration to usage of the Juniper Butte Range and R-3204 would occur. The nature of and the levels of noise from individual subsonic and supersonic overflights would be identical to the existing conditions. Aircraft noise exposure under the Proposed Action is summarized in **Section 3.2** and would be equivalent to that analyzed for and presented in the recent environmental analysis (Air Force, 2018).

4.2.3 *No Action Alternative*

Under the No Action Alternative, the land withdrawal would not be extended. As such, the use of the R-3204 for ordnance drop training would cease, and R-3204 would no longer be activated for training activities; however, the absence of the Juniper Butte Range would not affect the types and overall numbers of sorties flown by the aircrews within Jarbidge North MOA. The Mountain Home AFB F-15E/SG squadrons would continue to operate at their existing levels and conduct the same training activities by utilizing the Saylor Creek Range/R-3202 to absorb activities currently associated with the Juniper Butte Range/R-3204. As such, the No Action Alternative would not result in an appreciable change to aircraft noise exposure, as the airspace constituting R-3204 is encompassed by the Jarbidge North MOA, and the Jarbidge North MOA would continue to be utilized at existing levels of activity; therefore, no noise impacts would be anticipated.

4.3 LAND USE AND VISUAL RESOURCES

4.3.1 *Evaluation Criteria*

Potential impacts on land use are based on the level of land use sensitivity in areas potentially affected by the Proposed Action as well as compatibility of those actions with existing conditions. In general, a land use impact would be adverse if it met one of the following criteria:

- inconsistency or noncompliance with existing land use plans or policies
- precluded the viability of existing land use
- precluded continued use or occupation of an area

- incompatibility with adjacent land use to the extent that public health or safety is threatened
- conflict with planning criteria established to ensure the safety and protection of human life and property

Potential impacts to visual resources are based on the level of change to the surrounding visual setting and the degree of concern for visual change from sensitive receptors.

4.3.2 Proposed Action

Under the Proposed Action, there would be no change to land use at the Juniper Butte Range, no-drop targets, or emitter sites. Military training activities would continue, grazing activities would be allowed through leases on the Juniper Butte Range and ND-1, and withdrawn lands would continue to be managed by the Air Force.

Under the Proposed Action, there would be no changes to visual resources from the Proposed Action and the continued withdrawal of the lands for military use would not alter any BLM Visual Resource Management classes; therefore, there would be no impact on land use or visual resources as a result of the Proposed Action.

4.3.3 No Action Alternative

Under the No Action Alternative, approximately 11,152 acres of withdrawn land on the Juniper Butte Range as well as 664 acres of no-drop targets and emitter sites would be returned to BLM and subject to the multiple resource management objectives of the BLM as directed by the *Federal Land Policy and Management Act of 1976*. Prohibitions previously placed in effect by PL 105-261 would expire; however, segregation of these lands from appropriate land uses (such as mining or geothermal leasing) would continue until the Secretary of the Interior publishes an order opening the lands for such uses. An opening order could not be issued by the Secretary until the environmental consequences of competing land uses could be fully evaluated and analyzed in NEPA documentation. The results of new land management planning may or may not find that portions or all the former withdrawn lands should be opened to some or all forms of appropriate land use. Management of the former withdrawn lands would continue as currently directed until new management planning under *Federal Land Policy and Management Act* and NEPA regulations could be completed.

Under the No Action Alternative, all infrastructure on the Juniper Butte Range, no-drop targets, and emitter sites would be removed and military training activities would cease on these lands. Land uses would continue to be agriculture and following the removal of fencing, grazing would likely be allowed on those no-drop targets and emitter sites where grazing is currently restricted. Withdrawn and acquired mineral resources within the boundaries of the Juniper Butte Range would be restored subject to the restrictions of the United States mining laws. Further, recreational access for the public would be restored to all of these lands; therefore, with the restoration of grazing and lands designated as agricultural land uses and public access opportunities on federally-managed lands, there would be a minor long-term beneficial impact to land use as a result of the No Action Alternative.

Under the No Action Alternative, all infrastructure on the Juniper Butte Range, no-drop targets, and emitter sites would be removed and military training activities would cease on these lands. Although infrastructure would be removed, there would be no impact on the BLM Visual Resource Management classes, as the Juniper Butte Range, no-drop targets, and emitter sites are currently within Class III and IV categories, and removal of infrastructure would be compatible with the Visual Resource Management categories on these lands.

4.4 AIR QUALITY

4.4.1 *Evaluation Criteria*

The CAA Section 176(c), General Conformity, requires federal agencies to demonstrate their proposed activities would conform to the applicable State Implementation Plans for attainment of the NAAQS. General conformity applies particularly to nonattainment and maintenance areas (40 CFR § 51.853 [k]). If the emissions from a Federal action proposed in a nonattainment area exceed annual de minimis thresholds identified in the rule, a formal conformity determination is required of that action. The thresholds are more restrictive as the severity of the nonattainment status of the region increases. For attainment areas, an impact analysis is required under NEPA regulations.

Ambient air quality for the ROI is in attainment for the 8-hour O₃ NAAQS established in 2008 (75 parts per billion of ground-level ozone) (USEPA, 2016a). The regions are designated as unclassifiable/attainment areas for all other criteria pollutants. No conformity analysis is required; however, an impact analysis is required under NEPA regulations. Emissions of each criteria pollutant and ozone precursors (volatile organic compounds and NO_x) are assessed against the attainment area thresholds of 100 tons per year for each of those pollutants.

Potential impacts to air quality are evaluated with respect to the extent, context, and intensity of the impact in relation to relevant regulations, guidelines, and scientific documentation. The CEQ defines significance in terms of context and intensity in 40 CFR § 1508.27. This requires that the significance of the action must be analyzed with respect to the setting of the Proposed Action and based relative to the severity of the impact. The CEQ NEPA Regulations (40 CFR § 1508.27[b]) provide 10 key factors to consider in determining an impact's intensity.

Emissions of each pollutant must first be compared against the de minimis thresholds of 100 tons per year each. If these thresholds are exceeded, additional impact analyses are required. Impacts are considered significant if the proposed alternative would increase ambient air pollution concentrations above any NAAQS or emissions exceed 10 percent of the Air Quality Control Region emissions.

The Air Conformity Applicability Model (version 5.0.12) was used to provide emissions estimates for demolition, grading, trenching activities associated with the No Action Alternative. Additionally, emissions from employee commuting and generator use were estimated by the Air Conformity Applicability Model to estimate baseline emissions. The Air Conformity Applicability Model was developed by the Air Force (Air Force, 2016a,b); it provides estimated air emissions for each specific criteria and precursor pollutant as defined in the NAAQS. Details and assumptions of the model are discussed in **Appendix C**.

The air quality analysis focused on emissions associated with the proposed demolition associated with the No Action Alternative Action and other activities that may cause air emissions.

4.4.2 *Proposed Action*

The extension of the withdraw under the Proposed Action and continued use of this land and overlying airspace for military training purposes would not lead to any changes in emissions. Aircraft operations would be expected to remain at present levels, and the Proposed Action would not include changes to operations or aircraft; therefore, no significant increases in air emissions or violation of ambient air quality standards would occur. As a result, there would be no significant impacts to air quality under the Proposed Action.

4.4.3 *No Action Alternative*

As part of this No Action Alternative, the land withdrawal would not be renewed. No significant short- or long-term effects to air quality would be expected from implementing the No Action Alternative.

Emissions from ongoing activities are from military training operations (including aircraft operations and ordnance/defense countermeasure use), emergency generators at Juniper Butte Range facilities, and employee commutes. These emissions are essentially a part of the facility’s baseline emissions. If the No Action Alternative is implemented, emissions from these ongoing activities would cease.

If the No Action Alternative is implemented, military training operations that take place at the Juniper Butte Range, no-drop targets, and emitter sites would move to the Saylor Creek Range and other no-drop targets and emitter sites in the Mountain Home Range Complex. If military training moves to Saylor Creek Range or other facilities within Mountain Home Range Complex, its emissions would be displaced to a different location within the same ROI. As a result, the decrease in emissions due to the end of aircraft operations (and ordnance use) at the Juniper Butte Range would be offset by an increase in emissions (of similar magnitude) at Saylor Creek Range or another Mountain Home Range Complex location, both located within the same Air Quality Control Region; therefore, the No Action Alternative would result in no net change in ROI baseline emissions from aircraft operations.

For activities for which there were data to quantify air emissions, a Net Change Analysis was performed. The Air Force’s Air Conformity Applicability Model for criteria pollutant (or their precursors) and GHGs was used for quantifying emissions. The results of the Air Conformity Applicability Model assessment are summarized in **Table 4-1** (also refer to **Appendix C**). GHG emissions in terms of CO₂e emissions resulting from No Action Alternative operations that have been quantified would negligibly increase regional emissions of CO₂e. These GHG emissions are not large enough to have an appreciable effect on climate change. No significant impacts to GHG emissions would be anticipated if this alternative was implemented.

**Table 4-1
Net Change Emissions Analysis for Activities Associated with No Action Alternative**

Activity	Change in Emission Levels from Existing Facility Baseline	Pollutants ¹ (tons/year)						
		CO	NO _x	VOCs	SO _x	PM ₁₀	PM _{2.5}	CO ₂ e ³
Demolition/Dismantling	Increase	3.26	2.30	0.42	0.01	24.51	0.09	736.50
Remediation	Increase	-	-	-	-	-	-	-
Military Training Operations (Scenario 1) ²	Decrease	-	-	-	-	-	-	-
Flight Operations over R-3104A, B & C	Decrease	-	-	-	-	-	-	-
Employee/Personnel Commutes	Decrease	-9.83	-0.91	-0.92	-0.01	-0.02	-0.02	-771.40
Juniper Butte Range Backup Generators	Decrease	-0.23	-0.35	-0.08	-0.07	-0.08	-0.08	-40.40
Total Decreases		-10.07	-1.26	-1.00	-0.08	-0.10	-0.10	-811.80
Total Increases		3.26	2.30	0.42	0.01	24.51	0.09	736.50
Net Change in Quantifiable Emissions		-6.81	1.04	-0.58	-0.07	24.41	-0.01	-75.30

Notes:

¹ Emissions estimated only for activities that had data

² Includes flight operations and ordnance/defense countermeasure use

³ CO₂e = carbon dioxide equivalent presented in metric tons per year

Scenario 1: Military flight operations move to Saylor Creek Range or other facilities within Mountain Home Range Complex

CO = carbon monoxide; CO₂e = carbon dioxide equivalent; NO_x = nitrogen oxides; PM_{2.5} = particulates equal to or less than 2.5 microns in diameter; PM₁₀ = particulates equal to or less than 10 microns in diameter; ROI = Region of Influence; SO₂ = sulfur dioxide; VOC = volatile organic compound

Under the No Action Alternative, air emissions would occur from Earth-moving activities during demolition and removal activities at the training range. These emissions were estimated using Air Force Conformity Applicability Model (Version 5.0.12) and are presented in **Table 4-1**. Emissions from potential demolition

and removal activities would cause short-term and localized increases in air emissions. As seen from the table, these emissions would be relatively minor and would not be expected to cause any significant negative impact to the region's air quality.

Emissions related to remediation and clean-up would also be generated from earth-moving vehicles and equipment. Emissions resulting from these potential activities could be significant based on the nature and scale of the remediation activities; however, there are no quantifiable data to determine the nature and scale of potential remediation activities that would occur under the No Action Alternative. Cleanup of used nonexplosive training ordnance at the Juniper Butte Range is currently conducted by the Explosive Ordnance Disposal personnel on an annual or routine basis. Based on this information, additional remediation efforts to clean expended BDU-33s and unconsumed flares would not likely be a considerable effort that would result in significant additional emissions. A moderate-scale remediation effort would not likely cause a significant impact to the region's already high air quality. Moreover, these emissions would be widely dispersed over the area to cause any air quality violations in the ROI.

Estimates of the reduced emissions from the removal of emergency generators at Juniper Butte Range facilities and decreased employee commutes were also estimated using Air Conformity Applicability Model, Version 5.0.12 and are presented in **Table 4-1**. While most of the employee commutes to and from the Juniper Butte Range would end, some emissions from personnel commuting to other sites in and around the Mountain Home Range Complex would still occur. These emissions would be expected to be minor, and as such, were not quantified for this alternative.

An air quality impact assessment was conducted in accordance with the guidance in the Air Force Air Quality Environmental Impact Analysis Process Guide and 32 CFR § 989. Under Air Force guidance, a Net Change Emissions Assessment was performed which compared all net (increases and decreases caused by the federal action) direct and indirect emissions against general conformity de minimis values as thresholds for nonattainment/maintenance areas and as indicators of air quality impact significance for attainment areas. While the No Action Alternative would not occur within a nonattainment or maintenance area, the General Conformity de minimis (i.e., too trivial or minor to merit consideration) values (40 CFR § 93.153) were used as a conservative indicators of potential air quality significance. If these values represent de minimis emissions levels for nonattainment or maintenance areas; logically they would also represent emissions levels too trivial or minor to merit consideration in an attainment area; therefore, any net emissions below these significance indicators would be considered too insignificant to pose a potential impact on air quality.

Based on the nature of the No Action Alternative, a complete net emissions change analysis based on the facility's baseline emissions is not presented; however, a qualitative assessment of the use of withdrawn lands for ongoing and future activities indicates that air quality impacts would not likely be significant and would not adversely impact the air quality in the ROI.

4.4.4 *Climate Change Considerations*

Recently, annual average temperatures have increased by about 1 or 2 degrees Fahrenheit in Idaho. The snowpack is melting earlier in the year, and this results in lower meltwater into the streams during the summer months. Looking forward, there is high confidence that in Idaho average temperatures of streams will continue to rise, and wildfires may be more common, especially if soils become drier due to warmer temperature trends. On average, nearly 1 percent of the land in Idaho has burned per year since 1984, making it the most heavily burned state in the nation. Increasing wildfires can threaten homes and pollute the air (USEPA, 2016b).

As shown in **Table 4-1**, GHG emissions (expressed as CO₂e) for the quantified activities would not be significant. Even if the emissions for GHG from sources that are not quantified are estimated and are accounted for, the potential additional CO₂e emissions that would be expected for the No Action Alternative would have a negligible impact. With respect to the discussion regarding climate change, it can be generally inferred that the activities for the Proposed Action or the No Action Alternative would not have a substantial impact.

4.5 GEOLOGY AND SOILS

4.5.1 *Evaluation Criteria*

Protection of unique geological features, minimization of soil erosion, and the siting of facilities in relation to potential geologic hazards are considered when evaluating potential impacts of the Proposed Action on geological resources. Generally, impacts can be avoided or minimized if proper construction techniques, erosion control measures, and structural engineering design are incorporated into project development. Effects on geology and soils would be adverse if they would alter the lithology, stratigraphy, and geological structure that control groundwater quality, distribution of aquifers and confining beds, and groundwater availability or change the soil composition, structure, or function within the environment.

Adverse impacts would result if

- regional geology was affected;
- soils classified as prime and unique farmland were affected; and
- soils affected were considered unsuitable for activities.

4.5.2 *Proposed Action*

Under the Proposed Action, there would be no change to geology and soils on the withdrawn lands. Military training activities would continue, grazing activities would be allowed through leases on the Juniper Butte Range and ND-1, and withdrawn lands would continue to be managed by the Air Force.

4.5.3 *No Action Alternative*

Under the No Action Alternative, all infrastructure on the Juniper Butte Range, no-drop targets, and emitter sites would be removed, and military training activities would cease on these lands. The majority of these activities would occur on annual grasslands, which are not considered high-quality habitat areas, are not near or adjacent to any permanent water bodies, or on already barren soils. No effects to geology would occur as any demolition of facilities would not affect the local bedrock. Primary short-term effects such as precipitation runoff and erosion by wind and water would occur during demolition and removal activities in the event any vegetation would be cleared and the soil exposed. Increased surface runoff due to bare soil could possibly flood downgradient areas. This indirect effect would be long-term as it would take time for vegetation to cover and stabilize exposed soil. With the potential abandonment of the area under the No Action Alternative, wildlife might return and graze which may lead to brief soil exposure as vegetation recovers (which would lead to increased runoff). Due to the isolated nature and small footprint of facilities and equipment, any direct or indirect effects would be expected to be negligible. Appropriate sediment and erosion controls would be implemented and maintained prior to and throughout all phases to minimize these effects. Examples of erosion- and sediment-control techniques would include soil erosion-control mats, silt fences, straw bales, diversion ditches, riprap channels, water bars, water spreaders, and sediment basins. Furthermore, withdrawn and acquired mineral resources within the boundaries of the Juniper Butte Range would be restored subject to the restrictions of the United States mining laws.

4.6 WATER RESOURCES

4.6.1 *Evaluation Criteria*

Evaluation criteria for potential impacts on water resources are based on water availability, quality, and use; existence of floodplains; and associated regulations. Adverse impacts to water resources would occur if the proposed or alternative actions:

- reduce water availability or supply to existing users;
- overdraft groundwater basins;
- exceed safe annual yield of water supply sources;
- affect water quality adversely;

- endanger public health by creating or worsening health hazard conditions; or
- violate established laws or regulations adopted to protect water resources.

Potential impacts related to flood hazards can be significant if such actions are proposed in areas with high probabilities of flooding; however, any impacts can be mitigated through the use of specific design features to minimize the effects of flooding.

4.6.2 *Proposed Action*

Under the Proposed Action, activities with the potential to impact water resources would not change. Other than intermittent creeks and small isolated wetlands at the Juniper Butte Range, limited water resources are located within the immediate vicinity of the project area, and no jurisdictional waters of the United States occur on the withdrawn lands. The Juniper Butte Range was constructed with retention ponds around key facilities and the central target area to prevent sediment transport in stormwater runoff into Juniper Draw. The no-drop targets and emitter sites were constructed with retention berms around their perimeters to store any water accumulation onsite, where it could then percolate down into the soil. The Proposed Action would not involve withdrawals from, or discharges to, groundwater.

As part of the Mountain Home AFB natural resources program, procedures have been developed to monitor and maintain all wetlands, playas, and other water resources. These procedures include annually assessing ecosystem health, delineating and mapping potentially jurisdictional waters of the United States, and implementing wildland fire prevention and suppression strategies. Ongoing efforts to control invasive plants and restore native vegetative cover through seeding also help mitigate negative effects from erosion and wildland fire.

Under the Proposed Action, mission activities would continue to be reviewed to ensure avoidance of direct and indirect impacts to all aquatic and wetland habitats on the Juniper Butte Range, no-drop targets, and emitter sites; and if needed, best management practices would be implemented. Other actions to minimize potential impacts to water resources would include the following:

- Livestock grazing would be limited and managed on a rotational basis.
- Immediate and effective wildland fire suppression would be undertaken.
- Native vegetation restoration and enhancement efforts would be continued.

4.6.3 *No Action Alternative*

There would be a potential for minor, short-term increase in soil erosion and deterioration of water quality from the implementation of the No Action Alternative resulting from the demolition and removal of infrastructure and fencing. In addition, minor, long-term impacts to intermittent creeks and isolated wetlands would be possible from wildland fire, livestock grazing, and mining, and geothermal leasing. No impacts to floodplains or groundwater would be expected under this alternative.

In addition, upon termination of the land withdrawal, under PL 105-261, approximately 12,500 square feet of building infrastructure would either be demolished or removed, and approximately 62,082 linear feet of boundary and interior fencing would be dismantled and removed. Ground disturbance related to these activities could result in minor, short-term increase in soil erosion and deterioration of surface water quality. Prior to relinquishing the withdrawn lands, the Air Force would conduct an environmental review that fully characterizes the environmental conditions to identify any contamination on such lands (and waters) and carry out and complete environmental remediation as warranted.

4.7 **BIOLOGICAL RESOURCES**

4.7.1 *Evaluation Criteria*

For purposes of this EA, biological resources are divided into three major categories: vegetation, as vegetation communities and associations; wildlife, including common wildlife species; and special-status

species including those protected by state or federal laws or executive order reviewed in **Section 3.7**, including the ESA, *Migratory Bird Treaty Act*, *Bald and Golden Eagle Protection Act*, and EO 13186.

To evaluate the potential impacts on the biological resources under the alternative actions, the level of impact on biological resources is based on

- importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource;
- proportion of the resource that would be affected relative to its occurrence in the region;
- sensitivity of the resource to the proposed activities; and
- duration of potential ecological ramifications.

The impacts on biological resources would be adverse if species or habitats of high concern would be negatively affected over relatively large areas. Impacts would also be considered adverse if disturbances cause reductions in population size or distribution of a species of high concern.

As a requirement under the ESA, federal agencies must provide documentation that ensures that agency actions do not adversely affect the existence of any threatened or endangered species. The ESA requires that all federal agencies avoid “taking” threatened or endangered species (which includes jeopardizing threatened or endangered species habitat). Section 7 of the ESA establishes a consultation process with USFWS that ends with USFWS concurrence or a determination of the risk of jeopardy from a federal agency project.

4.7.2 Proposed Action

Under the Proposed Action, there would be no change to activities that may impact biological resources. Negligible impacts to biological resources resulting from training activities on the Juniper Butte Range and maintenance activities associated with the upkeep of the range, no-drop targets, and emitter sites would continue. Similarly, only minor, long-term impacts to biological resources may occur from wildland fire and livestock grazing.

4.7.2.1 Vegetation

Under the Proposed Action, activities that have the potential to cause impacts to vegetation would include ground disturbance associated with air-to-ground training, use of flares, Explosive Ordnance Disposal clearance activities, maintenance of facilities and targets, ground-based training, use and maintenance of roads and utility lines, and soil contamination and cleanup. Wildland fires, which can result from certain military activities, including exploding ordnance, aircraft crashes, and flares, may also reduce or eliminate vegetation and promote invasive plant infestations. Ongoing efforts to control invasive plants and restore native vegetation cover through seeding help mitigate negative effects from wildland fire and would continue under the Proposed Action.

Under the Proposed Action, the current types of activities would continue, though ground disturbing activities with potential for direct impacts to vegetation would be restricted to previously disturbed areas and existing roads, as much as feasible. Conservation measures outlined in the Mountain Home AFB Integrated Natural Resources Management Plan and 2010 USFWS Biological Opinion on the effects of ongoing actions at the Juniper Butte Range on the slickspot peppergrass that protect and enhance native vegetation communities would also be implemented.

With regard to wildland fire, the Air Force has a responsibility under PL 105-261 to take the necessary precautions to suppress wildland fires caused by military operations. Mountain Home AFB follows the Wildland Fire Management Plan for Mountain Home AFB and Mountain Home Range Complex and has a cooperative agreement between 366 FW, Mountain Home AFB and the Department of Interior, BLM, Twin Falls District to provide fire support for the Juniper Butte Range, no-drop targets, and emitter sites. Fire suppression equipment and personnel are stationed on the Juniper Butte Range to quickly suppress any fires that may start and the BLM stages firefighters on the Juniper Butte Range on an as-needed basis. To

help prevent fires, flares are released above 2,000 feet AGL under normal conditions, but when the Fire Danger Level is classified as Very High or above, a release must be above 5,000 feet AGL.

The potential impacts to vegetation under the Proposed Action would be negligible because existing disturbed areas would be utilized to the maximum extent practicable. Vegetation cover would be expected to remain the same or benefit through programs that would continue to be implemented by Mountain Home AFB such as invasive plant control, appropriate livestock management, native grass and sagebrush revegetation efforts, and wildland fire suppression that would help restore native vegetation communities throughout the project area.

4.7.2.2 Wildlife

Activities that could directly or indirectly impact wildlife under the Proposed Action would include ground-disturbing activities (i.e., continuing use of range targets, ground facilities, training areas, and roads) that could alter existing wildlife habitat by causing disturbance to vegetation or destruction of nests and burrows. Potential impacts to wildlife could also occur in activity-specific vicinities due to continued operational noise levels and episodic noise; BDU-33, chaff, and flare releases; and aircraft operations at the Juniper Butte Range.

Ground disturbing activities could result in the permanent or temporary displacement of wildlife; however, these activities would not reduce regional population numbers or distribution of wildlife, or their associated habitats as the affected areas within the Juniper Butte Range, no-drop targets, and emitter sites represents a small fraction of available habitat; therefore, the effects of ongoing ground-disturbing activities from military training would be expected to be negligible.

Exposure to high noise levels or episodic events from existing aircraft and Explosive Ordnance Disposal clearance could cause wildlife to become stressed that could potentially lead to abnormal behavior such as avoidance which could diminish feeding opportunities and potentially result in mortality (Manci et al., 1988). Although there is variability in responses across species, many birds and wildlife have the ability to habituate to noise emissions and movement from military aircraft (Grubb et al., 2010) and air-to-ground training has been ongoing at the Juniper Butte Range for decades. Under the Proposed Action, sources, intensity, and duration of noise would not change from the current condition. As such, the continued noise emissions and movement from aircraft operations would be anticipated to have negligible short-term and long-term impacts on wildlife, including birds breeding and foraging in nearby relatively undisturbed habitats.

Under the Proposed Action, the use of BDU-33s with cold spot charges would continue. Their use would be controlled in accordance with standard operating procedures detailed in AFI 13-212 Mountain Home AFB Supplement, *Range Planning and Operations*. Impacts to wildlife from using these materials could include a startle effect from deployment of this ordnance. The potential of being struck by debris, given the small amount would continue to be remote. Startle effects from the release of BDU-33s would also be minimal relative to potential aircraft noise.

Aircraft operations and the use of chaff and flare in the Jarbidge North MOA would continue. The procedures specified in the Mountain Home BASH Plan and AFI 13-212 Mountain Home AFB Supplement would continue to be followed to minimize potential bird and wildlife strikes and impacts within the Jarbidge North MOA from the use of flares.

As no changes in the extent or intensity of air operations, training, construction, or maintenance within the ROI under the Proposed Action, impacts to wildlife would be negligible. Any new activities would be subject to review and mitigation under NEPA, when warranted. Wildlife management programs implemented by the Mountain Home AFB natural resources program would also continue to benefit wildlife.

4.7.2.3 Special-Status Species

The withdrawn lands support numerous species that have been given a special status based on their rarity or sensitivity. Special-status species include one species, slickspot peppergrass, that is federally-listed as threatened; 38 species that are afforded special management status by the BLM, Idaho Department of Fish and Game, or USFWS (see **Table 3-3**), golden eagles, which are protected by the *Bald and Golden Eagle Protection Act*, and numerous bird species that are protected by the *Migratory Bird Treaty Act*.

Potential impacts to slickspot peppergrass on withdrawn lands would continue to be mitigated through implementing conservation measures outlined in the 2010 USFWS Biological Opinion, *The effects of U.S. Air Force ongoing actions at Juniper Butte Range and in Owyhee County, Idaho on the slickspot peppergrass* and the 2017 Mountain Home Integrated Natural Resources Management Plan. Annual monitoring has been conducted since 2001 and all occupied and unoccupied slickspot locations have been mapped (see **Figure 3-3**). To prevent habitat loss, all slickspots would be avoided during vegetation and road maintenance and herbicide application activities. No land-disturbing activities from construction or other land-use change activities would occur under this alternative. Effects to slickspot peppergrass would be negligible given the limited scope of disturbance from continued use of the Juniper Butte Range and adherence to best management practices and standard operating procedures relating to slickspot peppergrass, which would continue under the Proposed Action, as outlined in the 2017 Integrated Natural Resources Management Plan (Mountain Home AFB, 2017d).

Other special-status plant and animal species would be expected to experience similar impacts as common vegetation and wildlife would benefit from continued implementation of vegetation and habitat management practices described in the Mountain Home AFB Integrated Natural Resources Management Plan (Mountain Home AFB, 2017d) and strict adherence to current BASH plan actions. As such, no significant impacts to special-status species, migratory birds, or eagles would be anticipated.

Impacts to vegetation and wildlife resources would not be anticipated as a result of mission support and cattle grazing, erosion, and wildland fire activities as the following measures would continue:

- Livestock grazing would be limited and managed on a rotational basis.
- Immediate and effective wildland fire suppression would be undertaken.
- Native vegetation restoration and enhancement efforts would continue.
- Off-road vehicle use would be minimized whenever possible to decrease the spread of invasive species such as cheatgrass, Russian thistle, halogeton, and other invasive species.

4.7.3 No Action Alternative

There may be minor, short-term impacts to biological resources under the No Action Alternative. Upon termination of the land withdrawal, under PL 105-261, approximately 12,500 square feet of building infrastructure would either be demolished or removed, and approximately 62,082 linear feet of boundary and interior fencing would be dismantled and removed. Ground disturbance related to these activities could result in minor, short-term increase in soil erosion and deterioration of vegetation and wildlife habitat. Prior to relinquishing the withdrawn lands, the Air Force would conduct an environmental review that fully characterizes the environmental conditions to identify any contamination on such lands and carry out and complete environmental remediation as warranted.

Once lands are returned to the BLM, impacts to biological resources may result from land use activities allowed by the Secretary of the Interior. Under the No Action Alternative, the withdrawn lands would be returned to BLM and subject to the multiple resource management objectives of the BLM as directed by the *Federal Land Policy and Management Act*. Although prohibitions previously placed in effect by PL 105-261 would expire, segregation of these lands from appropriative land uses (such as mining or geothermal leasing) would continue until the Secretary of the Interior publishes an order opening the lands for such uses. An opening order could not be issued by the Secretary until the environmental consequences of competing land use could be fully evaluated and analyzed in NEPA documentation. The results of new land management planning may or may not find that portions or all of the former withdrawn lands should be

opened to some or all forms of appropriative land use. Management of the former withdrawn lands would continue as currently directed until new management planning under *Federal Land Policy and Management Act* and NEPA regulations could be completed.

4.8 CULTURAL RESOURCES

4.8.1 *Evaluation Criteria*

Adverse impacts on cultural resources would include physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the resource's significance; introducing visual or audible elements that are out of character with the property or alter its setting; neglecting the resource to the extent that it deteriorates or is destroyed; or the sale, transfer, or lease of the property out of agency ownership (or control) without adequate enforceable restrictions or conditions to ensure preservation of the property's historic significance.

4.8.2 *Proposed Action*

Under the Proposed Action, the withdrawal of public land as described in PL 105-261 for the Juniper Butte Range at the Mountain Home Range Complex would be extended for 25 years. Mountain Home AFB would continue to follow standard operating procedures for the management and protection of cultural resources on the withdrawn lands included within the APE. Procedures, as outlined in the Mountain Home Integrated Cultural Resources Management Plan, address mission conflicts, management and coordination for Section 106 of the *National Historic Preservation Act*, and other necessary consultation.

Eligible archaeological sites within the Juniper Butte Range and emitter site BA would continue to be annually monitored by the Mountain Home AFB Cultural Resource Manager. Consistent with 36 CFR § 800.13, in the event of an unanticipated discovery of archaeological remains, human remains, or damage to an archaeological site or a historic structure—the material remains would be left in place, work would immediately cease within 100 feet of the find, and the Cultural Resource Manager would be notified immediately. Work would resume only after the appropriate actions are taken by the Cultural Resource Manager.

Because there would be no change in Air Force land management or operations, no adverse effects to cultural resources that are listed on or eligible for the NRHP would be anticipated by the extension of the Juniper Butte Range Withdrawal under the Proposed Action.

4.8.3 *No Action Alternative*

Under the No Action Alternative, the withdrawal of public lands would not be extended for military training use. No adverse effects to cultural resources that are listed on or eligible for the NRHP would be anticipated by relinquishing management of the lands to the BLM as all cultural resources would remain under protection and management by the federal government and be subject to the review requirements of the *National Historic Preservation Act*.

4.9 HAZARDOUS MATERIALS AND WASTES, CONTAMINATED SITES, AND TOXIC SUBSTANCES

4.9.1 *Evaluation Criteria*

Impacts on hazardous materials management would be considered adverse if the federal action resulted in noncompliance with applicable federal and state regulations or increased the amounts of hazardous waste generated or procured beyond Mountain Home AFB's current waste management procedures and capacities. Impacts on the ERP would be considered adverse if the federal action disturbed or created contaminated sites resulting in negative effects on human health or the environment.

4.9.2 Proposed Action

4.9.2.1 Hazardous Materials and Wastes

The quantity of hazardous materials such as fuel for generators, oil, or lead acid batteries would not change with the extension of the land withdrawal. Hazardous materials required for the Juniper Butte Range operations would continue to be procured, controlled, and tracked through the Mountain Home AFB Civil Engineering Squadron and provided through the HAZMART, following established Mountain Home AFB procedures. This would ensure that only hazardous materials needed for operations on the Juniper Butte Range would be used at the smallest quantities and that all of the hazardous materials used at the Juniper Butte Range would be properly tracked and remain compliant; therefore, there would be no impacts from the continuing to track and handle hazardous materials used to support the extension of the land withdrawal.

The quantity of hazardous wastes generated (e.g., used petroleum products) would not change as a result of the land withdrawal extension. All hazardous waste generated as a result of training operations would be properly handled, stored, and disposed of following the Mountain Home AFB Hazardous Waste Management Plan. These procedures ensure that hazardous waste would continue to be managed according to all federal, state, and local laws and regulations. As such, there would be no impact from the storage and disposal of hazardous waste in support the land withdrawal extension.

Vehicle targets would continue to be prepared for use on the Juniper Butte Range by first removing all potentially hazardous materials such as fluids (e.g., fuel, oil, antifreeze, hydraulic) and other items (such as radium dials if so equipped) prior to targets being placed on the range. The handling and removal of these materials, and disposal of these wastes would continue to occur in administrative areas and be done following the requirements of the Mountain Home AFB Hazardous Waste Management Plan and in accordance with all federal, state, and local laws and regulations. No hazardous materials would remain in targets transported to Juniper Butte Range. Therefore, there would be no impact on hazardous wastes associated with the continued use of targets at the Juniper Butte Range with the extension of the land withdrawal.

4.9.2.2 Environmental Restoration Program/Military Munitions Response Program

No environmental contamination is known to occur within the project area. Because there would be no changes to the withdrawn lands, and the range would continue to be cleared and cleaned annually, there would be no impacts on contaminated sites or on the Military Munitions Response Program from the land withdrawal extension.

There would be no change in the amount of ordnance used at the Juniper Butte Range. Annual range clearance would continue to occur and spent munitions would be placed in the fenced residue holding area used for range residue. Materials would continue to be demilitarized and then certified as non-hazardous waste, which would be transferred to recycling centers or permitted landfills by a certified range residue removal contractor.

4.9.2.3 Toxic Substances

Asbestos-Containing Materials and Lead-Based Paint. No alterations or demolition of facilities would occur as a result of the extension of the land withdrawal. As such, there would be no risk of exposing asbestos-containing materials that could be present within facilities on the withdrawn lands. No lead-based paint is present in the facilities located on the Juniper Butte Range; therefore, there would be no impact from asbestos-containing materials or lead-based paint from the Proposed Action.

Radon. There is a moderate potential for radon to pose a health hazard at buildings on the Juniper Butte Range; however, all facilities where personnel operate have adequate ventilation systems. Further, no new construction is proposed. As such, no impact from radon would be anticipated.

Polychlorinated Biphenyls. No changes to facilities located on the Juniper Butte Range are proposed as part of the Proposed Action. No polychlorinated biphenyls would be used as part of ongoing training operations. All used fuels and oils would be disposed of according to federal, state, and local laws and regulations; therefore, there would be no impacts from polychlorinated biphenyls under the Proposed Action.

4.9.3 *No Action Alternative*

4.9.3.1 Hazardous Materials and Waste

Removal of facilities associated with the return of the withdrawn land to BLM, which would include the demolition of buildings, removal of aboveground fuel storage tanks, and removal of targets, would generate wastes; however, all hazardous wastes generated from the removal of facilities, storage tanks, and targets would be handled and disposed of in accordance with Mountain Home AFB protocols and following the requirements of the 366 FW Hazardous Waste Management Plan; therefore, there would be no impact on hazardous materials and waste with the implementation of the No Action.

An environmental baseline survey would be required for the return of withdrawn land to BLM. The environmental baseline survey would provide BLM and the Air Force with the potential risk or liability from existing environmental contamination. Any recognized environmental conditions that were identified in the environmental baseline survey would be rectified by the Air Force prior to the return of the withdrawn land.

4.9.3.2 Environmental Restoration Program/Military Munitions Response Program

Under the No Action, the existing Juniper Butte Range would be closed, and any munitions would be removed. This would have a minor adverse impact on the Military Munitions Response Program and require clearing and closure of the range prior to returning the withdrawn lands to BLM. All munitions and other debris cleared from the range would be demilitarized with disposition as solid waste, either through existing recycling programs or at a permitted landfill.

4.9.3.3 Toxic Substances

Asbestos-Containing Materials and Lead-Based Paint. Based on the year of construction, asbestos and lead-based paint containing materials are not expected to be present within facilities on the Juniper Butte Range and the emitter sites; however, confirmation surveys have been done for these facilities. With the removal and demolition of facilities all facilities would be inspected by a qualified contractor prior to demolition to determine if asbestos or lead-based paint containing materials are present. If these materials are determined to be present in facilities scheduled for demolition or removal, the materials would be properly removed and disposed of according to either the Mountain Home AFB Asbestos Management and Operating Plan or the Mountain Home Hazardous Waste Management Plan, and following all federal, state, and local regulations. With the proper inspection, removal, and disposal of any potential hazardous or regulated material, there would be no impact under the No Action Alternative.

Radon. There would be no impact from radon with the demolition and removal of facilities on the withdrawn land as radon would no longer pose a hazard to personnel within the interior of facilities.

Polychlorinated Biphenyls. Removal of any light fixtures would have the potential to disturb polychlorinated biphenyls. If demolition and removal activities require the removal of fluorescent lighting fixtures where the ballasts and starters could contain polychlorinated biphenyls, the lighting fixtures would be disposed of according to federal, state, and local laws. With the proper removal and disposal of polychlorinated biphenyls, there would be no adverse impacts under the No Action Alternative.

4.10 SAFETY

4.10.1 *Evaluation Criteria*

Flight safety evaluates aircraft flight risks such as aircraft mishaps and BASH. Ground safety examines maintenance activities to maintain Juniper Butte Range, no-drop target, and emitter site facilities and infrastructure. Ground safety also assesses occupational hazards associated with activities required to relinquish lands back to the BLM, such as the demolition or removal of facilities and infrastructure from the Juniper Butte Range, no-drop targets, and emitter sites. Explosives safety, particularly within the Juniper Butte Range fenced impact area, examines munitions safety and fire risk and management most commonly related to use of defensive countermeasures and ordnance.

An impact to safety would be significant if an action creates unacceptable safety conditions or substantially changes safety beyond existing management or response plans. Potential impacts to safety were considered significant if the Proposed Action or the No Action Alternative would endanger life or pose an unusual risk to military or civilian personnel working on or near the withdrawn lands, or to the general public.

4.10.2 *Proposed Action*

Under the Proposed Action, the withdrawal would be extended for an additional 25 years. Training sorties originating from Mountain Home AFB would continue to use the Juniper Butte Range, no-drop targets, and emitter sites. The procedures and regulations that ensure safe flight, explosive, and ground operations would continue.

4.10.2.1 Flight Safety

Implementation of the Proposed Action would not change the use of the withdrawn lands, or the number of annual sorties utilizing these locations. As a result, no changes to flight safety would occur and there would be no significant impacts to flight safety since aircrews and air traffic control would continue to follow established standard flight rules and local operating procedures and policies for flight safety.

4.10.2.2 Bird/Wildlife Aircraft Strike Hazard

Under the Proposed Action, BASH management actions would continue to be carried out in accordance with applicable Air Force guidance and the Mountain Homes AFB BASH Plan; therefore, no change in current BASH conditions would occur from the implementation of this alternative.

4.10.2.3 Explosives Safety

The use of cold spot BDU-33s on the Juniper Butte Range, and expenditure of chaff and flare in the airspace would remain unchanged. The designated Weapons Danger Zones surrounding the Juniper Butte Range would remain to ensure personnel safety while the range is in use. The procedures established by Air Force Manual 91-201, *Explosive Safety Standards*, the Mountain Home AFB Supplement to AFI 13-212, *Range Planning and Operations*, and all applicable Air Force technical orders would continue to be followed for range clearing activities on the Juniper Butte Range. No significant impacts to explosive safety would be anticipated to occur under the Proposed Action.

4.10.2.4 Ground Safety

Current Air Force guidance that covers the safe execution of activities associated with the daily maintenance of Juniper Butte Range, no-drop target, and emitter site grounds and facilities would continue to be followed and there would be no significant impacts to ground safety.

4.10.2.5 Fire Risk and Management

Under the Proposed Action, cold spot BDU-33s would continue to be used on the Juniper Butte Range and flares expended in the airspace. Fire risk and management would not change when compared to the existing conditions; therefore, there would be no new or significant impacts.

4.10.3 No Action Alternative

Under the No Action Alternative, the lands described in **Section 2.1.1** would be returned to the BLM. The Juniper Butte Range, no-drop targets, and emitter sites would no longer be used for air-to-ground combat training and ground-based activities at these locations would cease. Relinquishing these lands would require the demolition or removal of facilities, removal of fencing, and the potential remediation of lands to ensure they are safe for nonmilitary use.

4.10.3.1 Flight Safety

No impacts to flight safety would be expected from the implementation of the No Action Alternative. In order to continue the number of sorties necessary to maintain operational readiness, some or all of sorties previously flown on the no-drop targets using the assets on the withdrawn lands would be moved to Saylor Creek Range and other emitter sites and no-drop targets on the Mountain Home Range Complex. The increase in use of Saylor Creek Range and the remaining emitter sites and no-drop targets could increase the congestion in this airspace. This increase in use would not be expected to escalate the potential for Class A mishaps. In order to avoid collisions, aircrews and air traffic control would continue to follow established standard flight rules and local operating procedures and policies for flight safety and avoidance of civilian aircraft travelling through MOAs.

4.10.3.2 Bird/Wildlife Aircraft Strike Hazard

No changes to the potential for BASH incidents would be expected from implementation of the No Action Alternative. Under the No Action, approximately 11,816 acres of withdrawn land would be returned to BLM and subject to the management objectives of the BLM as directed by the *Federal Land Policy and Management Act*. Aircraft sorties would continue to originate from Mountain Home AFB with training activities occurring within the Jarbidge North MOA. Changes in land use and management actions on the returned land could impact the presence of birds and the prey for raptors. For example, the removal of the livestock ponds would remove habitat for waterfowl; however, reduced vegetation height from increased grazing could increase the presence of fossorial animals and burrowing owls, thus potentially increasing the presence of raptors, ravens, and crows. The Jarbidge North MOA already includes land that is subject to BLM management objectives and no new or unique procedures would be needed for operations due to the implementation of the No Action Alternative. Pilots would continue to use bird avoidance technologies and practices to minimize the potential for bird and wildlife strikes in accordance with the Mountain Home AFB BASH Plan.

4.10.3.3 Explosives Safety

There would be no significant impacts to explosive safety under the No Action Alternative. There would be no change in the use of countermeasure chaff and flares in the Jarbidge North MOA. Increased use of the Saylor Creek Range for air-to-ground training may increase the use of BDU-33s on Saylor Creek Range. Unlike the Juniper Butte Range, the use of hot spot BDU-33s is also authorized on Saylor Creek Range, with written approval from the Range Operations Officer, during moderate to low fire conditions. As such, the use of hot spot BDU-33s could increase from current levels. Unlike cold spot BDU-33s, which only contain a small explosive charge to eject the titanium tetrachloride to produce smoke, hot spot BDU-33s contain an explosive charge that produces smoke, as well as flame so that they can be seen and scored at night. This training ordnance would continue to be dropped within the boundaries of the Saylor Creek Range. Under the No Action Alternative, the designated Weapons Danger Zones surrounding the Juniper Butte Range would be removed once munitions cleanup has been completed and the range is fully restored.

to its original condition. As specified in the Mountain Home AFB Supplement to AFI 13-212, *Range Planning and Operations*, Saylor Creek Range would be closed annually and cleared of all munitions, including the demolition of unexploded ordnance by qualified and certified Explosive Ordnance Disposal technicians using approved Air Force technical orders. In addition, there would be no change to the assembly, delivery, or loading of munitions. Nothing new or unique would be introduced from implementation of the No Action Alternative; therefore, there would be no significant impacts to explosives safety.

4.10.3.4 Ground Safety

No significant impacts to ground safety would be expected from the implementation of the No Action Alternative. The No Action Alternative would require the demolition or removal of approximately 12,500 square feet of infrastructure and the removal of about 62,000 linear feet of fencing. Air Force personnel that may be involved with demolition or fence removal would follow the standards prescribed in AFI 91-202, *The US Air Force Mishap Prevention Program*, and AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, as well as all applicable Air Force technical guidance. Construction contractors would prepare appropriate job site safety plans and follow all applicable Occupational Safety and Health Administration requirements.

4.10.3.5 Fire Risk and Management

There would be no significant increase in fire risk under the No Action Alternative. As discussed above, the number of hot spot BDU-33s on Saylor Creek Range could increase over current levels due to the shift of air-to-ground training from the Juniper Butte Range, which could also increase the number of hot spot BDU-33s used on Saylor Creek Range; however, hot spot BDU-33s require permission for use from the Range Operations Officer and would only be used during low to moderate fire conditions. In addition, as specified in the Mountain Home AFB Supplement to AFI 13-212, when fire conditions are at moderate or higher, firefighters and equipment would be present on the range during normal operating hours. Once the fire condition increases to high, fire fighters would be present during all dropping operations and remain on the range for 30 minutes after the last drop to ensure no fire starts are present.

There would be no change to fire risk from countermeasure flare use. Flares would continue to be released in the Jarbidge North MOA above 2,000 feet AGL; however, when the fire conditions are raised to very high or above, flare use would be restricted to above 5,000 feet AGL.

4.11 SOCIOECONOMICS

4.11.1 *Evaluation Criteria*

Consequences to socioeconomic resources were assessed in terms of the potential impacts on the local economy from the proposed extension of the land withdrawal. The level of impacts associated with land withdrawal is assessed in terms of direct effects on the local economy and related effects on other socioeconomic resources (e.g., housing, employment, and community resources). The magnitude of potential impacts can vary greatly, depending on the location of an action. For example, implementation of an action that creates 10 employment positions might be unnoticed in an urban area but might have significant impacts in a rural region.

In addition, if potential socioeconomic changes resulting from other factors were to result in substantial shifts in population trends or in adverse effects on regional spending and earning patterns, they may be considered adverse.

4.11.2 *Proposed Action*

There would be no impact on the local or regional economy in Owyhee or Twin Falls Counties as a result of the continued withdrawal of lands for military training at the Juniper Butte Range. There would be no new

construction, no new training activities, no additional employment of civilian or military personnel, and no new expenditures on materials or supplies.

4.11.3 *No Action Alternative*

Under the No Action Alternative, there would be short-term beneficial impacts on socioeconomics in the region as the removal of infrastructure, demolition of buildings, and restoration of lands would occur with the return of withdrawn lands to BLM. There would also be minor long-term beneficial impacts from the return of withdrawn land to BLM, as that land could then be used for other purposes that generate economic activity in the region, such as recreation, grazing, or resource extraction; however, following the removal of the infrastructure located on withdrawn lands, there would also be a long-term minor adverse impact to regional economic activity as Air Force payments to local governments for access road use and maintenance would cease, military expenditures to maintain and support infrastructure on withdrawn lands at the Juniper Butte Range would end, and military training activities currently occurring at the Juniper Butte Range would be relocated to other sites within the Mountain Home Range Complex. These changes would yield a slight reduction in local employment of civilian personnel and contractors that currently support the Juniper Butte Range infrastructure and facilities.

4.12 ENVIRONMENTAL JUSTICE

4.12.1 *Evaluation Criteria*

Environmental justice analysis applies to potential disproportionate effects on minority, low-income, and youth populations. Environmental justice issues could occur if an adverse environmental or socioeconomic consequence to the human population fell disproportionately upon minority, low-income, or youth populations. Ethnicity and poverty status were examined and compared to state and national data to determine if these populations could be disproportionately affected by the Proposed Action.

4.12.2 *Proposed Action*

There would be the potential for disproportionate impacts to minority and low-income communities in Owyhee County, where there is a greater percentage of the population identifying as minority (including American Indian) and a larger than average low-income population; however, under the Proposed Action, there would be no impacts to minority or low-income communities with the land withdrawal extension for military training activities. Training activities that have taken place at the Juniper Butte Range since the land was originally withdrawn from BLM would continue. As such, there would be no disproportionate impacts on low-income or minority populations or children in Owyhee and Twin Falls Counties.

4.12.3 *No Action Alternative*

Although military training on withdrawn lands would cease and land management activities would revert back to BLM, these changes would not have disproportionate impacts on low-income or minority populations or children. Some lands that have been previously restricted for military use could become open to recreational or agricultural uses or be subject to mineral extraction under leases with BLM; however, the opportunities to participate in these activities on lands that had been previously withdrawn would not be restricted by race, income, or age; therefore, there would be no disproportionate impacts.

CHAPTER 5 CUMULATIVE IMPACTS AND OTHER ENVIRONMENTAL CONSIDERATIONS

This section includes an analysis of the potential cumulative impacts by considering past, present, and reasonably foreseeable future actions; potential unavoidable adverse impacts; the relationship between short-term uses of resources and long-term productivity; and irreversible and irretrievable commitment of resources.

5.1 CUMULATIVE EFFECTS

The CEQ regulations stipulate that the cumulative effects analysis considers the potential environmental consequences resulting from “the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR § 1508.7). In addition, CEQ published guidance for addressing and analyzing cumulative impacts under NEPA. CEQ’s publication, *Considering Cumulative Effects Under the National Environmental Policy Act, January 1997*, provides additional guidance for conducting an effective and informative cumulative impacts analysis.

Assessing cumulative effects begins with defining the scope of other actions and their potential interrelationship with the proposed or alternative actions. Other activities or projects that coincide with the location and timetable of the Proposed Action and other actions are evaluated. Actions not identified in **Chapter 2** as part of the proposed or alternative actions, but that could be considered as actions connected in time or space (40 CFR § 1508.25) may include projects that affect areas on or near the Juniper Butte Range, no-drop targets, and emitter sites.

An effort has been made to identify actions that are being considered or are in the planning phase at this time. To the extent that details regarding such actions exist and the actions have a potential to interact with the Juniper Butte Range Withdrawal Extension, these actions are included in this cumulative analysis. This approach enables decision makers to have the most current information available in order that they can evaluate the potential environmental consequences of the Proposed Action.

5.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

An effort was made to identify past, present, and reasonably foreseeable actions that would affect lands included in the Proposed Action as well as in the region. The past, present, and reasonably foreseeable future major Air Force projects anticipated to occur on or near the Juniper Butte Range, no-drop targets, and emitter sites are listed in **Table 5-1**. Anticipated future BLM projects that may overlap in the potentially affected area or project timing with the Proposed Action were also considered and are listed in **Table 5-2**.

5.2.1 Air Force Actions

Each project summarized in this section was reviewed to consider the implication of each action with the proposed or alternative actions (**Table 5-1**). Potential overlap in the affected area and project timing were considered.

5.2.2 Bureau of Land Management Actions

Most of the lands adjacent to the withdrawn lands are managed by BLM. BLM manages land for multiple use while protecting and conserving natural resources, as stipulated under the *Federal Land Policy and Management Act*. The withdrawn lands proposed for extension when added to past, present, and reasonably foreseeable future uses could result in an incremental impact. The past, present, and reasonably foreseeable uses of BLM-managed lands are listed below in **Table 5-2**.

**Table 5-1
Past, Present, and Reasonably Foreseeable Future Projects Mountain Home Air Force Base and
Mountain Home Range Complex**

Scheduled Project	Project Summary	Timeframe	Relevance to Proposed Action
Past Actions			
Operational Changes and Range Improvements in the Mountain Home Range Complex EA	The project includes implementation of operational changes and improvements in the Mountain Home Range Complex to sustain the 366 FW primary mission. Operational changes include upgrading ground-based operations, facilities, targets, and munitions to enhance integrated ground-based and airspace training.	Final EA - May 2017	Operational changes and range improvements were completed for the Juniper Butte Range.
Environmental Assessment for Cheatgrass and Weed Control at Mountain Home AFB	Proposal to minimize the development and spread of resistant invasive and noxious weeds use new herbicides and bioherbicides (<i>Pseudomonas fluorescens</i>) on all Mountain Home AFB managed lands.	Final EA – March 2018	Application of treatment for cheatgrass and weed control would be applied to withdrawn lands.
Urban Close Air Support Air and Ground Training Spaces in Urban Centers in Idaho	The Air Force proposes to conduct air and ground training spaces in urban centers in Idaho and to establish Urban Close Air Support aircrew proficiency training.	Draft EA – September 2018	No direct impact to the extension of land withdrawal as the training associated with Urban Close Air Support would occur elsewhere.
Beddown of Additional Republic of Singapore Air Force F-15SGs	The beddown included an increase in the number from 14 to 20 of F-15SGs stationed at Mountain Home AFB including construction of support facilities and increases in personnel, aircraft operations, and inert munitions use.	Final EA – June 2018	The beddown included increased sorties which are incorporated into the withdrawal extension baseline. Construction activities could be ongoing or near completion at the same time as the proposed extension of the land withdrawal; however, the construction would occur on base.
Future Actions			
Airspace Optimization for Readiness EIS	The Proposed Action would optimize special use airspace and improve realistic training and pilot readiness.	EIS in initial planning stages.	Any potential impacts related to the airspace optimization proposal will be thoroughly addressed in that EIAP, including the opportunity for stakeholder involvement. No impacts would be anticipated as a result of the withdrawal extension Proposed Action.

Notes:
366 FW = 366th Fighter Wing; AFB = Air Force Base; EA = Environmental Assessment; EIS = Environmental Impact Statement; EIAP = Environmental Impact Analysis Process

**Table 5-2
Past, Present, and Reasonably Foreseeable Future Bureau of Land Management Projects**

Scheduled Project	Project Summary	Timeframe	Relevance to Proposed Action
Future Actions			
ARMPA for the Great Basin Region, including the Greater Sage-Grouse Subregions of Idaho, et al.)	The proposed amendments would align BLM plans with State plans, establish buffer distances, and adjust objectives for grazing allotments in sagebrush-steppe habitat.	Currently underway to amend the September 2015 RMP	No direct interaction with the Proposed Action, but under the No Action, lands would be subject to new management objectives.
Renewal of livestock grazing permits	An EA is being prepared to renew livestock grazing permits for allotments east of the Juniper Butte Range (on the east side of Clover Creek).	Final decision expected spring 2019.	No direct interaction with the Proposed Action, but under the No Action, grazing administration on the Juniper Butte Range withdrawn lands would revert to BLM.
Juniper Draw Allotment EIS	Juniper Draw Allotment and allotments adjacent to the Juniper Butte Range on the west side of Clover Creek	NEPA in initial phases. EIS anticipated by 2021.	No direct interaction with the Proposed Action, but under the No Action, grazing administration on the Juniper Butte Range withdrawn lands would revert to BLM.

Notes:

ARMPA = Approved Resource Management Plan Amendments; BLM = Bureau of Land Management; EA = Environmental Assessment; EIS = Environmental Impact Statement; RMP = Resource Management Plan

5.2.3 Nonfederal Actions

Nonfederal actions such as new development or construction projects occurring in the area surrounding the Juniper Butte Range, no-drop targets, and emitter sites were considered for potential cumulative impacts. The withdrawn lands that would be extended under the Proposed Action are located in a rural setting of agricultural and grazing land uses; as such, no nonfederal projects that would interact with the Proposed Action or the No Action Alternative were identified.

5.3 CUMULATIVE EFFECTS ANALYSIS

The following analysis considers how projects identified in **Tables 5-1** and **5-2** could cumulatively result in potential environmental consequences when considered with the Proposed Action or the No Action Alternative.

5.3.1 Airspace Management and Use

The Proposed Action when added to past, present, and reasonably foreseeable future actions would result in no cumulative impacts to airspace management and use. Airspace would continue to be managed and used as it is currently operated with no incremental effect from past, present, or reasonably foreseeable future actions.

Under the No Action Alternative, airspace use (Restricted Airspace-3204A) above the Juniper Butte Range would be retained by the Air Force; however, training activities would exclude ordnance drops. When added to past, present, or reasonably foreseeable future actions, it would reduce the availability of air-to-ground training space and may increase other airspace congestion, resulting in a minor cumulative impact to airspace.

5.3.2 *Noise*

The Proposed Action would continue to operate under the current conditions and therefore, would not incrementally add to the existing noise environment. When added to past, present, and reasonably foreseeable future actions, there could be a slight increase in noise; however, this increase would be negligible over the broad Mountain Home Range Complex area.

Under the No Action Alternative, there would be no change in noise levels as the restrictive airspace would continue to be used for training, excluding ordnance drops. When added to past, present, and reasonably foreseeable future actions, there could be a slight increase in noise; however, this would represent a negligible cumulative impact over the broad Mountain Home Range Complex area.

5.3.3 *Land Use and Visual Resources*

The Proposed Action, when added to past, present, and reasonably foreseeable future actions on and in the vicinity of the Juniper Butte Range, no-drop targets, and emitter sites would result in no cumulative impacts to land use. The Proposed Action would not change the existing land use of military training operations and future actions would support grazing and agricultural activities currently taking place. No cumulative impacts would occur to visual resources. The Proposed Action when added to past, present and reasonably foreseeable future projects would not change the visual landscape as it currently exists.

The No Action Alternative would result in a beneficial impact to land use as withdrawn lands would return to BLM jurisdiction allowing surrounding land uses such as agriculture and grazing to take place on withdrawn lands. When added to past, present, and reasonably foreseeable future projects, land use would realize an incremental beneficial impact. Under BLM jurisdiction, the withdrawn lands would be subject to management objectives under the Jarbidge Resources Management Plan and Amendments. The land use surrounding the Proposed Action would not change and the landscape would return to its rural setting without the presence of military infrastructure. Under the No Action Alternative, there would be no adverse cumulative impacts to visual resources as there would be no change in the BLM Visual Resource Management classes for the Juniper Butte Range area.

5.3.4 *Air Quality*

The Proposed Action, in addition to past, present, and reasonably foreseeable future actions on or in the vicinity of the Juniper Butte Range, no-drop targets, and emitter sites would result in no significant impacts to air quality. A low to moderate increase in the number of sorties from future training enhancement or expansion actions would in and by itself not deteriorate the quality of air in the region. The increase in total air emissions from the additional sortie operations would be dispersed over a wide area of airspace, which overlies remote, pastoral lands and would result in negligible changes to the region's air quality.

Under the No Action Alternative, there would be minor increases in air emissions from demolition associated with returning the withdrawn land back to BLM management; however, these emissions would be short-term and when added to anticipated future projects, no significant cumulative impacts would be expected.

5.3.5 *Geology and Soils*

The Proposed Action when added to the past, present, and reasonably foreseeable future actions would have no cumulative effects to the local geology or soils.

During demolition under the No Action Alternative, there would be a potential for short-term effects to soils from wind and water erosion from barren soils; however, sediment and erosion controls would be in place to minimize those effects. When added to past, present, and reasonably foreseeable future projects, the cumulative effect would be negligible.

5.3.6 *Water Resources*

The Proposed Action when added to past, present, and reasonably foreseeable future actions on or in the vicinity of the Juniper Butte Range, no-drop targets, and emitter sites would result in minor impacts to water resources. Impacts to intermittent creeks and isolated wetlands from implementation of grazing renewals and the Proposed Action would result in minor cumulative impacts. No cumulative impacts to floodplains or groundwater would be expected.

Demolition activities under the No Action Alternative would increase soil erosion and potential deterioration of water quality. Application of best management practices would reduce the effects of water quality deterioration. The No Action Alternative when added to other present and future projects would result in minor cumulative impacts to intermittent creeks and isolate wetlands primarily from demolition activities. No cumulative impacts would be anticipated under the No Action Alternative to floodplains or groundwater.

5.3.7 *Biological Resources*

The Proposed Action when added to past, present, and reasonably foreseeable future actions on or in the vicinity of the Juniper Butte Range, no-drop targets, and emitter sites would result in negligible impacts to biological resources from disturbance to vegetation, wildlife habitat, and special-status species. With the implementation of the cheatgrass and weed control plan, weed control would be expected to improve and provide more suitable habitat for native plant species, and when added to future projects could result in an incremental beneficial impact. The Proposed Action in addition to other present and future activities could increase the potential for wildland fire, resulting in minor cumulative impacts to vegetation, wildlife habitat, and special-status species.

Under the No Action Alternative, a minor, short-term increase to soil erosion and deterioration of vegetation, wildlife, and special-status species habitat would occur from demolition activities. When added to present and future activities, there would be minor cumulative adverse impacts to vegetation from implementation of grazing renewals, but potentially offset with beneficial impacts from implementation of the cheatgrass and weed control plan on the remaining adjacent Mountain Home Range Complex lands. No significant cumulative impacts to biological resources under the No Action Alternative would be expected.

5.3.8 *Cultural Resources*

The Proposed Action in combination with past, present, and reasonably foreseeable future actions on and in the vicinity of the Juniper Butte Range, no-drop targets, and emitter sites would not be anticipated to result in incremental cumulative impacts to cultural resources, archaeological resources, historic resources, or Native American Traditional Cultural Properties. The Proposed Action and Air Force future actions would continue to implement procedures outlined in the Mountain Home Integrated Cultural Resources Management Plan and would follow guidelines for managing and coordinating Section 106 of the *National Historic Preservation Act*.

Under the No Action Alternative when added to past, present, and reasonably foreseeable future action on or in the vicinity of the withdrawn lands would not be anticipated to result in incremental cumulative impacts to cultural resources, archaeological resources, or historic resources. No Native American Traditional Cultural Properties were identified. BLM would manage the withdrawn lands as well as future BLM actions and be required to manage cultural resources in compliance with Section 106 of the *National Historic Preservation Act*. Cultural resources could be at an increased risk during demolition activities; however, standard operating procedures would be implemented to reduce the potential for adverse impacts.

5.3.9 *Hazardous Materials and Wastes, Toxic Substances*

The Proposed Action when added to past, present, and reasonably foreseeable future actions on or in the vicinity of the withdrawn lands would not be anticipated to result in significant cumulative impacts to the management of hazardous materials and wastes, and toxic substances. Under the Proposed Action, storage, handling, and tracking of hazardous materials would remain as it is currently handled. Hazardous waste generated would not be expected to increase and would be stored and disposed following the Mountain Home AFB Hazardous Waste Management Plan. Operations would continue and when added to present and future actions, no incremental increase would be expected.

Under the No Action Alternative, when added to past, present, and reasonably foreseeable future projects would be expected to result in a cumulative beneficial impact to hazardous materials and waste and toxic substances. Removal of facilities, aboveground fuel storage tanks, and targets would eliminate the potential risk associated with hazardous materials and waste handling and storage. In addition, the environmental baseline survey would identify any environmental contamination and require the Air Force to clean up any contamination prior to returning the land to BLM. If present, asbestos-containing materials and polychlorinated biphenyls would be removed and properly disposed in accordance with Mountain Home AFB management plans and federal, state, and local laws. Incremental beneficial cumulative effects would be expected under the No Action Alternative.

5.3.10 *Safety*

The Proposed Action in addition to past, present, and reasonably foreseeable future operations on or in the vicinity of the withdrawn lands would follow existing safety procedures and policies for ground and flight operations. The Proposed Action would continue to operate under the existing safety procedures and policies and any future projects would be required to operate under the same safety policies. No cumulative impacts to flight, BASH, explosives, or ground safety would be expected. Likewise, no cumulative change to fire risk on the Juniper Butte Range would be expected.

Under the No Action Alternative when added to past, present, and reasonably foreseeable future projects, would have no cumulative impacts. The change in land management objectives would not be expected to change the potential BASH incidents. Any demolition and fence removal operations would be temporary. Similarly, there would be no significant impacts expected to explosive safety or fire risk. The No Action Alternative, when added to other present and future projects, would not result in cumulative impacts to explosive or ground safety, or fire risk.

5.3.11 *Socioeconomics*

The Proposed Action when added to past, present, and reasonably foreseeable future actions would result in no cumulative impact to the region's population, employment, housing, or educational opportunities. The No Action Alternative may create a beneficial incremental impact to the region's economy during demolition, but when added to future projects, while the cumulative effect would be beneficial, it would be negligible.

5.3.12 *Environmental Justice and Protection of Children*

The Proposed Action or No Action Alternative, as well as past, present, and reasonably foreseeable future actions on and in the vicinity of the withdrawn lands, would not be expected to have a disproportionate cumulative impact to minority, low-income, or youth populations.

5.4 RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

CEQ regulations (§ 1502.16) specify that analysis must address "...the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity." Attention should be given to impacts that narrow the range of beneficial uses of the environment in the long term or pose a long-term risk to human health or safety. This section evaluates the short-term benefits of the

proposed project compared to the long-term productivity derived from not pursuing the proposed or alternative actions.

Short-term effects to the environment are generally defined as a direct consequence of a project in its immediate vicinity. For example, short-term effects could include localized disruptions from construction. Environmental commitments and best management practices in place for each project should reduce potential impacts or disruptions. Under the Proposed Action, these short-term uses would have a negligible cumulative effect.

The Proposed Action extends the withdrawal of BLM lands for military uses and provides for continuation of current military training activities. As such, there would be no short-term effects to the airspace already in use for training and therefore, no adverse effect to the long-term productivity and future use of the current airspace. The Proposed Action does not include new construction, so there would be no effects to the short-term use of resources associated with construction (e.g. labor, goods, and services). No negative effects would be expected from the Proposed Action to short-term use or long-term productivity.

5.5 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. Irreversible effects result primarily from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action.

Operational activities conducted on the withdrawn lands would remain the same. Training operations would consume nonrenewable resources such as gasoline for vehicles and jet fuel for aircraft; however, the demand for these resources would represent a negligible decrease to the overall supply of regional petroleum resources. Use of training ordnance would result in a commitment to chemicals and other ordnance materials; however, there would be no increase in the use of these materials under the proposed withdrawal extension. The Proposed Action would not substantially increase the irreversible or irretrievable commitment of resources.

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APPENDICES

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APPENDIX A
INTERAGENCY AND INTERGOVERNMENTAL COORDINATION AND
CONSULTATIONS

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Appendix A-1

**Interagency and Intergovernmental Coordination for Environmental Planning
Memorandum**

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 366TH FIGHTER WING (ACC)
MOUNTAIN HOME AIR FORCE BASE IDAHO

4 December 2018

MEMORANDUM FOR ALL INTERESTED GOVERNMENT AGENCIES, INDIVIDUALS,
AND ORGANIZATIONS

FROM: 366 A7/IE

SUBJECT: Environmental Assessment for Juniper Butte Range Land Withdrawal Extension,
Mountain Home Air Force Base, Idaho

1. In accordance with the National Environmental Policy Act (NEPA) of 1969, the Council of Environmental Quality regulations, and the United States Air Force (Air Force) NEPA regulations, the Air Force is preparing an Environmental Assessment to evaluate potential environmental impacts associated with the proposal by the Air Force and 366th Fighter Wing to extend the withdrawal of public lands established in October 1998 under the *Juniper Butte Range Withdrawal Act*, Public Law 105-261, at Mountain Home Range Complex. Mountain Home Range Complex is associated with Mountain Home Air Force Base, Idaho. Under PL 105-261, 11,816 acres of public land from the Department of Interior (DOI), Bureau of Land Management (BLM) was withdrawn to the Air Force for military training use. Public Law 105-261 will expire in 2023; therefore, the Air Force is proposing to extend the withdrawal for 25 years.

2. The Mountain Home Range Complex is an integrated combat training complex supporting the 366th Fighter Wing's mission with air-to-air training, air-to-ground bombing and gunnery training, and Electronic Combat training activities. The Complex includes two air-to-ground weapons ranges (Saylor Creek Range and Juniper Butte Range), no-drop targets, and emitter sites (**Figure 1**). Approximately 9,000 square miles of special use airspace overlies the Mountain Home Range Complex. In addition to supporting 90 percent of the Mountain Home Air Force Base's flight training, the Mountain Home Range Complex provides training assets and airspace for other Air Force units, 124th Fighter Wing from Gowen Field Air National Guard Base in Boise, other Department of Defense units, and international partner pilots.

3. Public Law 105-261 was enacted in 1998 by Congress for the purpose of authorizing appropriations for the Department of Defense, military construction, and Department of Energy National Security. The *Juniper Butte Range Withdrawal Act*, enacted under Public Law 105-261, provides for the withdrawal of public lands for military use, and specifically for high-hazard military training. The *Juniper Butte Range Withdrawal Act* adopted the environmentally preferred alternative, which is described in the Enhanced Training in Idaho Environmental Impact Statement Record of Decision and is otherwise referred to as the Juniper Butte Range Withdrawal. In addition, the *Juniper Butte Range Withdrawal Act* outlined commitments for managing the natural resources and existing land uses of withdrawn lands through mitigation measures specified in the Memorandum of Understanding between the BLM and the Air Force

and in a subsequent Settlement Agreement (1999). The current land withdrawal will expire in 2023 unless Congress approves legislation to extend it. This Environmental Assessment supports the Air Force's request for an extension to be submitted to Congress.

4. The purpose of the Proposed Action is to ensure Mountain Home Air Force Base aircrews continue to have the available infrastructure on the Juniper Butte Range portion of the Mountain Home Range Complex for realistic training in order to achieve and maintain combat readiness. The need for the Proposed Action is to maintain ready access to a dedicated area of land near to Mountain Home Air Force Base, which would continue to provide a suitable location for ground assets in relationship to established airspace. The Environmental Assessment will evaluate the potential effects of a land withdrawal extension as stipulated in Public Law 105-261.

5. Approximately 11,816 acres of land were withdrawn by Public Law 105-261. Juniper Butte Range comprises 12,600 acres, 2,000 of which are leased from the state of Idaho and are not considered part of the Proposed Action; therefore, the Proposed Action evaluates approximately 11,152 acres on the Juniper Butte Range withdrawn from the BLM, as well as 664 acres on the Mountain Home Range Complex for no-drop and emitter sites. The elements of the Proposed Action to extend the withdrawal are shown on **Figure 2**.

6. If you have additional information regarding potential impacts of the Proposed Action on the environmental aspects of the project area of which we are unaware, we would appreciate receiving such information for inclusion and consideration during the NEPA compliance process. To ensure the Air Force has sufficient time to consider your input in the preparation of the Draft Environmental Assessment, please forward issues or concerns within 30 days of receipt of the memorandum to the Public Affairs office at 366FW.PA.Public.Affairs@us.af.mil or (208) 828-6800.

Respectfully,

 Recoverable Signature

X 

SHERI L. ROBERTSON
Chief, Environmental Management Branch
Signed by: ROBERTSON.SHERI.L.1152447350

2 Attachments:

1. Location of the Mountain Home Air Force Base and the Mountain Home Range Complex
2. Location of the Proposed Action Elements

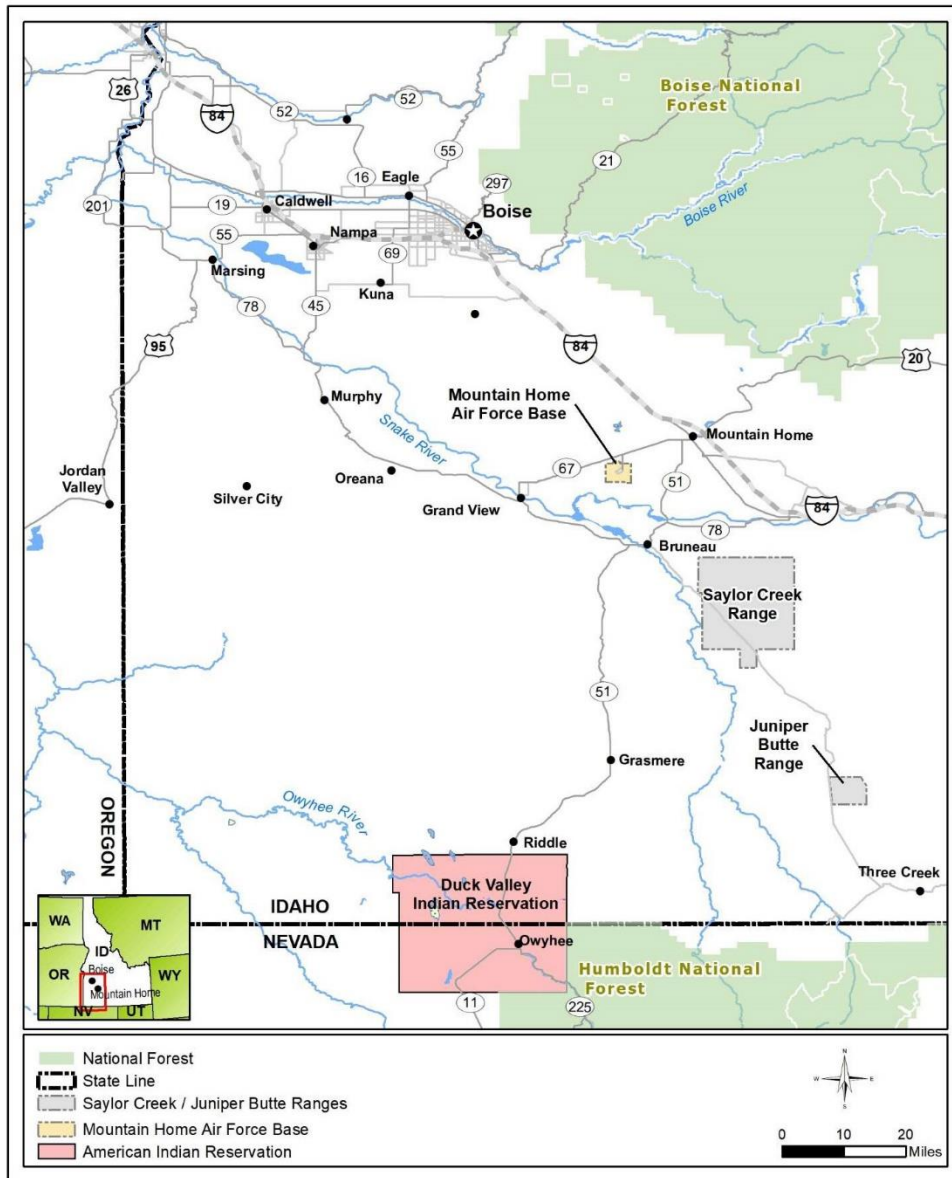


Figure 1. Location of the Mountain Home Air Force Base and the Mountain Home Range Complex

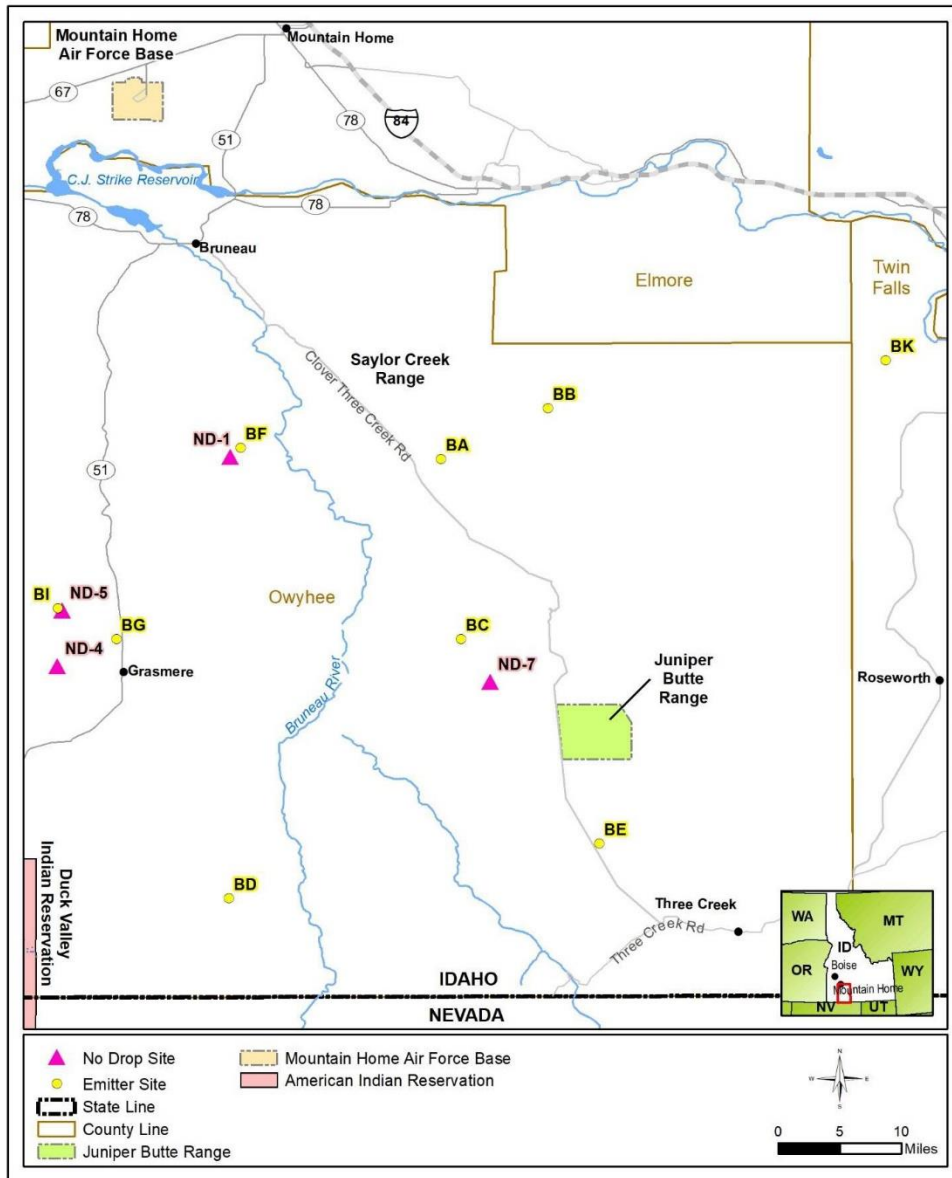


Figure 2. Location of the Proposed Action Elements

Interagency and Intergovernmental Coordination and Consultations Mailing List

Mr. Jim Tibbs, Commissioner
Ada County Board
200 West Front Street
Boise, ID 83702

The Honorable David Bieter
Mayor of Boise
150 North Capitol Boulevard
Boise, ID 83702

Boise Metro Chamber of Commerce
250 South 5th Street, Suite 300
Boise, ID 83702

Mr. Jerry Hoagland, Commissioner
Owyhee County Courthouse
P.O. Box 128
Murphy, ID 83650

Mr. Kelley Aberasturi, Commissioner
Owyhee County Courthouse
P.O. Box 128
Murphy, ID 83650

The Honorable Edwin Collett,
Mayor of Grand View
P.O. Box 69
Grand View, ID 83624

The Honorable James Ferdinand
Mayor of Marsing
425 Main Street
Marsing, ID 83639

Mr. Bud Corbis, Commissioner
Elmore County
150 South 4 East
Mountain Home, ID 83647

Mr. Wes Wootan, Commissioner
Elmore County
150 South 4 East
Mountain Home, ID 83647

Mr. Al Hofer, Commissioner
Elmore County
150 South 4 East
Mountain Home, ID 83647

The Honorable Rich Sykes
Mayor of Mountain Home
P.O. Box 10
Mountain Home, ID 83647

Mountain Home Chamber of Commerce
205 North 3rd East
Mountain Home, ID 83647

Mr. Jimmy Schipani, Councilman
Mountain Home City Council
160 South 3rd East
Mountain Home, ID 83647

Mr. Mark Bryant, Councilman
Mountain Home City Council
160 South 3rd East
Mountain Home, ID 83647

Mr. Matt Bundy, Councilman
Mountain Home City Council
160 South 3rd East
Mountain Home, ID 83647

Mr. Daniel Brennan, Councilman
Mountain Home City Council
160 South 3rd East
Mountain Home, ID 83647

The Honorable Monty White
Mayor, City of Glens Ferry
PO Box 910
Glens Ferry, ID 83623

Glens Ferry Chamber of Commerce
7 East 1st Avenue
Glens Ferry, ID 83623

The Honorable Shawn Barigar
Mayor of Twin Falls
2015 Neilsen Point Place, Suite 100
Twin Falls, ID 83301

Mr. Terry Kramer, Commissioner
Twin Falls County
P.O. Box 126
Twin Falls, ID 83303

Mr. Don Hall, Commissioner
Twin Falls County
P.O. Box 126
Twin Falls, ID 83303

Mr. Jack Johnson, Commissioner
Twin Falls County
P.O. Box 126
Twin Falls, ID 83303

Twin Falls Chamber of Commerce
2015 Neilsen Point Place, #100
Twin Falls, ID 83301

Mr. Justin Hayes, Program Director
Idaho Conservation League
P.O. Box 844
Boise, ID 83701

Mr. Kevin Lewis, Executive Director
Idaho Rivers United
P.O. Box 633
Boise, ID 83701

Mr. Brian Brooks, Executive Director
Idaho Wildlife Federation
P.O. Box 6426
Boise, ID 83707-6426

Sierra Club Middle Snake Group
P.O. Box 552
Boise, ID 83701-0552

Mr. Zack Waterman, Chapter Director
Sierra Club
503 West Franklin Street
Boise, ID 83702

Mr. Craig Gehrke, Executive Director
The Wilderness Society
950 West Bannock Street, Suite 605
Boise, ID 83702

Mr. Ken Cole, Executive Director
Western Watersheds Project
P.O. Box 2863
Boise, ID 83701

Ms. Katie Fite, Director
Wildlands Defense
P.O. Box 125
Boise, ID 83701

Ms. Inna Patrick
6850 W Hollilynn Drive
Boise, ID 83709

Appendix A-2

Government-to-Government Letters

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 366TH FIGHTER WING (ACC)
MOUNTAIN HOME AIR FORCE BASE IDAHO

28 December 2018

Colonel Joseph D. Kunkel
Commander
366 Gunfighter Avenue Ste 331
Mountain Home AFB ID 83648

Mr. Theodore Howard
Chairman
Shoshone-Paiute Tribes of Duck Valley Indian Reservation
P.O. Box 219
Owyhee NV 89832

SUBJECT: Notification of the Environmental Assessment for the Juniper Butte Range Land
Withdrawal Extension and Request for Section 106 Consultation

Dear Chairman Howard,

It was a pleasure to meet with you this past December 7th to discuss past and future coordination between Mountain Home Air Force Base and the Shoshone-Paiute Tribes of Duck Valley Indian Reservation. We are preparing a transcript of our discussion, but would like to send this letter in reference to one of the things we discussed, the renewal of the lease on the Juniper Butte Range.

In accordance with the National Environmental Policy Act (NEPA) of 1969, the Council of Environmental Quality regulations, and the United States Air Force (Air Force) NEPA-implementing regulations, the Air Force is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with the proposal to renew the withdrawal of public lands established in October 1998 under the Juniper Butte Range Withdrawal Act, Public Law 105-261, at the Mountain Home Range Complex (MHRC), Mountain Home Air Force Base, Idaho [undertaking].

Under Public Law 105-261, 11,816 acres of public land were withdrawn from the Bureau of Land Management to the Air Force for military training use. As demonstrated in Figures 1 and 2, the withdrawn lands constitute a critical component of the MHRC, including the Juniper Butte Range, remote electronic emitter sites, and No Drop targets.

As Public Law 105-261 will expire in 2023, the purpose of the Proposed Action is to continue the existing land withdrawal from the Bureau of Land Management for an additional 25 years. Because this is a federal action, the law requires preparation of an EA even though the action would be limited to the continuation of existing conditions and would not incorporate additional land acquisition, expansion, or new training requirements. The Juniper Butte Range Withdrawal

Act reserved public land for military use by adopting the environmentally preferred alternative defined in the 1998 *Enhanced Training in Idaho Environmental Impact Statement* Record of Decision. In addition, the Juniper Butte Range Withdrawal Act outlined commitments for managing the natural resources and existing land uses of withdrawn lands through mitigation measures specified in the Memorandum of Understanding between the Bureau of Land Management and the Air Force and in a subsequent Settlement Agreement (1999).

In compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR 800, this letter invites you to initiate consultation and request information regarding significant cultural resources that could be affected by the undertaking. Knowing that information pertaining to important cultural resources can only be conveyed through government-to-government consultation with Tribal representatives, we respectfully request your participation in this process.

We look forward to hearing from you and would appreciate receiving initial questions and/or comments within 30 days from receipt of this correspondence. If you have any questions or comments, please contact the Installation Tribal Liaison Officer, Ms. Barbara Hurt, at Barbara.hurt@us.af.mil, by phone at (208) 828-4536, or by postal mail at: Barbara Hurt, 366 Gunfighter Avenue, Ste. 331, Mountain Home, ID 83648.

Respectfully,



JOSEPH D. KUNKEL, Colonel, USAF

2 Attachments:

1. Location of the Mountain Home Air Force Base and the Mountain Home Range Complex
2. Location of the Proposed Action Elements

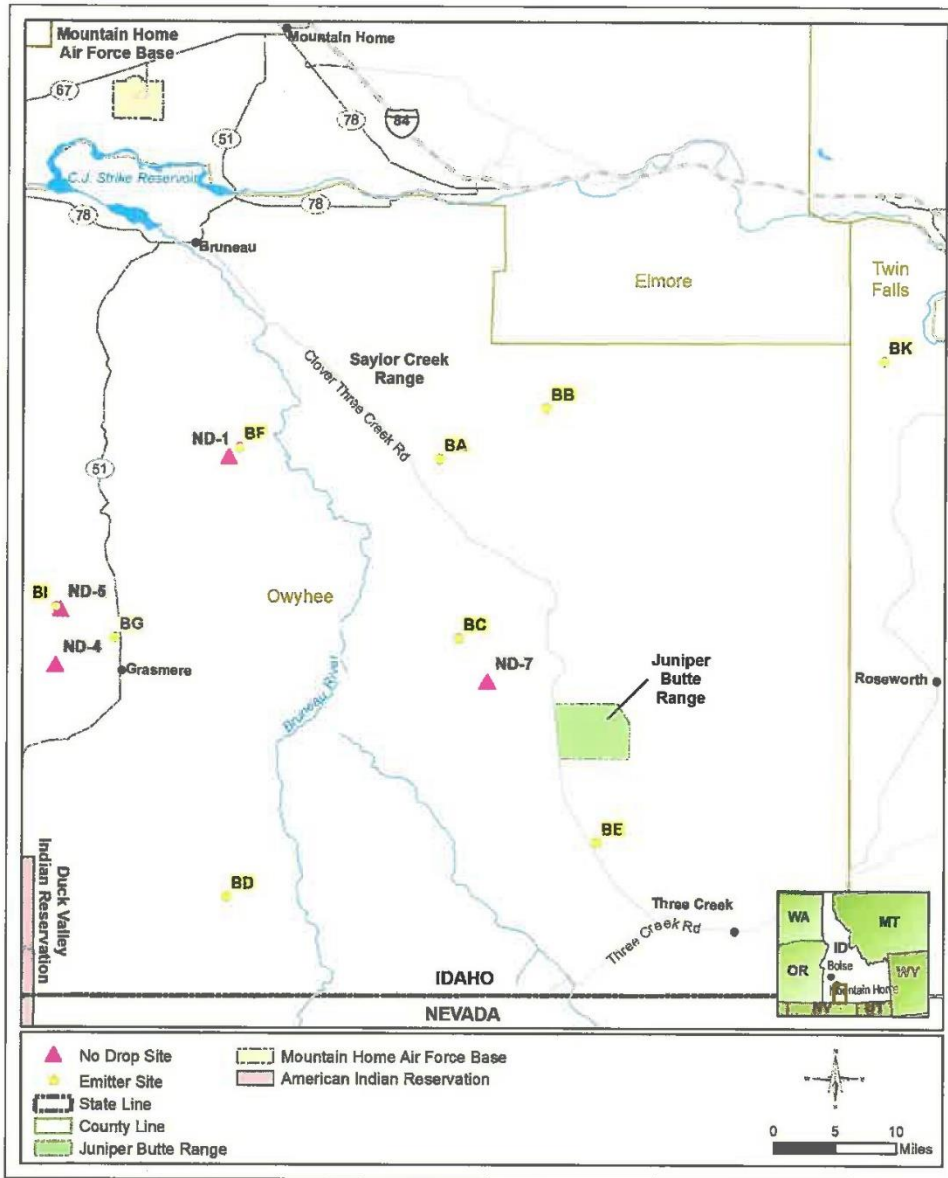


Figure 2. Location of the Proposed Action Elements



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 366TH FIGHTER WING (ACC)
MOUNTAIN HOME AIR FORCE BASE IDAHO

28 December 2018

MEMORANDUM FOR ALL INTERESTED TRIBAL GOVERNMENTS

FROM: 366 Fighter Wing

SUBJECT: Notification of the Environmental Assessment for the Juniper Butte Range Land
Withdrawal Extension and Request for Section 106 Consultation

1. In accordance with the National Environmental Policy Act (NEPA) of 1969, the Council of Environmental Quality regulations, and the United States Air Force (Air Force) NEPA- implementing regulations, the Air Force is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with the proposal to renew the withdrawal of public lands established in October 1998 under the Juniper Butte Range Withdrawal Act, Public Law 105-261, at the Mountain Home Range Complex (MHRC), Mountain Home Air Force Base, Idaho [undertaking].
2. Under Public Law 105-261, 11,816 acres of public land were withdrawn from the Bureau of Land Management to the Air Force for military training use. As demonstrated in Figures 1 and 2, the withdrawn lands constitute a critical component of the MHRC, including the Juniper Butte Range, remote electronic emitter sites, and No Drop targets.
3. As Public Law 105-261 will expire in 2023, the purpose of the Proposed Action is to continue the existing land withdrawal from the Bureau of Land Management for an additional 25 years. Because this is a federal action, the law requires preparation of an EA even though the action would be limited to the continuation of existing conditions and would not incorporate additional land acquisition, expansion, or new training requirements. The Juniper Butte Range Withdrawal Act reserved public land for military use by adopting the environmentally preferred alternative defined in the 1998 *Enhanced Training in Idaho Environmental Impact Statement* Record of Decision. In addition, the Juniper Butte Range Withdrawal Act outlined commitments for managing the natural resources and existing land uses of withdrawn lands through mitigation measures specified in the Memorandum of Understanding between the Bureau of Land Management and the Air Force and in a subsequent Settlement Agreement (1999).
4. In compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR 800, Mountain Home AFB is contacting you to initiate consultation and request information regarding significant cultural resources that could be affected by the undertaking. Knowing that information pertaining to important cultural resources can only be conveyed through government-to-government consultation with Tribal representatives, we respectfully request your participation in this process.

5. We look forward to hearing from you and would appreciate receiving initial questions and/or comments within 30 days from receipt of this correspondence. If you have any questions or comments, please contact the Installation Tribal Liaison Officer, Ms. Barbara Hurt, at Barbara.hurt@us.af.mil, by phone at (208) 828-4536, or by postal mail at: Barbara Hurt, 366 Gunfighter Avenue, Ste. 331, Mountain Home, ID 83648.

Respectfully,



JOSEPH D. KUNKEL, Colonel, USAF

2 Attachments:

1. Location of the Mountain Home Air Force Base and the Mountain Home Range Complex
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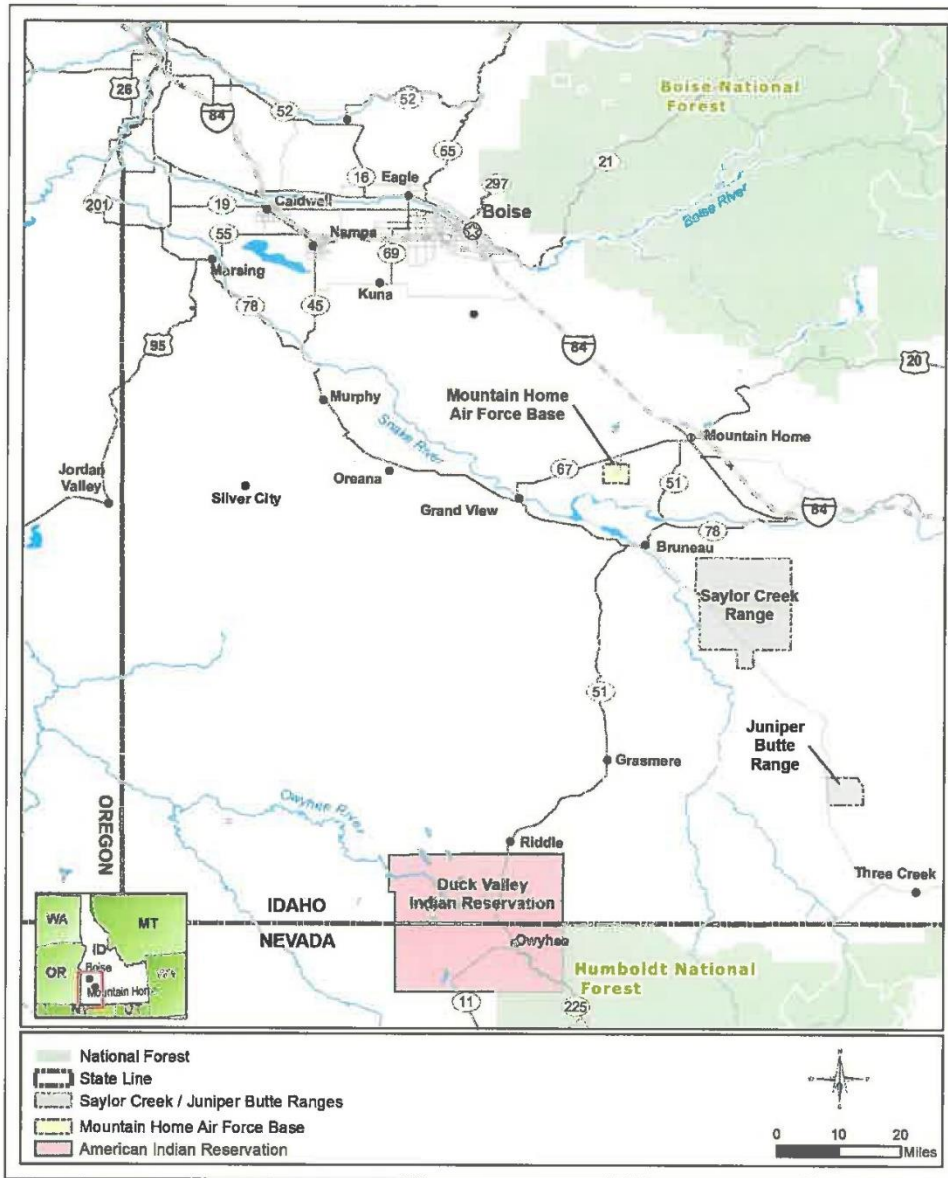


Figure 1. Location of the Mountain Home Air Force Base and the Mountain Home Range Complex

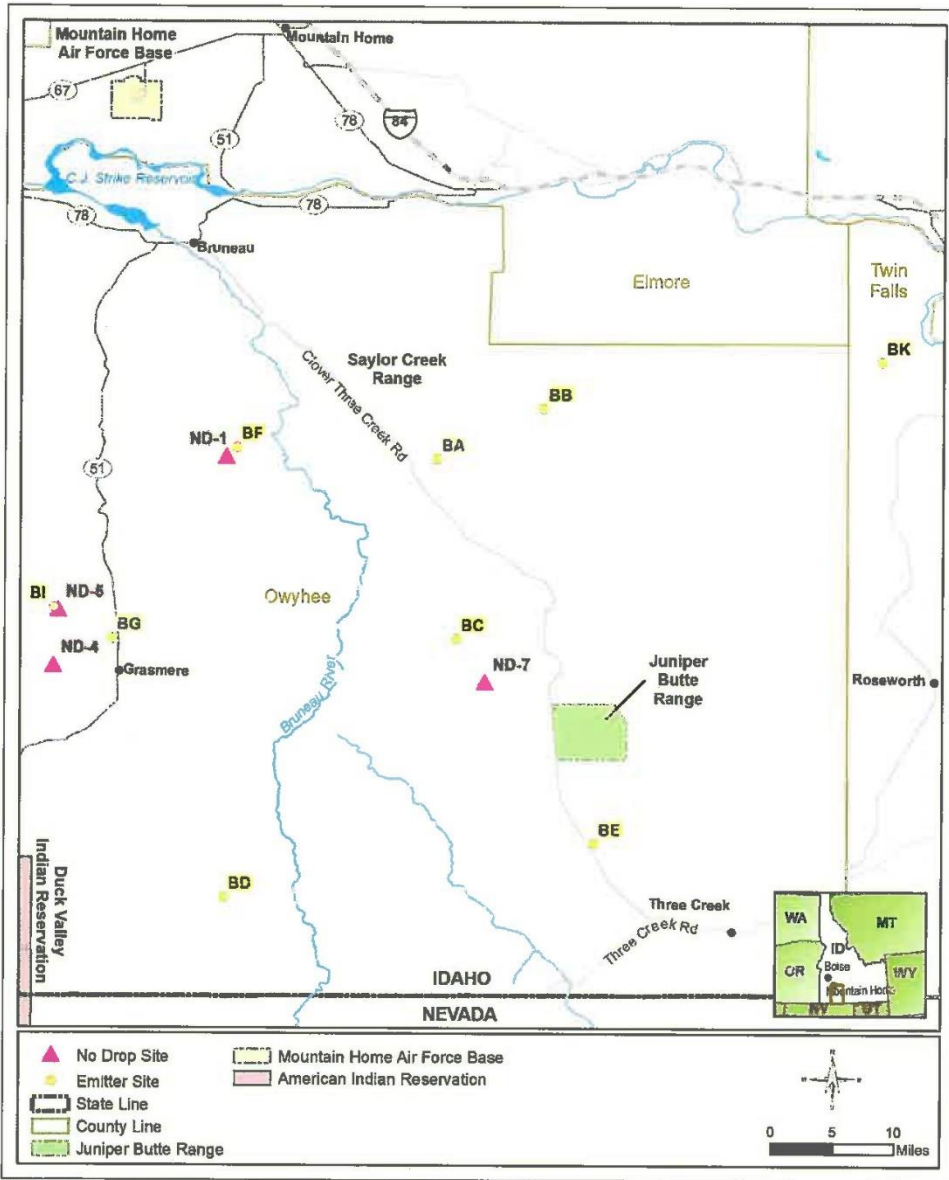


Figure 2. Location of the Proposed Action Elements

Government-to-Government Coordination and Consultations Mailing List

Mr. Theodore Howard, Chairman
Shoshone-Paiute Tribes of Duck Valley
P.O. Box 219
Owyhee ,NV 89832

Mr. Joe DeLaRosa, Chairman
Burns Paiute Tribe
100 Pasigo Street
Burns, OR 97720

Mr. Shane Warner, Chairman
NW Band of the Shoshone Nation
707 North Main Street
Brigham City, UT 84302

Mr. Bradley Crutcher, Chairman
Paiute-Shoshone Tribes of Fort McDermitt
P. O. Box 457
McDermitt, NV 89421-0457

Mr. Nathan Small, Chairman
Shoshone-Bannock Tribes
P.O. Box 306
Fort Hall, ID 83203

Ms. Diane L. Teeman,
Culture & Heritage Department Director
Burns Paiute Tribe
100 Pasigo Street
Burns, OR 97720

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Appendix A-3

Draft Environmental Assessment Federal Register Notice

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Federal Register Notice

DEPARTMENT OF DEFENSE

Department of the Air Force

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL ASSESSMENT FOR THE JUNIPER BUTTE LAND WITHDRAWAL EXTENSION, MOUNTAIN HOME AIR FORCE BASE, IDAHO

AGENCY: Department of the Air Force, Department of Defense

ACTION: Notice of Availability

SUMMARY: The U.S. Air Force (Air Force) is issuing this notice of availability to advise the public of the availability of a Draft Environmental Assessment (EA) for the Juniper Butte Land Withdrawal Extension, Mountain Home Air Force Base, Idaho.

DATES: A public meeting will be held in Mountain Home, Idaho, from 5 p.m. to 7 p.m. on April 25, 2019 at the American Legion (VFW Post 26), 515 E 2nd South Street, Mountain Home, Idaho 83647

ADDRESSES: For questions regarding the Proposed Action or EA development, contact Public Affairs at 366FW.PA.Public.Affairs@us.af.mil or 208-828-6800. Although comments can be submitted to the Air Force any time during the EA process, comments are requested within 60 days from the date of this publication to ensure full consideration in the process. Comments can be submitted by email to 366FW.PA.Public.Affairs@us.af.mil, mail to, 366 FW/PA, 366 Gunfighter Avenue, Suite 310, Mountain Home AFB 83648, or in person by attending the public meeting.

SUPPLEMENTARY INFORMATION: The Draft EA has been prepared to consider the potential environmental consequences of extending the public lands withdrawal established in October 1998 under the *Juniper Butte Range Withdrawal Act of 1999*, Public Law (PL) 105-261

Federal Register Notice

at Mountain Home Range Complex associated with Mountain Home Air Force Base (AFB), Idaho. Under PL 105-261, approximately 11,816 acres of public land, located in Owyhee and Twin Falls counties, Idaho, from the Department of Interior, Bureau of Land Management was withdrawn to the Air Force for military use. PL 105-261 will expire in 2023; therefore, the Air Force is proposing to extend the withdrawal of this public land for continued military training for an additional 25 years. In addition, except as provided in subsection 2908(f) of PL 105-261, withdrawn and acquired mineral resources within the boundaries of the Juniper Butte Range will continue as originally withdrawn from the United States mining laws.

The extension would allow the Air Force to sustain its mission for enhanced readiness training as well as maintain critical existing assets that support the mission. A No Action Alternative is included in the Draft EA for evaluation. Under the No Action Alternative, the withdrawal of public lands would not be extended, and public lands would be relinquished to the Bureau of Land Management. The Air Force would retain the restricted airspace R-3204A, B, and C; however, training activities would exclude ordnance drops on the existing withdrawal. The analysis of the No Action Alternative provides a benchmark to enable Air Force decision-makers to compare the magnitude of the potential environmental effects of the Proposed Action.

The Air Force is soliciting comments from interested local, state, and federal elected officials and agencies, as well as interested members of the public. The Air Force is also pursuing government-to-government consultations with interested Native American tribes in accordance with requirements as articulated in the National Historic Preservation Act (NHPA).

The Draft EA is available on the Internet at <https://www.mountainhome.af.mil/Home/Environmental-News/>. Copies of the Draft EA are available for review at the following locations:

- Mountain Home Public Library, 790 N 10th E Street, Mountain Home, Idaho 83647

Federal Register Notice

- Mountain Home AFB Library, 480 5th Avenue, Building 2610, Mountain Home AFB, Idaho 83648
- Twin Falls Public Library, 201 4th Avenue E, Twin Falls, Idaho 83301

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APPENDIX B
PROPOSED ACTION AGREEMENTS AND COMMITMENTS

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366 CMD SECTION

002



HEADQUARTERS

UNITED STATES AIR FORCE

ENHANCED TRAINING IN IDAHO
RECORD OF DECISION

10 March 1998

03/11/98 10:26 7286387

366 CMD SECTION

003

**RECORD OF DECISION
for the
UNITED STATES AIR FORCE
ENHANCED TRAINING IN IDAHO**

A Final Environmental Impact Statement (FEIS) was prepared to aid in determining whether or not to develop Enhanced Training in Idaho (ETI) with the following components:

- (1) one 300-acre ordnance impact area within a 12,000-acre training range;
- (2) one 640-acre no drop target area;
- (3) four 5-acre no drop target areas;
- (4) ten 1-acre electronic emitter sites;
- (5) twenty 0.25-acre electronic emitter sites;
- (6) cancellation of restricted airspace south of Saylor Creek Range (SCR);
- (7) establishment of restricted airspace associated with the 12,000-acre training range; and
- (8) reconfiguration and expansion of existing military operations areas (MOAs).

The Air Force will achieve four key objectives by implementing the ETI proposal:

- (1) Provide effective training and maximize use of available training hours;
- (2) Support the unique missions of the Air Force's only rapid-response air expeditionary wing;
- (3) Accommodate competing demands for Idaho's airspace and land while enhancing the 366th Wing's training capability; and
- (4) Provide for flexibility in training to accommodate environmental and cultural resources to the maximum extent possible.

The Bureau of Land Management (BLM), Federal Aviation Administration (FAA), and State of Idaho were cooperating agencies for the FEIS.

ISSUES ADDRESSED

Four alternatives were considered. Each alternative makes use of the existing Saylor Creek Range. The "no action" alternative would continue the existing training activities of the 366th Wing, Mountain Home AFB, ID, without any components of Enhanced Training in Idaho.

The three action alternatives were Clover Butte, Grasmere, and Juniper Butte. The Juniper Butte site was suggested by the public for consideration during the scoping phase of the environmental impact analysis process. Several no-drop and emitter sites were relocated during the analytical process in response to environmental concerns expressed by the public, agencies, and Shoshone-Paiute Tribal representatives.

Each of the three action alternatives would enhance the training capabilities of the 366th Wing by providing increased realism, flexibility, and quality in training. The Air Force would withdraw

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366 CMD SECTION

004

public lands within the selected 12,000-acre training range, the no-drop target areas, and the nine 1-acre emitter sites. The Air Force would obtain rights-of-way from the BLM for eighteen 0.25-acre emitter sites and access roads to the sites. The Air Force would enter into a lease agreement with the State of Idaho's Department of Lands for use of sites located on state lands. The Air Force would obtain authorization from the Owyhee County or Three Creek Good Roads District for use, improvements, and maintenance of some access roads.

The current restricted status of airspace south of SCR would be discontinued for each action alternative. This would result in an overall reduction in restricted airspace by nearly 50 percent. The airspace would be modified to the south and north to allow for greater dispersal of aircraft. For the Juniper Butte alternative only, the MOA would also be extended to the east to provide sufficient space for aircraft maneuvers. A new restricted airspace area associated with the 12,000-acre training area would be designated to permit the safe delivery of training ordnance onto the impact area.

DECISIONS

After considering the potential environmental consequences of the proposed action and alternatives, the Air Force has decided to select the Juniper Butte alternative for Enhanced Training in Idaho. This was the environmentally preferred alternative. If Congress enacts land withdrawal legislation, the Air Force will compensate the rancher that currently grazes cattle on the Juniper Butte site. The Air Force will submit formal applications to the:

- (1) BLM for withdrawing approximately 10,600 acres for the training range at Juniper Butte, the entire 640 acre and four 5 acre no-drop target areas, and nine 1-acre emitter sites;
- (2) BLM for acquiring rights-of-way for eighteen 0.25-acre emitter sites and access roads to the sites;
- (3) Owyhee County and Three Creek Good Roads District for use of some access roads;
- (4) State of Idaho's Department of Land for lease agreements for 960 acres within the 12,000-acre Juniper Butte site, one 1-acre emitter site, and two 0.25-acre emitter sites located on state lands; and
- (5) FAA for modifying the airspace on the northern, southern, and eastern boundaries, designating restricted airspace over the 12,000-acre training range at Juniper Butte, extending SCR restricted airspace from 18,000 to 29,000 feet MSL, and canceling the restricted airspace south of SCR.

IMPACTS

Implementing Enhanced Training in Idaho will increase the noise over the northern airspace modification and the proposed training range at Juniper Butte. The noise will decrease in other areas of the MOA because of greater aircraft dispersal into the modified airspace. No new constraints on land use are expected to result from the changes in noise.

The proposed airspace changes do not adversely impact non-military users of the airspace. The proposed changes enhance general aviation access and simplify MOA boundaries.

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The 366th Wing will continue to train over much of southwestern Idaho. Although military overflights do not prevent a wilderness study area's (WSA) designation as wilderness, the Air Force has given special consideration to the public's concern regarding the effects of overflights upon wilderness areas and WSAs, especially the northern airspace modification over Little Jacks Creek. The impacts associated with military overflight on these lands include noise and visual intrusion. The Air Force believes the FEIS adequately addresses the impacts on such areas. The Air Force has also consulted extensively with the State of Idaho and BLM regarding wilderness areas and WSAs during the environmental impact analysis process and recognizes the environmental sensitivity and special considerations needed to protect the values of the Owyhee canyonlands during the months of April, May, and June. The 366th Wing Commander will work with the State Director, Idaho BLM to establish, if required, temporal and/or geographic restrictions on low level activity in order to lessen noise impacts. Low altitude training flights will be limited during that period over the canyonlands, consistent with readiness training requirements.

Prior to, and throughout the environmental impact analysis process, the Air Force consulted with members of the Shoshone-Paiute Tribes. Additionally, literature searches and field studies were conducted for cultural resources. The Air Force did not find any National Register eligible resources at the Juniper Butte site and the Shoshone-Paiute did not indicate any specific concerns with that location. Juniper Butte emerged as the action alternative which would least impact cultural resources - a factor which weighed heavily in selecting Juniper Butte. The Air Force will continue to work with the Shoshone-Paiute tribes.

Special consideration has been given to the effects of overflight, emitter site use, range operations, and vehicular traffic upon bighorn sheep, pronghorn antelope, sage grouse, and raptor populations. The affected habitat currently experiences disturbance from occasional hikers, light aircraft, hunters, helicopters, and military aircraft. The Air Force has determined that the additional disturbance resulting from implementation of Enhanced Training in Idaho is not likely to endanger or threaten the current wildlife populations in the affected areas.

The Air Force and the cooperating agencies recognize that a multitude of factors may affect the viability of sage grouse populations. Each of these agencies is committed to furthering exploration of potentially contributing factors. If impacts are identified, each agency will examine potential measures to respond within the context of their missions. The cooperating agencies will work collaboratively with appropriate sage grouse working groups, established according to the Idaho Department of Fish and Game (IDFG), *Idaho Sage Grouse Management Plan* (August, 1997).

The Air Force has given special attention to the public's concern over the consequences from chaff, flare, and spotting charge use for Enhanced Training in Idaho. The environmental analysis indicates minimal potential for fires because of the altitude at which flares will be deployed and the use of "cold spots" rather than "hot spots." Flares will not be dropped below 2,000 feet above ground level when outside of the SCR exclusive use area. Chaff use will not increase during the first year of this proposal and when used, it will not be dropped outside of restricted airspace or MOAs.

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A small wetland at Clover Creek crossing may be suitable habitat for spotted frogs, northern leopard frogs, and western toads. An existing bridge at Clover Creek crossing would need to be replaced for each of the action alternatives. Reconstruction of the bridge would temporarily disturb a small portion of this habitat, and may permanently alter the portion of the pool between the existing bridge and the diversion dam approximately 10 feet downstream. Mitigation measures would be implemented to minimize the impact to local and regional populations of spotted frogs, northern leopard frogs, and western toads, and the wetland habitat. Pursuant to Executive Order 11990 (Protection of Wetlands) and taking the EIS analysis into account, it has been determined that there is no practicable alternative to the bridge reconstruction. Mitigation measures will be implemented to minimize harm to the wetland habitat.

Potential impacts associated with construction projects at Juniper Butte, the no-drop target areas, and the emitter sites are expected to be minor.

MITIGATION MEASURES

The following measures are being adopted for implementation of Enhanced Training in Idaho:

- (1) Mitigation Measures Incorporated into the Project: The following measures were designed into the project to reduce or eliminate potential impacts to one or more resource.
 - (a) The Air Force will continue government-to-government dialogue with the Shoshone-Paiute Tribes in accordance with the Presidential Memorandum (29 April 1994) and ensure the Tribes are granted access to sacred and ceremonial sites in accordance with Executive Order 13007, Indian Sacred Sites. *None identified on WAFB lands*
 - (b) Flares will not be used below 2,000 feet AGL except over SCR exclusive use area. The minimum release altitude at SCR exclusive use area is 700 feet AGL. Flares will continue to be used in MOAs in accordance with the Inter-Department Memorandum of Agreement among Mountain Home AFB and BLM State Offices in Idaho, Nevada, and Oregon, dated 31 March 1993.
 - (c) Fire potential will be reduced by using "cold spot" or "no-spot" training ordnance, no-drop target areas, and on-site fire suppression capabilities.
 - (d) Non-explosive, self-protection chaff will continue to be used by military aircraft within Mountain Home AFB restricted airspace and MOAs. Chaff will not be used on Mountain Home AFB military training routes. Chaff use within Mountain Home AFB airspace will not increase during FY 99. After FY 99, the USAF and BLM will meet to discuss the issue of increasing chaff beyond baseline levels within Mountain Home AFB airspace.
 - (e) The 366th Wing will ensure contractors minimize disturbance to native vegetation and use erosion control measures (e.g., water conveyance, energy dissipation structures) and sediment retention measures (e.g., basins, tarps, barriers) to minimize exposure and movement of soil to reduce impacts resulting from wind or water erosion at construction sites in order to reduce the possibility of the establishment of undesirable non-native plant species.

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- (f) The Air Force will reduce potential effects to wildlife by using eagle-safe utility poles for the above-ground electrical transmission system and wildlife-safe fencing.
 - (g) Once established, the Air Force's Military Radar Unit will provide air traffic advisories to civilian aviation transiting the MOAs.
 - (h) Non-explosive training ordnance on the proposed training range will consist of 25-pound BDU-33s or equivalent, to minimize the amount of land required and ground disturbance. Used non-explosive training ordnance will be periodically removed from the range.
 - (i) MOA airspace will be adjusted to disperse flight activities and reduce associated noise under most of the airspace.
 - (j) Known critical or crucial habitat for threatened, endangered, or special status species will be avoided to the extent practicable. Specific mitigation will be developed for instances where such habitat cannot be avoided.
 - (k) Range project components will be sited to avoid or minimize potential effects on native vegetation, recreation activities, access, or special land use management areas.
 - (l) Electronic emitter sites will be dispersed to enhance the Air Force's ability to address agency and public seasonal environmental concerns.
 - (m) Range project components will be sited to avoid privately owned lands. The public will be informed of range activities by the placement of signs at all facilities.
 - (n) Road improvements and new road construction will be designed to avoid negative impacts to soil, native vegetation, and visual resources.
 - (o) Livestock grazing will be accommodated to the greatest extent practicable on federal lands withdrawn or state lands leased for project facilities.
 - (p) Range facilities will be painted with non-contrasting desert colors to reduce visual impacts.
 - (q) The potential for environmental contamination will be reduced by using double-walled, above-ground diesel fuel storage tanks with secondary containment. Hazardous waste accumulation at training sites will be minimized.
 - (r) Existing drainage grade to Clover Creek will be reestablished following bridge replacement.
- (2) Mitigation Measures to Address Concerns: The following measures are being adopted to address concerns expressed by state and Federal agencies, the public, Shoshone-Paiute Tribes, and ranchers during the National Environmental Policy Act process.

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- (a) The 366th Wing will develop a range support agreement with BLM that will include a fire suppression plan for the Juniper Butte site.
- (b) The Air Force will work with the Shoshone-Paiute Tribes and BLM to develop monitoring procedures to protect sensitive cultural resources in the vicinity of ETI range components. The Air Force will also work with the Shoshone-Paiute Tribes to develop a Memorandum of Agreement stipulating procedures for the handling, distribution, and storage of sensitive information, procedures which meet tribal concerns for confidentiality and Air Force requirements for environmental analysis, planning, and contracting.
- (c) Military aircraft will be restricted to above 10,000 feet mean sea level, approximately 5,000 feet AGL, over the Little Jacks Creek WSA on Friday through Monday during the months of May and June of each year. This voluntary flight restriction will be observed absent compelling national security circumstances, military contingencies, or hostilities.
- (d) The Air Force, BLM, and the State of Idaho will meet at least semiannually in accordance with a Memorandum of Agreement developed to address the needs and expectation of managers and users of resources in southwest Idaho. The Air Force, BLM and the State of Idaho will also use this process to jointly identify and seek funding as required for management and mitigation measures necessary to protect resources and support military training activities. *Additional language in sROD*
- (e) The training airspace managed by Mountain Home AFB will be closed to military training activities, except for transiting aircraft during weekends associated with Memorial Day, Labor Day, and the 4th of July holidays. This voluntary flight restriction will continue in place absent compelling national security circumstances, military contingencies, or hostilities.
- (f) During the first floating season after the ETI Record of Decision (ROD), the Air Force will institute a two-week flight restriction during the optimum floating period over the main Bruneau Canyon north of the confluence of the Jarbidge River to the northern edge of the airspace. Low-altitude sorties below 5,000 feet AGL will only cross perpendicular to the canyon with no parallel flights within one mile of the canyon. Parallel flights will be above 5,000 feet AGL if within one mile of the canyon. The optimum floating season and modifications to restrictions for subsequent years will be determined through consultation with the BLM.
- (g) The Air Force will train emitter site crew members to identify sage grouse and raptors. The individuals will be instructed to inspect ETI emitter sites for the presence of the birds before use. The Air Force will have a biologist inspect ETI emitter sites at critical times of the year and recommend when certain sites will be available or unavailable for use. Specific procedures for training emitter site crew members and inspecting ETI emitter sites will be based on

Superseded by Supplemental ROD, same as

MOA Required Emission only in place

Superseded by Supplemental ROD, same as

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consultation with the Idaho Department of Fish and Game (IDFG) and the BLM.

- (h) The Air Force will consult with the IDFG and BLM annually to jointly determine critical California bighorn sheep lambing areas, lambing periods, and avoidance criteria in the Owyhee canyonlands consistent with 366th Wing training needs and IDFG determination of bighorn sheep needs. The 366th Wing is prepared to restrict flight near lambing areas in specific locations throughout the training airspace, during critical lambing periods, absent compelling national security circumstances, military contingencies, or hostilities. Information from ongoing studies will be provided for use in the consultation.
 - (i) The Air Force will supplement the IDFG annual survey in 1998 to determine baseline populations for sage grouse and California bighorn sheep in areas where there are ground and airspace changes as a result of ETI.
 - (j) The Air Force, BLM, and the State of Idaho agree that the Air Force will work collaboratively with BLM, the State of Idaho, and appropriate sage grouse working groups established according to the IDFG *Idaho Sage Grouse Management Plan* (August, 1997).
 - (k) The 366th Wing will publicize to civilian aviation and other interested individuals, via telephone and the internet, the airspace schedule of the MOAs controlled by Mountain Home AFB.
 - (l) The Air Force will execute an Interagency Support Agreement with Owyhee County and the Three Creek Good Roads Highway District for use and maintenance of specific roads associated with range operations.
 - (m) The 366th Wing will ensure that transient aircrews comply with the mitigation measures and any changes agreed to during semiannual meetings with the BLM and the State of Idaho.
- (3) Mitigation Measures to Minimize Defined Impacts: The following measures will be implemented to minimize the environmental consequences of siting project components in areas or settings known to contain environmental or cultural resources that could be significantly affected.

- (a) The Air Force will provide in-kind compensation to ranching operations for disruption to and loss of grazing on withdrawn acreage. This will consist of grazing permits or a combination of grazing permits and cash, fencing the lands associated with the new permits, modifying existing water pipelines affected by the withdrawal, extending existing water pipelines onto the lands associated with the new permits, and constructing a less than one-acre above-ground water reservoir in the corner of the withdrawn lands and associated with a water pipeline. Should the Air Force decide to outlease all or part of the withdrawn land for grazing, the existing permit holder will have first right of refusal.

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- (b) The 366th Wing will conduct construction activities so as to minimize the loss of slick spot peppergrass, a BLM-sensitive species. Measures will be taken to protect significant populations on withdrawn lands, participate in interagency ecosystem program goals designed to propagate and protect the species, and facilitate increased knowledge of the species by providing outside agency access to the protected habitat. Contingent on the availability of funds, the Air Force and BLM would test procedures to reestablish slick spot peppergrass on suitable habitat that could be impacted within the 12,000-acre withdrawal area during ETI construction or operation.
- (c) Prior to bridge reconstruction at Clover Creek crossing, the Air Force will comply with Section 106 of the National Historic Preservation Act and consult with the State Historic Preservation Officer and the Shoshone-Paiute Tribes to identify ways to reduce adverse effects to cultural resources at Clover Creek Crossing.
- (d) The Air Force will conduct site-specific surveys for spotted frogs, northern leopard frogs, and western toads at Clover Creek crossing; if these species are found, bridge design will be modified to the extent practicable to minimize loss of amphibian breeding habitat. Construction of the dam at Clover Creek crossing will take place in the autumn when potential impacts to amphibian populations will be lowest.

SUMMARY

The Air Force will continue to work with the cooperating agencies (BLM, FAA, and State of Idaho) during and after the development of Enhanced Training in Idaho. This cooperation will involve the withdrawal of public lands, leasing of state lands, modification of airspace, implementation of mitigation measures, and protection of species of concern.

The FEIS used public involvement to identify alternatives and impacts, and assess the environmental consequences associated with Enhanced Training in Idaho. With implementation of the above mitigation measures and operational conditions, all practicable means to avoid or minimize environmental harm, from the selected alternative, have been adopted.



RODNEY A. COLEMAN
Assistant Secretary
(Manpower, Reserve Affairs,
Installations & Environment)



PATRICK K. GAMBLE, Lt Gen, USAF
Deputy Chief of Staff
Air & Space Operations

**SUPPLEMENT TO
RECORD OF DECISION
for the
UNITED STATES AIR FORCE
ENHANCED TRAINING IN IDAHO**

In accordance with the Memorandum of Understanding between the Bureau of Land Management (BLM) and the Air Force (June 11, 1998), the Enhanced Training in Idaho Record of Decision (March 10, 1998) is amended as described below.

MITIGATION MEASURES

Replace the text in paragraphs 2 (c) and 2(f) on page 6 with the following new statements:

(2) (c) There will be no military overflights below 5,000 feet above ground level (AGL) in the airspace over Little Jacks Creek Wilderness Study Area (WSA) within a 12-mile diameter circle centered on N4241 W11612 during April, May and June.

(2) (f) Seasonal Low-Level Flight Restrictions - The Air Force will institute the following seasonal low-level flight restrictions for military users in the Jarbidge and Owyhee military operating areas to minimize conflicts with public land resources and uses. The restrictions apply during April, May, and June.

Bruneau/Jarbidge River System

- i. In general, low-altitude training flights over canyons will be limited to 1,000 feet AGL and at that level will only cross perpendicular to the major canyons. Parallel flights within a mile of the canyons will be limited to 5,000 feet AGL.
- ii. In addition, within 1 mile of the canyon rim, from the confluence of the Bruneau and Jarbidge Rivers north to the intersection with the East Fork of the Bruneau River (Clover Creek), low altitude training flights will be limited to 5,000 feet AGL, except for two Composite Wing Training (CWT) exercises per month. The 366th Wing will notify BLM and the public of CWT exercises.
- iii. In addition, from Friday through Monday, training flights will be limited to 5,000 feet AGL, within 1 mile from the rim, starting at the East Fork of the Bruneau (Clover Creek), N4235 W11538, north approximately 4.5 miles to Miller Water, N4238 W11541.

Owyhee River System

- i. In general, low-altitude training flights over canyons will be limited to 1,000 feet AGL and at that level will only cross perpendicular to the major canyons. Parallel flights within a mile of the canyons will be limited to 5,000 feet AGL.
- ii. In addition, except for two CWT exercises per month, training flights will be limited to 5,000 feet AGL within 1 mile of the canyon rim, from 45 Ranch,

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Exhibit 7

N4210 W11652, north on the South Fork of the Owyhee to the confluence of Owyhee River and east on the East Fork to Deep Creek, N4216 W11639.

- iii. In addition, from Friday through Monday, training flights will be limited to 5,000 feet AGL within 1 mile of the rim, from the confluence of the East Fork of the Owyhee River and Deep Creek, N4216 W11639, southeast on the East Fork of the Owyhee to Battle Creek, N4214 W11632.

The following statements are added to the 10 March 1998 ROD:


(2) (d) (Insert after the existing statement): The Air Force and the BLM will continue to work to discuss and resolve five additional areas as part of the Memorandum of Agreement between the Air Force and cooperating agencies. The parties are committed to military training activities co-existing with public land resources and land uses. The five areas involve the use of chaff; special status species; Native American traditional cultural and sacred sites; deviation from commitments; and refinement of the agreement. The Air Force will ensure BLM has an opportunity to review its site plans prior to beginning construction.

(2) (n) Additional Measures


- i. Air Combat Command (ACC) will make every good faith effort to schedule the 366th Wing for off-station training or deployments during April, May and June.
- ii. The 366th Wing will work closely with the BLM to notify the public about low-level crossings of the river canyons and periods of increased military training activities.
- iii. The 366th Wing will host semiannual meetings of ETI-interested parties to discuss issues, problems, and concerns, and seek resolutions.
- iv. The Air Force will participate in a collaborative study on recreational use in the Owyhee Brancau/Jarbridge canyons and Little Jacks Creek WSA.

SUMMARY

This supplement to the 10 March 1998 ROD reinforces the collaboration between the Air Force and the BLM to ensure military training activities coexist with public land resources and other users in southwest Idaho. The Air Force and BLM may mutually agree to modify the commitments in this Supplement in light of experience gained through monitoring and mitigation measures or as a result of changed military circumstances.


RUBY J. DEMAS
Assistant Secretary of the Air Force
(Manpower, Reserve Affairs,
Installations & Environment)

8 SEP 1998


MARVIN R. EDMOND, USAF
Deputy Chief of Staff
Air & Space Operations

SEP 14 1998

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ENHANCED TRAINING IN IDAHO

Memorandum of Understanding
Between
The Bureau of Land Management
and
The United States Air Force

The United States Air Force and the Bureau of Land Management (BLM) have reviewed the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the Enhanced Training in Idaho. As a result of on-going consultation with cooperating agencies and additional public comments, the following mitigation measures have been further defined and are being adopted as part of the Record of Decision for Enhanced Training in Idaho.

1. **Seasonal Low-Level Flight Restrictions** - The Air Force will institute the following seasonal low-level flight restrictions for military users in the Jarbidge and Owyhee military operating areas to minimize conflicts with public land resources and uses. The restrictions apply during April, May and June.

Bruneau/Jarbidge River System

A. In general, low-altitude training flights over canyons will be limited to 1,000 feet AGL and at that level will only cross perpendicular to the major canyons. Parallel flights within a mile of the canyons will be limited to 5,000 feet AGL.

B. In addition, within 1 mile of the canyon rim, from the confluence of the Bruneau and Jarbidge Rivers north to the intersection with the East Fork of the Bruneau River (Clover Creek), low altitude training flights will be limited to 5,000 feet AGL, except for two Composite Wing Training (CWT) exercises per month. The 366th Wing will notify BLM and the public of CWT exercises.

C. In addition, from Friday through Monday, training flights will be limited to 5,000 feet AGL, within 1 mile from the rim, starting at the East Fork of the Bruneau (Clover Creek), N4235 W11538, north approximately 4.5 miles to Miller Water, N4238 W11541.

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Exhibit 8

Owyhee River System

A. In general, low-altitude training flights over canyons will be limited to 1,000 feet AGL and at that level will only cross perpendicular to the major canyons. Parallel flights within a mile of the canyons will be limited to 5,000 feet AGL.

B. In addition, except for two CWT exercises per month, training flights will be limited to 5,000 feet AGL within 1 mile of the canyon rim, from 45 Ranch, N4210 W11652, north on the South Fork of the Owyhee to the confluence of Owyhee River and east on the East Fork to Deep Creek, N4216 W11639.

C. In addition, from Friday through Monday, training flights will be limited to 5,000 feet AGL within 1 mile of the rim, from the confluence of the East Fork of the Owyhee River and Deep Creek, N4216 W11639, southeast on the East Fork of the Owyhee to Battle Creek, N4214 W11632.

This commitment replaces the mitigation measure in the FEIS and the ROD that restricts low level flights for a two-week period over the main Brunéau Canyon north of the confluence of the Jarbidge River to the northern edge of the airspace. The major canyons described above are shown on the attached map, Exhibit A.

2. Airspace Expansion over Little Jacks Creek - There will be no military overflights below 5000 feet AGL in the airspace over the Little Jacks Creek WSA within a twelve mile diameter circle centered on N4241 W11612 during April, May and June.

This commitment replaces the mitigation measure in the FEIS that restricts military training flights over the Little Jacks Creek area on Friday through Monday during the months of May and June.

3. Additional Measures - In addition to the overflight restrictions described above, the Air Force has also committed to the following measures:

A. Air Combat Command (ACC) will make every good-faith effort to schedule the 366th Wing for off-station training or deployments during April, May and June.

B. The 366th Wing will work closely with the BLM to notify the public about low-level crossings of the river canyons and periods of increased military training activities.

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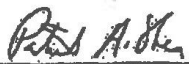
C. The 366th Wing will host semiannual meetings of ETI-interested parties to discuss issues, problems, and concerns, and seek resolutions.

D. The Air Force will participate in a collaborative study on recreational use in the Owyhee Bruneau/Jarbridge canyons and Little Jacks Creek WSA.

There are five additional areas that the Air Force and the BLM will continue to work to discuss and resolve as part of the Memorandum of Agreement between the Air Force and cooperating agencies. The parties are committed to military training activities co-existing with public land resources and land uses. The five areas involve the use of chaff; special status species; Native American traditional cultural and sacred sites; deviation from commitments; and refinement of the agreement. The Air Force will ensure BLM has an opportunity to review its site plans prior to beginning construction.


These commitments reinforce the collaboration between the Air Force and the Bureau of Land Management to ensure military training activities coexist with public land resources and other users in southwest Idaho. The parties may mutually agree to modify these commitments in light of experience gained through monitoring and mitigation actions or as a result of changed military circumstances.

The Record of Decision will be further expanded to include the above commitments to address cooperating agency and public concerns.



Patrick A. Shea
Director
Bureau of Land Management

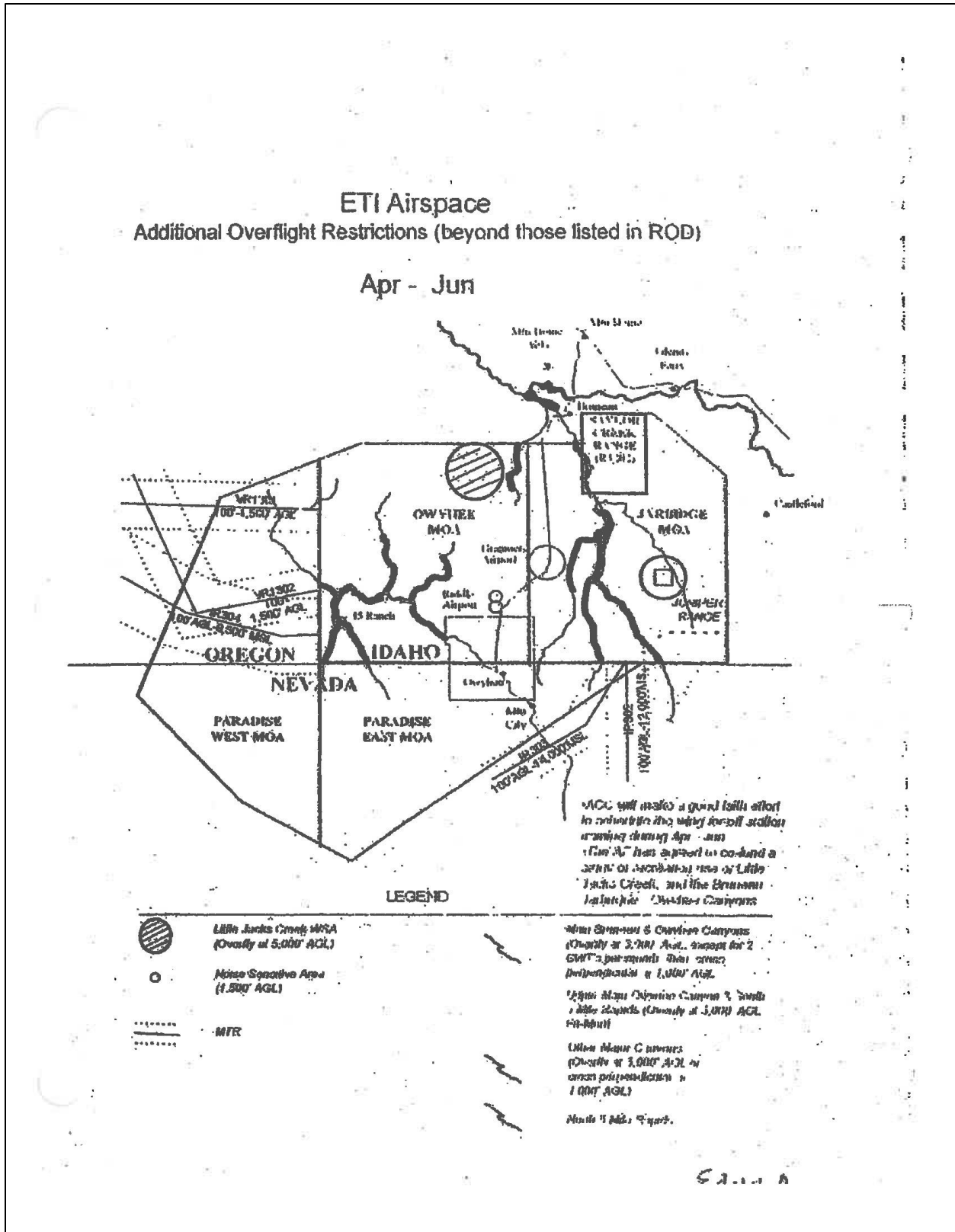
June 11, 1998
Date



Patrick K. Gamble, Lt Gen, USAF
Deputy Chief of Staff
Air Space and Operations

9 June 98
Date

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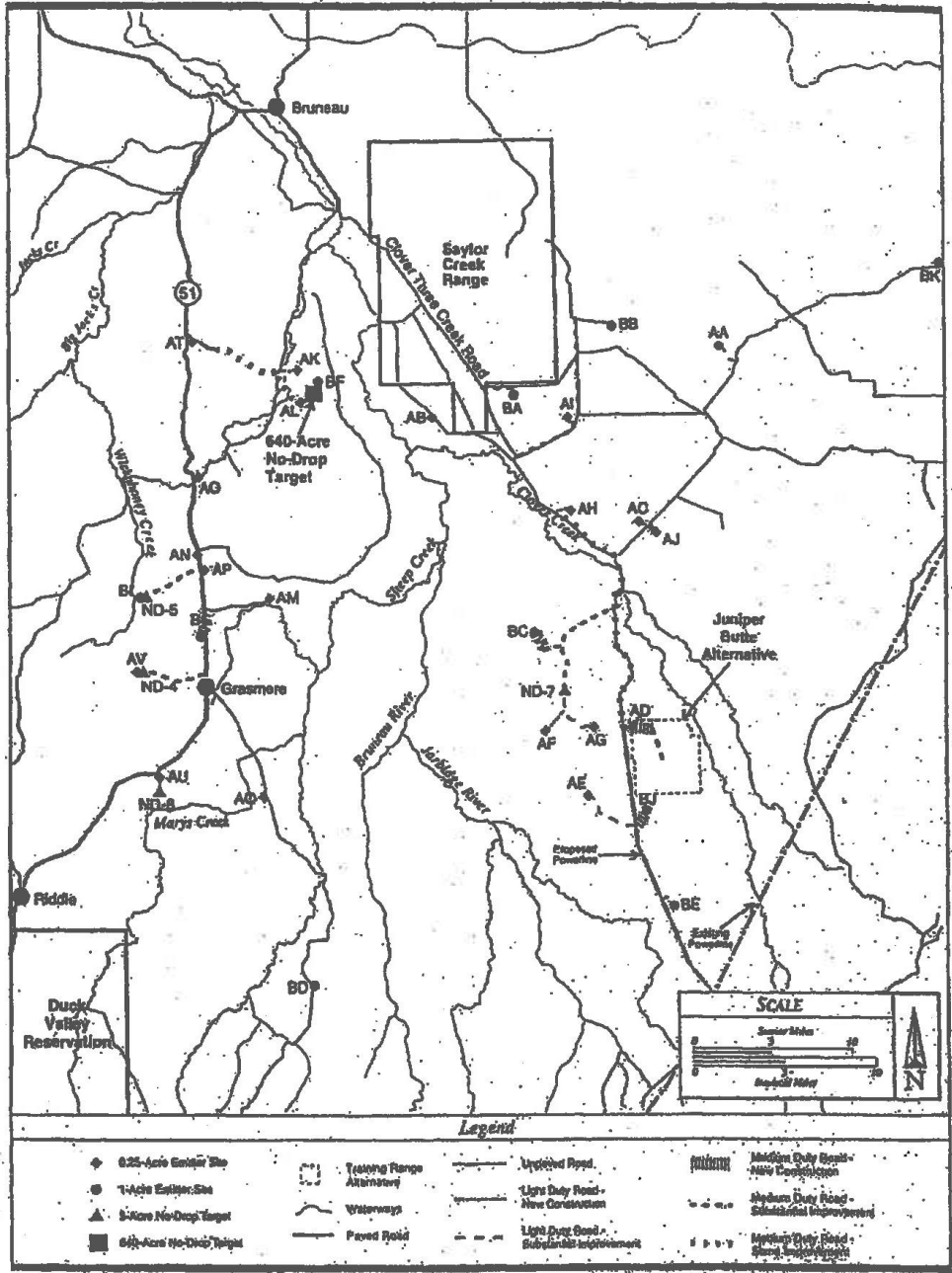
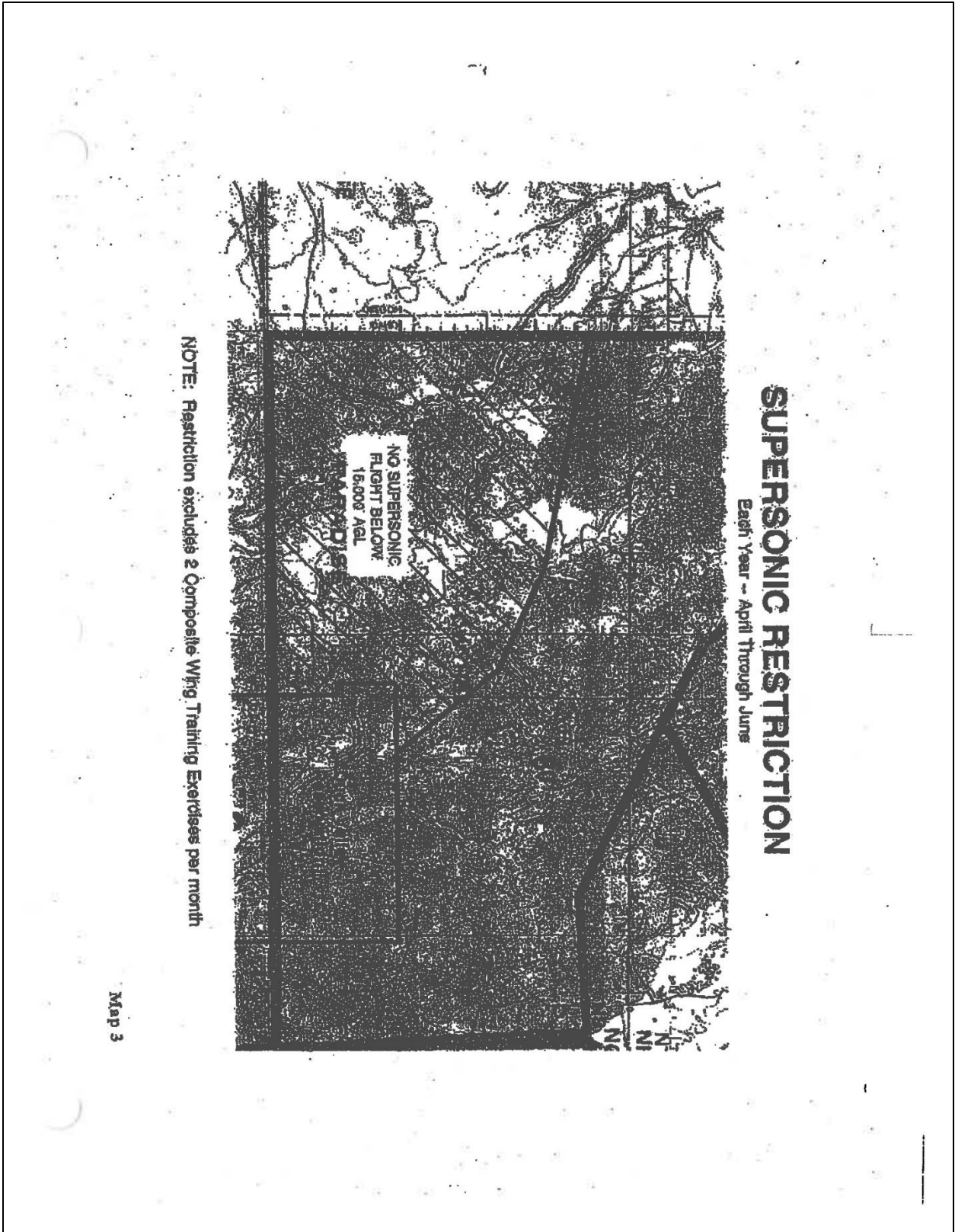
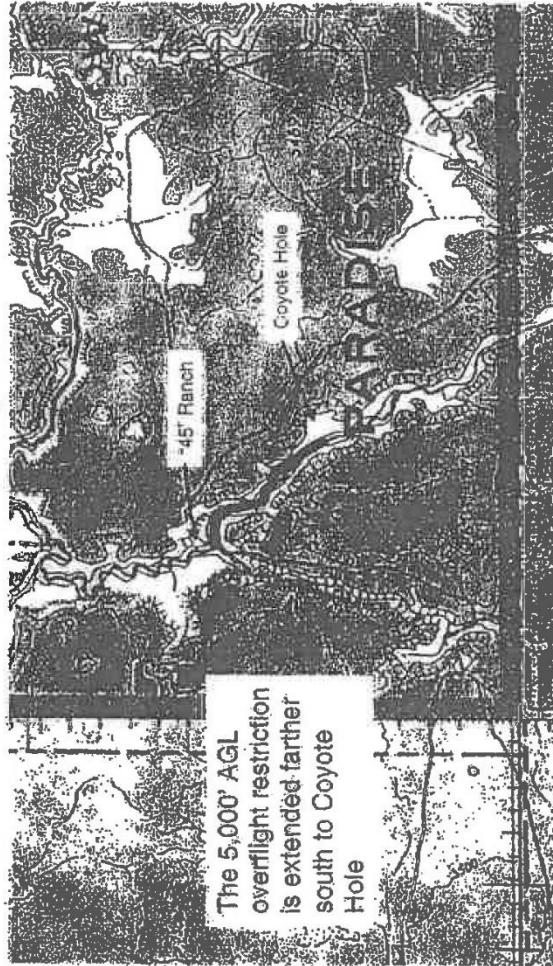


Figure 2.3-3 Components for Alternative D - Juniper Butte



OVERFLIGHT RESTRICTION

Each Year -- April Through June



NOTE: Restriction excludes 2 Composite Wing Training Exercises per month

Map 4

SETTLEMENT AGREEMENT
Resolving Claims Over United States Air Force
Composite Wing and Proposal for Enhanced Training in Idaho (ETI)*

I. INTRODUCTION

This Settlement Agreement ("Agreement") is entered into, on the one hand, by Greater Owyhee Legal Defense ("GOLD") and the individual Plaintiffs/Appellants in the litigation and Department of Interior Board of Land Appeals administrative appeal identified below in Section II (jointly referred to hereafter as "Plaintiffs"); and on the other hand, by the United States Air Force ("Air Force"), Department of Defense ("DOD"), Department of Interior ("DOI"); Bureau of Land Management ("BLM"), and the individual DOD, DOI and BLM Defendants in the litigation and administrative appeal referenced below (jointly referred to hereafter as "Defendants").

II. SCOPE OF SETTLEMENT AGREEMENT

This Agreement is intended to resolve the following pending lawsuits (hereafter "litigation") and administrative appeal brought by Plaintiffs with respect to the Air Force's proposals concerning expanded training activities occurring within the airspace and on land areas beneath that airspace identified in attached Maps 1 and 2, and the related agency decisions or actions as alleged in the following matters:

- IDAHO RIVERS W/ST
- A. Greater Owyhee Legal Defense v. United States Department of Defense et al., No. CIV 92-0189-S-BLW (D. Idaho) (hereafter, "GOLD I") (challenging the "Air Force In Idaho" ("AFI") Environmental Impact Statement and Record of Decision by Air Force, and further challenging Bureau of Land Management actions with respect to AFI activities);
 - B. The Wilderness Society et al. v. United States Department of Defense et al., No. CIV 96-0326-S-BLW (D. Idaho) (hereafter, "B-1B case") (challenging the adequacy of the Air Force's Environmental Assessment and Finding of No Significant Impact ("FONSI") for the location of B-1B bombers to MHAFB as part of composite wing under AFI);
 - C. Greater Owyhee Legal Defense v. Col. Gerald F. Pease, Jr. et al., No. CIV 98-0162-S-BLW (D. Idaho) (hereafter, "GOLD II") (challenging the adequacy of the Air Force's "Enhanced Training In Idaho" ("ETI") Environmental Impact Statement, Record of Decision, Supplemental Record of Decision, and further challenging State of Idaho Defendants' (as described in Section III.G.2.) compliance with the National Environmental Policy Act); and
 - D. The Wilderness Society and Committee for Idaho's High Desert v. Bureau of Land Management, TBLA No. 99-216 (Interior Board of Land Appeals 1999) (administrative appeal of BLM decision IDI-32274 granting Juniper

* See reference Map 1 and Map 2 from the Air Force ETI EIS attached hereto.

Butte Range Withdrawal Act rights-of-way applications to Air Force for ETI proposed actions).

III. SETTLEMENT TERMS AND CONDITIONS

Plaintiffs and Defendants wish to avoid protracted litigation and to compromise or otherwise resolve their claims and disputes over the AFI and ETI projects and related actions, as set forth in Section II above. The parties enter this Agreement without Defendants admitting or conceding wrongdoing or liability. Specifically, nothing herein shall be construed as a statement, acknowledgment, concession, or admission by any of the Plaintiffs as to the legal or technical adequacy or correctness of any of the decisions, environmental documents (including without limitation NEPA documents) or analyses challenged in the matters identified in Section II. The parties hereby agree to the following terms and conditions of this Settlement Agreement:

A. Public Involvement

1. **Settlement Implementation Group:** The parties agree to meet as the "Settlement Implementation Group" ("SIG") no less than three times a year to discuss and attempt to resolve environmental, conservation, and natural and cultural resource management issues arising from military operations and facilities development under the AFI and ETI projects, including the implementation of mitigation and monitoring measures under the ETI ROD/Supplemental ROD, Juniper Butte Range Withdrawal Act, and this Settlement Agreement.

(a) The SIG co-leaders shall be the 366th Wing Commander, or designee, for the Air Force; the Lower Snake River District Manager, or designee, for BLM; and The Wilderness Society/Idaho Director or designee. Additional representatives of the parties may also participate in SIG meetings. The first SIG meeting shall be scheduled within thirty days of execution of this Settlement Agreement, and thereafter SIG meetings shall be held annually in February and as otherwise determined by the SIG co-leaders. Before or during the first meeting of the SIG, the co-leaders shall establish procedures for conduct of the meetings, resolution and follow-up of issues, and distribution of minutes. Any leader may call a SIG meeting.

(b) The SIG, in addition to facilitating the exchange of information, will seek to identify solutions for all issues and concerns that may arise during the course of SIG activities. The Air Force will make available to the SIG all unrestricted data obtained through ETI-related mitigation and monitoring.

2. **Natural Resource Council:** The Air Force will seek to broaden the scope of the existing Natural Resource Council ("NRC") and propose a charter to define NRC interaction and relationship with other committees and entities, including the parties to this Agreement. In addition, the Air Force will submit sage grouse and aircraft overflight as items of discussion for the next and future NRC meetings.

3. Funding:

(a) The Air Force and BLM commit to a collaborative effort to seek funds to offset environmental concerns of the ETI project, in consultation with the SIG.

SETTLEMENT AGREEMENT - 2.

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(b) The Air Force through the NRC also agrees to seek funding for an ecoregional initiative in cooperation with other agencies.

B. Airspace Modifications

1. **Owyhee Overflights:** The Air Force agrees that no supersonic flights will occur below 15,000 feet Above Ground Level ("AGL") over the East Fork Owyhee, South Fork Owyhee, and Little Owyhee Rivers, as set forth in Map 3 attached hereto and incorporated by reference, during April, May and June of each year, except for two one-day Composite Wing Training exercises per month (see Map 3 for northern boundary, which is approximately five miles north of the Owyhee and East Fork Owyhee Rivers, and other boundaries of Oregon and Nevada state lines and Duck Valley Reservation boundary).

*- Seasonal
supersonic
restrictions*

2. **Bighorn Sheep Lambing Near the 45 Ranch:** The Air Force will move the current supplemental ROD (September 14, 1998) restriction of 5,000 feet AGL, during April, May and June of each year over the Owyhee/South Fork Owyhee rivers south to Coyote Hole, except for two one-day Composite Wing Training exercises per month (see Map 4, attached hereto and incorporated by reference).

3. **Publication:** The Air Force agrees to publish these additional flight restrictions in the MHLAFB Supplement to AFI 13-212 and MHAFFBI 13-287 above as part of the flight restrictions for the MOAs, restricted areas, and ranges that are the subject of this Agreement.

C. Noise and Wildlife Monitoring

1. **Noise Monitoring and Study:** The Air Force will conduct a study of actual noise associated with ETI activities, as follows:

(a) Air Force will commit supersonic and subsonic noise monitoring assets to conduct the noise study;

(b) Air Force will, no later than the first scheduled meeting of the SIG after March 2001, compile and deliver to the SIG a list of qualified noise experts or firms, with input from cooperating agencies on the ETI EIS and Plaintiff GOLD, to design and conduct the study referenced in this section;

(c) GOLD will then select a noise expert or firm from the list (paragraph C.1.(b)) for that expert or firm to develop a noise study design. Air Force will pay for the work of the expert or firm in the study design, implementation, and report of findings at a value not to exceed \$300,000. Such amount shall be exclusive of the value or cost of any monitoring assets owned or provided by the Air Force (paragraph C.1.(a)).

(d) The final study design to be implemented by the noise expert or firm, including selection of noise monitoring sites, shall be developed cooperatively between the SIG and the noise expert or firm.

SETTLEMENT AGREEMENT - 3

(e) Air Force will add "Cowboy Control" data, when available, to the proposal for analysis along with noise data, subject to security considerations.

2. **Bighorn Sheep and Sage Grouse Monitoring:** Air Force agrees to undertake the following in cooperation and coordination with the Idaho Department of Fish and Game ("IDFG") and BLM:

(a) Monitoring sage grouse and bighorn sheep in areas of potential ETI impacts and Little Jacks Creek expanded airspace changes beginning in the 2000 field season.

(b) In addition to existing monitoring commitments, the Air Force agrees to seek funding for sage grouse and bighorn sheep monitoring in the amount of \$110,000 per year in FY 2002 and FY 2003;

(c) The Integrated Natural Resources Management Plan ("INRMP") for the ETI will address bighorn sheep and sage grouse monitoring and mitigation as part of the management plan;

(d) Provide the SIG with an opportunity to review and provide input on development of the INRMP;

(e) Evaluate monitoring results after five years to determine if additional funding is needed.

D. Fire Suppression

1. **Cost Recovery:** The Air Force and BLM will use existing procedure to recover costs from Air Force for BLM fire suppression (according to Interservice Support Agreement Number I00010-98-262-001 or as may be amended) and rehabilitation activities.

2. **Restoration:** The Air Force will restore native vegetation in the areas of Air Force-caused fires in accordance with BLM best management practices.

E. Use of Emitters and No-Drop Sites

1. **Public Participation:** The Air Force will invite and involve public participation, including the SIG, in developing protocols for evaluating uses of ETI emitter and no-drop sites.

2. **Seasonal Restrictions:** The Air Force agrees to implement seasonal restrictions on use of the sites BD, AU, AQ, ND-4, and ND-8, in consultation with the SIG and ETI EIS cooperating agencies. Such consultation must be commenced on an annual basis so as to be completed before the Air Force's use of any of these sites.

3. **ND-8:** The Air Force will move site ND-8 to an area that meets operational concerns, in consultation with the parties; and install a raptor-proof fence if necessary.

4. **Restoration:** The Air Force will restore 25 acres of sage grouse habitat in collaboration with BLM, IDFG, SIG and the public as a demonstration project.

F. **Response to Damage Claims**

The Air Force will issue a press release informing the public of the process for filing claims for damage caused by MHAFB-related training activities; will make claims processes available on the internet; and will refine the process for routing claims to the correct office.

G. **Dismissals and Releases**

1. **Dismissal and Release of Pending Actions:** In return for the covenants and agreements herein, Plaintiffs agree to dismiss with prejudice all matters identified in Section II of this Agreement, through filing of the Stipulations of Dismissal and Orders of Dismissal attached hereto as Exhibits 1 through 4 concurrently upon final execution of this Settlement Agreement.

2. **State of Idaho Defendants:** The State of Idaho Defendants were previously dismissed by the U.S. District Court from the GOLD II lawsuit, and are not parties to this Agreement. GOLD agrees that, as part of this Settlement Agreement and the filing of the Stipulation of Dismissal in GOLD II, it will not appeal such dismissal of the Idaho parties, provided that the State of Idaho Defendants do not seek recovery of any costs, fees, or other relief as against GOLD. In the event that the State of Idaho Defendants do seek recovery of costs, fees, or other relief as against GOLD in the GOLD II matter, GOLD reserves the right to oppose such claims, and to reassert its claims against the State of Idaho Defendants, as it may deem appropriate.

H. **Attorney Fees and Costs**

The Defendants agree to pay reasonable attorney fees and costs for the GOLD I, GOLD II, and B1-B cases as agreed between the parties in the two separate Attorney Fees Settlement Agreements, one for the two GOLD cases and one for the B1-B case. Plaintiffs agree that such payment fully satisfies and releases all claims which they may have for recovery of costs or attorney fees in the litigation matters and appeal referenced in Section II of this Agreement.

IV. **NOTIFICATIONS**

All notifications of meetings, public involvement opportunities, solicitation of input or comments, provision of monitoring or natural resource data availability or results, or notices or communications for any other purpose under this Settlement Agreement shall be sent by regular first class mail to the following:

SETTLEMENT AGREEMENT - 5

On behalf of Plaintiffs:

Mr. Craig Gehrke
The Wilderness Society
710 North 6th Street, Suite 102
Boise, ID 83702
Telephone: (208) 343-8163
Facsimile: (208) 343-8164

With a copy to:

Murray D. Feldman
Holland & Hart LLP
P.O. Box 2527
Boise, ID 83701
Telephone: (208) 342-5000
Facsimile: (208) 343-8869
E-Mail: mfeldman@hollandhart.com

On behalf of the Air Force:

Lt. Col. Phillip T. Lanman
366th WG/XPE
ETI Project Manager
361 Gunfighter Street
Mountain Home Air Force Base, ID 86348
Telephone: (208) 828-5756
Facsimile: (208) 828-6416

On behalf of the BLM:

Kate Kitchell
Lower Snake River District Manager
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705
Telephone: (208) 384-3390
Facsimile: (208) 384-3326

Additional notice may also be provided by telephone, facsimile, or e-mail transmission, but official confirming copies of notices or communications required or documenting the implementation or completion of steps under the Settlement Agreement will be sent by regular first class mail, or overnight delivery service if time or scheduling constraints so require.

V. MODIFICATIONS

No provision of this Settlement Agreement may be modified except pursuant to the mutual agreement of the parties confirmed in writing with the signature of the

APPROVED AS TO FORM AND CONTENT:

By: Murray D. Feldman
Attorney for Plaintiff GOLD

Date: _____

By: Laird J. Lucas
Attorney for Plaintiff GOLD

Date: _____

By: ~~James C. Burnham~~
~~Attorney for the B1-B Case Plaintiffs~~

Date: 4/15/99

FOR UNITED STATES AIR FORCE AND
DEPARTMENT OF DEFENSE DEFENDANTS

DATED this _____ day of _____, 1999.

By: _____
Lynn B. Whetless, Colonel, USAF
Chief of Range, Airspace, and Airfields Division
Headquarters, Air Combat Command

DATED this _____ day of _____, 1999.

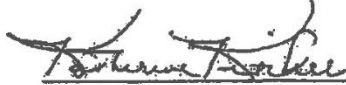
By: _____
Billy F. Richey, Colonel, USAF
Director of Staff, 366th Wing
Mountain Home Air Force Base

SETTLEMENT AGREEMENT - 9A

FOR BUREAU OF LAND MANAGEMENT DEFENDANTS

DATED this 16TH day of November, 1999.

LOWER SNAKE RIVER DISTRICT MANAGER.



Kate Kitchell

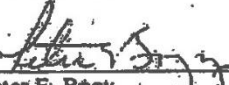
APPROVED AS TO FORM AND CONTENT:

BETTY H. RICHARDSON
UNITED STATES ATTORNEY

By: 

D. Marc Haws
Assistant United States Attorney


Date: Nov 15th 1999

By: 

Peter E. Bogy
Special Assistant United States Attorney

Date: 11/15/99

OFFICE OF FIELD SOLICITOR
DEPARTMENT OF INTERIOR

By: 

William M. Perry
Attorney, Field Solicitor's Office
U.S. Department of Interior

Date: 11/15/1999

SETTLEMENT AGREEMENT - 10

F. This Agreement is effective as of the last date of the signatures set forth below.

In witness whereof, the parties have executed this Agreement on the dates specified below:

FOR PLAINTIFFS

DATED this _____ day of _____, 1999.

Greater Owyhee Legal Defense

DATED this _____ day of _____, 1999.

The Wilderness Society

DATED this _____ day of _____, 1999.

Committee for Idaho's High Desert

DATED this _____ day of _____, 1999.

Idaho Conservation League

DATED this 12 day of November, 1999.

Ted A. Smith, President

Foundation for North America Wild Sheep

DATED this _____ day of _____, 1999.

Idaho Wildlife Federation

DATED this _____ day of _____, 1999.

Idaho Rivers United

SETTLEMENT AGREEMENT - 7/8A ^{7/06} B

APPROVED AS TO FORM AND CONTENT:

By: Murray D. Feldman
Murray D. Feldman
Attorney for Plaintiff GOLD

Date: Nov. 15, 1999

By: Laird J. Libas
Laird J. Libas
Attorney for Plaintiff GOLD

Date: 11/15/99

By: _____
James C. Burnham
Attorney for the B1-B Case Plaintiffs

Date: _____

FOR UNITED STATES AIR FORCE AND
DEPARTMENT OF DEFENSE DEFENDANTS

DATED this 11th day of November, 1999.

By: Lynn B. Wheelless
Lynn B. Wheelless, Colonel, USAF
Chief of Ranges, Airspace, and Airfields Division
Headquarters, Air Combat Command

DATED this 10th day of November, 1999.

By: Billy F. Richey
Billy F. Richey, Colonel, USAF
Director of Staff, 366th Wing
Mountain Home Air Force Base

SETTLEMENT AGREEMENT - 9

appropriate representatives of the Plaintiffs and Air Force and BLM Defendants. If so modified, the modification shall become an addendum to this Agreement.

VI. OTHER PROVISIONS

A. This Agreement, and the referenced Exhibits and Maps attached hereto, embody the entire agreement of the parties respecting the matters raised in these lawsuits, with exception of attorney fees and costs that have been agreed to separately among the parties. There are no promises, terms, conditions, or obligations other than those described in this Agreement and the referenced attachments. This document supersedes all previous communications, representations, or agreements, either verbal or written, between the parties with respect to this litigation. Nothing in this Agreement supersedes the requirements included in the Juniper Butte Range Withdrawal Act ("JBRWA," P.L. 105-261) or the ETI Final Environmental Impact Statement/Record of Decision, supplements, or Memorandums of Agreement between the Air Force and the BLM not specifically and expressly modified by this Agreement.

B. Nothing in this Agreement shall be construed or offered in evidence in any proceeding as an admission or concession of wrongdoing or liability concerning the claims settled under this Agreement. Defendants do not hereby waive any defenses they may have concerning the claims settled under this Agreement. This Agreement is executed solely for the purpose of compromising and settling this litigation.

C. The parties hereto agree to raise and seek to resolve through the SIG concerns regarding future rights-of-way grants under JBRWA (P.L. 105-261) Section 2905 or any rights-of-way permits, approvals, plans, or agreements authorized by JBRWA Section 2507; provided, however, that nothing in the foregoing shall affect or alter any right Plaintiffs may have to seek administrative or judicial review of any such agency decision.

D. The parties agree that this Agreement is not intended to be used in subsequent litigation to establish either a point of law or fact; provided, however, that the foregoing shall in no way effect the binding nature of this Agreement or the parties' respective obligations pursuant to this Agreement, nor shall the parties be precluded from establishing the existence or content of this Agreement in either subsequent litigation or subsequent proceedings in this lawsuit where the terms or existence of the Agreement may be at issue, including, without limitation, any action to enforce the terms of this Agreement.

E. Nothing in this Agreement shall be construed to deprive a federal official of authority to revise, amend or promulgate regulations. Nothing in this Agreement shall be construed to commit a federal official to expend funds not appropriated by Congress. The signatories of this Agreement represent and warrant, evidenced by their signatures below, that they have the legal capacity to enter into this Agreement and bind themselves and the parties upon whose behalf they act.

SETTLEMENT AGREEMENT - 7

F. This Agreement is effective as of the last date of the signatures set forth below.

In witness whereof, the parties have executed this Agreement on the dates specified below:

FOR PLAINTIFFS

DATED this 10th day of November, 1999.

[Signature]
Greater Owyhee Legal Defense

DATED this 10th day of November, 1999.

[Signature]
The Wilderness Society

DATED this 10th day of November, 1999.

[Signature]
Committee for Idaho's High Desert

DATED this 10th day of November, 1999.

[Signature]
Idaho Conservation League

DATED this _____ day of _____, 1999.

Foundation for North America Wild Sheep

DATED this 16th day of Nov, 1999.

[Signature]
Idaho Wildlife Federation

DATED this 12th day of November, 1999.

[Signature]
Idaho Rivers United

SETTLEMENT AGREEMENT - 8

- Exhibit 1: Stipulation and Order of Dismissal, GOLD I
- Exhibit 2: Stipulation and Order of Dismissal, B-1B case
- Exhibit 3: Stipulation and Order of Dismissal, GOLD II
- Exhibit 4: Stipulation and Order of Dismissal, IBLA Appeal
- Exhibit 5: Record of Decision for the Air Force in Idaho (March 11, 1992)
- Exhibit 6: Enhanced Training in Idaho Record of Decision (March 10, 1998)
- Exhibit 7: Supplement to Record of Decision for the United States Air Force Enhanced Training in Idaho (September 14, 1998)
- Exhibit 8: Enhanced Training in Idaho Memorandum of Understanding Between the Bureau of Land Management and the United States Air Force (June 11, 1998)
- Map 1: ETI EIS Figure 2.3-3
- Map 2: ETI EIS Figure 2.3-15
- Map 3: Owyhee Supersonic Restriction
- Map 4: 45 Ranch Bighorn Lambing Overflight Restriction

80110930.06

SETTLEMENT AGREEMENT - 11

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF IDAHO

GREATER OWYHEE LEGAL DEFENSE
("GOLD"), an unincorporated association with
membership including the Idaho Conservation
League, Idaho Wildlife Federation, Idaho
Wildlife Council Region 3, Idaho Rivers United,
The Wilderness Society, Committee for Idaho's
High Desert, Foundation for North American
Wild Sheep, and individual members William
Clark, Brian Goller, Phil Lansing, Arthur T.
Manning, Audrey Lynn Howard, Claire
Manning-Dick, Frances A. Prior, Delbert Jim,
Kenneth Harney Jr., Richard C. Dick, T. Gibson,
and Karen A. Jimmy,

Plaintiff,

vs.

UNITED STATES DEPARTMENT OF
DEFENSE; WILLIAM S. COHEN, Secretary,
Department of Defense; F. WHITTEN PETERS,
Acting Secretary, United States Air Force;
UNITED STATES DEPARTMENT OF THE
INTERIOR; BRUCE BABBITT, Secretary,
Department of the Interior; BUREAU OF LAND
MANAGEMENT,

Defendants.

Case No. CIV 92-0189 S BLW

STIPULATION OF
DISMISSAL

Exhibit 1

FOR PLAINTIFFS

By: Murray D. Feldman
Murray D. Feldman,

Date: Nov 15, 1999

By: Laird J. Lucas
Laird J. Lucas
For Land and Water Fund of the Rockies
Attorneys for Plaintiff GOLD

Date: 11/15/99

FOR DEFENDANTS

By: D. Marc Haws
D. Marc Haws
Assistant United States Attorney

Date: Nov 16th, 1999

By: Peter E. Bogy
Peter E. Bogy
Special Assistant United States Attorney

Date: 11/16/99

OFFICE OF FIELD SOLICITOR
DEPARTMENT OF INTERIOR

By: William M. Ferry
William M. Ferry
Attorney, Field Solicitor's Office
U.S. Department of Interior

Date: 11/16/1999

STIPULATION OF DISMISSAL - 3

CERTIFICATE OF SERVICE

I hereby certify that on this 18th day of November, 1999, I caused to be served a true and correct copy of the foregoing by the method indicated below, and addressed to the following:

D. Marc Haws
U.S. Attorney's Office
First Interstate Center
877 Main Street, Suite 201
Boise, ID 83702

U.S. Mail
 Hand Delivered
 Overnight Mail
 Telecopy (Fax)

Peter E. Bogy
Air Force Environmental Law
and Litigation Department
AFLSA/JACE
1501 Wilson Blvd., Suite 629
Arlington, VA 22209

U.S. Mail
 Hand Delivered
 Overnight Mail
 Telecopy (Fax)

William M. Ferry
Department of Interior
Field Solicitor's Office
550 West Fort Street
MSC 020
Boise, ID 83724-0020

U.S. Mail
 Hand Delivered
 Overnight Mail
 Telecopy (Fax)



Boise:0112792.01762490.1000

Betty H. Richardson
United States Attorney
D. Marc Haws
Assistant United States Attorney
Peter E. Bogy
Special Assistant United States Attorney
District of Idaho
First Interstate Center
877 West Main Street, Suite 201
Boise, Idaho 83702
Telephone: (208) 334-1211
Mailing Address:
Box 32
Boise, Idaho 83707

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF IDAHO

THE WILDERNESS SOCIETY, IDAHO)
RIVERS UNITED, IDAHO)
CONSERVATION LEAGUE,)
FOUNDATION FOR NORTH AMERICAN)
WILD SHEEP, IDAHO WILDLIFE)
FEDERATION and COMMITTEE FOR)
IDAHO'S HIGH DESERT,)
)
Plaintiffs,)
vs.)
)
UNITED STATES DEPARTMENT OF)
DEFENSE; WILLIAM S. COHEN,)
Secretary, Department of Defense;)
UNITED STATES AIR FORCE;)
SHEILA E. WIDNALL, Secretary, United)
States Air Force,)
)
Defendants.)

Cv. No. 96-0326-S-BLW
STIPULATION OF DISMISSAL

Exhibit-2

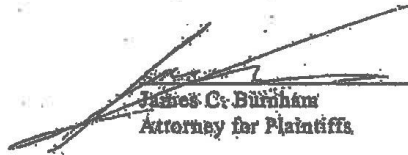
Plaintiffs The Wilderness Society, Idaho Rivers United, Idaho Conservation League, Foundation for North American Wild Sheep, Idaho Wildlife Federation and Committee for Idaho's High Desert and United States Department of Defense, William S. Cohen, Secretary of Defense, United States Air Force, and Sheila E. Widnall, Secretary, United States Air Force (collectively "Air Force"), without admitting or conceding wrongdoing or liability and without waiving objections or defenses, pursuant to Fed. R. Civ. P. 41(a)(1)(ii), hereby agree and stipulate to the dismissal of all claims in this action, as follows:

1. All claims relating to the Air Force's proposal to move the 34th Bomb Squadron from Ellsworth Air Force Base to Mountain Home Air Force Base are dismissed with prejudice to the Plaintiffs' right to file a lawsuit to challenge, on National Environmental Policy Act ("NEPA") adequacy grounds or otherwise, the final Air Force decisionmaking on the Final Environmental Assessment for the Proposed Relocation of the 34th Bomb Squadron to Mountain Home AFB, Idaho dated May 1996 and associated Finding of No Significant Impact dated May 28, 1996.

2. All claims concerning attorneys' fees and costs and expenses of litigation are dismissed with prejudice, pursuant to the Attorneys' Fees Agreement by and between attorneys for Plaintiffs and the government dated November 10, 1999.

STIPULATION OF DISMISSAL - 1

DATED this 15th day of November, 1999.


James C. Burdick
Attorney for Plaintiff

STIPULATION OF DISMISSAL - 2

DATED this 15th day of November, 1999.

BETTY H. RICHARDSON
UNITED STATES ATTORNEY

By: *D. Marc Haws*
D. Marc Haws
Assistant United States Attorney

By: *Peter E. Bogy*
Peter E. Bogy
Special Assistant United States Attorney

STIPULATION OF DISMISSAL - 3

CERTIFICATE OF SERVICE

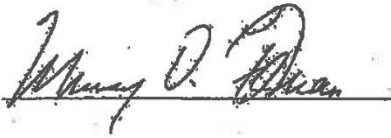
I hereby certify that on this 18th day of November, 1999, I caused to be served a true and correct copy of the foregoing by the method indicated below, and addressed to the following:

D. Marc Haws
U.S. Attorney's Office
First Interstate Center
877 Main Street, Suite 201
Boise, ID 83702

U.S. Mail
 Hand Delivered
 Overnight Mail
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Peter E. Bogy
Air Force Environmental Law
and Litigation Department
AFLSA/JACE
1501 Wilson Blvd., Suite 629
Arlington, VA 22209

U.S. Mail
 Hand Delivered
 Overnight Mail
 Telecopy (Fax)



Boise:0112801.01/62499.1000

STIPULATION OF DISMISSAL - 4

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF IDAHO

GREATER OWYHEE LEGAL DEFENSE)
("GOLD"), an unincorporated association)
with membership including the Idaho)
Conservation League, Idaho Wildlife)
Federation, Idaho Wildlife Council Region)
3, Idaho Rivers United, The Wilderness)
Society, Committee for Idaho's High)
Desert, Foundation for North American)
Wild Sheep, and individual members Brian)
Goller, Jay Christopher Hormel, and)
LuAnne Hormel;)
Plaintiffs,)

Case No. CIV98-0162-S-BLW

STIPULATION OF DISMISSAL

vs.)

COLONEL GERALD F. ("FRED") PEASE,)
JR.; BRENDA COOK; LIEUTENANT)
GENERAL PATRICK K. GAMBLE;)
RODNEY A COLEMAN; UNITED)
STATES DEPARTMENT OF DEFENSE;)
WILLIAM COHEN, Secretary of Defense;)
UNITED STATES AIR FORCE; DARYL)
L. JONES, Secretary-Designate, United)
States Air Force; STATE OF IDAHO,)
PHILIP E. BATT, Governor of Idaho;)
STAN HAMILTON, Director of IDAHO)
DEPARTMENT OF LANDS; IDAHO)
STATE LAND BOARD,)
Defendants.)

Exhibit 3

Plaintiff Greater Owyhee Legal Defense ("GOLD") ("Plaintiffs") and United States Air Force and Department of Defense (collectively the "Air Force"), without admitting or conceding wrongdoing or liability and without waiving objections or defenses, pursuant to Fed. R. Civ. P. 41(a)(1)(ii), hereby agree and stipulate to the dismissal of all claims in this action, as follows:

1. All claims relating to the Air Force's proposal for Enhanced Training in Idaho are dismissed with prejudice to the Plaintiffs' right to file a lawsuit to challenge, on National Environmental Policy Act ("NEPA") adequacy grounds or otherwise, the final Air Force decisionmaking on the Final Environmental Impact Statement covering the "Enhanced Training in Idaho" ("ETI EIS") dated January 19, 1998, and the associated Record of Decision ("ROD") dated March 10, 1998 and Supplemental Record of Decision dated September 14, 1998.

2. Nothing in this Stipulated Dismissal shall be construed as a statement, acknowledgment, concession, or admission by the Plaintiff as to the legal or technical adequacy or correctness of any of the decisions, environmental documents (including without limitation National Environmental Policy Act documents) or analysis challenged in this litigation. Further, nothing in this Stipulation of Dismissal shall affect the Plaintiff's right to file a new lawsuit, based on National Environmental Policy Act adequacy grounds or otherwise, challenging Air Force final decisions other than those specifically addressed by this Stipulated Dismissal and underlying Settlement Agreement.

STIPULATION OF DISMISSAL - 1

3. All claims concerning attorneys' fees and costs and expenses of litigation are dismissed with prejudice, pursuant to the Attorneys' Fees Agreement by and between attorneys for Plaintiffs and the government dated November 10, 1999.

4. Attached hereto as Exhibit A and incorporated by reference is a true and correct copy of the Settlement Agreement signed by Plaintiff and Defendants and their counsel in this case. The parties agree that this Court should retain express jurisdiction over the compromise and settlement of this matter, and incorporate the terms of the Settlement Agreement by reference in the Order of Dismissal for purposes of enforcing the Settlement Agreement.

STIPULATION OF DISMISSAL - 2

FOR PLAINTIFFS

By: Murray D. Feldman
Murray D. Feldman,
Date: Nov. 15 1999

By: Laird J. Lucas
Laird J. Lucas
For Land and Water Fund of the Rockies
Attorneys for Plaintiff GOLD
Date: 11/15/99

FOR DEFENDANTS

By: D. Marc Haws
D. Marc Haws
Assistant United States Attorney
Date: Nov 15th, 1999

By: Peter E. Bogy
Peter E. Bogy
Special Assistant United States Attorney
Date: 11/15/99

STIPULATION OF DISMISSAL - 3

CERTIFICATE OF SERVICE

I hereby certify that on this 18th day of November, 1999, I caused to be served a true and correct copy of the foregoing by the method indicated below, and addressed to the following:

D. Marc Haws
U.S. Attorney's Office
First Interstate Center
877 Main Street, Suite 201
Boise, ID 83702

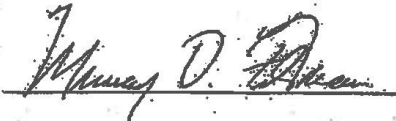
U.S. Mail
 Hand Delivered
 Overnight Mail
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Peter E. Bogy
Air Force Environmental Law
and Litigation Department
AFLEA/JACE
1561 Wilson Blvd., Suite 629
Arlington, VA 22209

U.S. Mail
 Hand Delivered
 Overnight Mail
 Telecopy (Fax)

C. Nicholas Krems
Deputy Attorney General
700 W. Jefferson Street, Room 210
P.O. Box 83720
Boise, ID 83720-0010

U.S. Mail
 Hand Delivered
 Overnight Mail
 Telecopy (Fax)



Boise: (208) 672-4904

STIPULATION OF DISMISSAL - 4

UNITED STATES DEPARTMENT OF INTERIOR

OFFICE OF HEARINGS AND APPEALS

Interior Board of Land Appeals
4915 Wilson Boulevard
Arlington, Virginia 22203

IBLA 99-216

IBI-32274

THE WILDERNESS SOCIETY &
THE COMMITTEE FOR IDAHO'S HIGH
DESERT

Juniper Butte Withdrawal Act
Rights-of-Way Applications

v.

BUREAU OF LAND MANAGEMENT

STIPULATION OF DISMISSAL

Appellants, The Wilderness Society and Committee for Idaho's High Desert and Bureau of Land Management ("BLM"), without admitting or conceding wrongdoing or liability and without waiving objections or defenses, hereby agree and stipulate to the dismissal of all claims in this action, as follows:

1. All claims relating to the Appellants' application for appeal of the January 29, 1999 Decision of the Lower Snake River District Manager, Bureau of Land Management ("BLM"), granting right-of-way (ROW) IBI-32274 to the Army Corps of Engineers, on behalf of the United States Air Force, for access roads and emitter sites to be used in conjunction with land withdrawn in association with the Juniper Butte Range Withdrawal for the Enhanced Training in Idaho proposal are dismissed pursuant to the parties' Settlement Agreement herein.

A proposed Order granting dismissal of this matter is filed herewith.

Exhibit 4

DATED this 10th day of November, 1999.

The Wilderness Society

C. J. Polub

Committee for Idaho's High Desert

Natasha Bickel

ACKNOWLEDGED:

By: *William M. Ferry*
William M. Ferry
Attorney, Boise Field Solicitor's Office
U.S. Department of Interior
FOR BUREAU OF LAND MANAGEMENT

By: *Peter E. Bogy*
Peter E. Bogy
Attorney, U.S. Air Force

Boise\0112607.01

Plaintiff Greater Owyhee Legal Defense ("GOLD") ("Plaintiffs") and United States Air Force, Department of Defense, Department of the Interior, and Bureau of Land Management (collectively "Defendants"), without admitting or conceding wrongdoing or liability and without waiving objections or defenses, pursuant to Fed. R. Civ. P. 41(a)(1)(ii), hereby agree and stipulate to the dismissal of all claims in this action, as follows:

1. All remaining claims in the Second Amended Complaint relating to the Air Force's beddown of a composite wing at Mountain Home Air Force Base are dismissed with prejudice to the Plaintiffs' right to file a lawsuit to challenge, on National Environmental Policy Act ("NEPA") adequacy grounds or otherwise, the Air Force decisionmaking on the Final Environmental Impact Statement covering "Proposals for the Air Force in Idaho" dated January 1992 ("AFI EIS") and the associated Record of Decision ("ROD") dated March 11, 1992. *(Composite Wing)*

2. All claims relating to the Department of Interior and Bureau of Land Management in conjunction with the beddown of the Air Force Composite Wing at Mountain Home Air Force Base and the AFI EIS and ROD are dismissed with prejudice, based on the terms and conditions of the parties' Settlement Agreement dated November 10, 1999 attached hereto and incorporated by reference.

3. Nothing in this Stipulated Dismissal shall be construed as a statement, acknowledgment, concession, or admission by the Plaintiff as to the legal or technical adequacy or correctness of any of the decisions, environmental documents (including without limitation National Environmental Policy Act documents) or analysis challenged in this litigation. Further, nothing in this Stipulation of Dismissal shall affect the Plaintiff's right to file a new lawsuit, based on National Environmental Policy Act adequacy grounds or otherwise, challenging Air Force or Department of Interior/Bureau

STIPULATION OF DISMISSAL - 1

of Land Management final decisions other than those specifically addressed by this Stipulated Dismissal and underlying Settlement Agreement.

4. All claims concerning attorneys' fees and costs and expenses of litigation are dismissed with prejudice, pursuant to the Attorneys' Fees Agreement by and between attorneys for Plaintiffs and Defendants dated November 10, 1999.

5. Attached hereto as Exhibit A and incorporated by reference is a true and correct copy of the Settlement Agreement signed by Plaintiff and Defendants and their counsel in this case. The parties agree that this Court should retain express jurisdiction over the compromise and settlement of this matter, and incorporate the terms of the Settlement Agreement by reference in the Order of Dismissal for purposes of enforcing the Settlement Agreement.

STIPULATION OF DISMISSAL - 2

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APPENDIX C
AIR QUALITY

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C.1 Air Quality

This appendix presents calculations used for the air quality analyses presented in the Air Quality sections of this Environmental Assessment. A Record of Conformity Analysis precedes the detailed Air Conformity Applicability Model (ACAM) Report for the Juniper Butte Range, Mountain Home Range Complex for the Proposed Action and No Action Alternative. Juniper Butte Range activities are located in Owyhee County and Twin Falls County in Idaho. The area is designated attainment for all criteria pollutants. Accordingly, a conformity analysis is not required. Estimates of emissions are summarized in Chapter 4. Detailed summary reports for each alternative are provided after each Air Quality summary report. Each report includes a general description of the project, the calculations used to estimate emissions, and timeline assumptions made for the project as well as ongoing emissions once the project is completed.

There were some ACAM data assumptions made in lieu of missing base-specific data, and the key ones are provided, as follows:

- Start dates for construction/demolition activities are assumed to be CY2023. Unless otherwise stated, most of the projects were either assumed to begin in CY2018 and end in CY2022.
- Building heights for construction and demolition activities are assumed based on the type of building or structure (e.g. 10 feet for administrative buildings)
- Duration of construction are assumed based on the scale of the project, with a maximum duration of 24 months for construction projects of 30,000 square feet (sf) or more.
- Site grading duration is assumed to be one month of duration for site grading for facilities with construction area of 50,000 sf or less, and two months for facilities with construction area of greater than 50,000 sf.
- Duration of trenching was estimated based on an online calculator based on total linear meters of trenching required for the project.
- Trenching area was assumed to be same as for grading. Using the linear meters and an assumed width for trenching, the area to be trenched was estimated.
- Assumed the dirt removed during trenching can be used for backfilling for utility trenching; in this case, no dirt will need to be hauled off or on.
- Emissions from personnel commute to and from the Mountain Home Air Force Base (AFB) and Juniper Butte Range is performed for 30 personnel.
- ACAM defaults were used in lieu of base-specific data, where possible.
- For No Action Alternative projects, only emissions associated with worker commute and backup generators was estimated as there was no specific data on other types of activities, such as aircraft operations.

C.2 Project Calculations

This section presents an export of results directly from the air quality modeling software, retaining the organizational headings and table formatting produced by the software.

**AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)**

Analysis Summary:

2018

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-0.201	100	No
NOx	-0.252	100	No
CO	-2.013	100	No
SOx	-0.015	100	No
PM 10	-0.020	100	No
PM 2.5	-0.019	100	No
Pb	0.000	100	No
NH3	-0.010	100	No
CO2e	-162.4		

2019

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-0.201	100	No
NOx	-0.252	100	No
CO	-2.013	100	No
SOx	-0.015	100	No
PM 10	-0.020	100	No
PM 2.5	-0.019	100	No
Pb	0.000	100	No
NH3	-0.010	100	No
CO2e	-162.4		

2020

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-0.201	100	No
NOx	-0.252	100	No
CO	-2.013	100	No
SOx	-0.015	100	No
PM 10	-0.020	100	No
PM 2.5	-0.019	100	No
Pb	0.000	100	No
NH3	-0.010	100	No
CO2e	-162.4		

2021

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-0.201	100	No
NOx	-0.252	100	No
CO	-2.013	100	No
SOx	-0.015	100	No
PM 10	-0.020	100	No
PM 2.5	-0.019	100	No
Pb	0.000	100	No
NH3	-0.010	100	No
CO2e	-162.4		

2022

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-0.201	100	No
NOx	-0.252	100	No
CO	-2.013	100	No
SOx	-0.015	100	No
PM 10	-0.020	100	No
PM 2.5	-0.019	100	No
Pb	0.000	100	No
NH3	-0.010	100	No
CO2e	-162.4		

2023

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.419	100	No
NOx	2.295	100	No
CO	3.258	100	No
SOx	0.008	100	No
PM 10	24.514	100	No
PM 2.5	0.091	100	No
Pb	0.000	100	No
NH3	0.001	100	No
CO2e	736.5		

2024 - (Steady State)

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.000	100	No
NO _x	0.000	100	No
CO	0.000	100	No
SO _x	0.000	100	No
PM 10	0.000	100	No
PM 2.5	0.000	100	No
Pb	0.000	100	No
NH ₃	0.000	100	No
CO _{2e}	0.0		

None of estimated emissions associated with this action are above the GCR indicators, indicating no significant impact to air quality; therefore, no further air assessment is needed.



Radhika Narayanan, Contractor

03/28/2019

1. General Information

- Action Location

Base: MOUNTAIN HOME AFB
County(s): Owyhee; Twin Falls
Regulatory Area(s): NOT IN A REGULATORY AREA

- Action Title: JUNIPER BUTTE LAND WITHDRAWAL EXTENSION - MOUNTAIN HOME AFB, IDAHO

- Project Number/s (if applicable):

- Projected Action Start Date: 1 / 2018

- Action Purpose and Need:

The United States Air Force (Air Force) and 366th Fighter Wing (366 FW) propose to extend the withdrawal of public lands established in October 1998 under the *Juniper Butte Range Withdrawal Act* of 1999, Public Law (PL) 105-261, at Mountain Home Range Complex associated with Mountain Home Air Force Base (AFB), Idaho. Under PL 105-261, approximately 11,300 acres of public land from the Department of Interior (DOI), Bureau of Land Management (BLM) was withdrawn to the Air Force for military training use. PL 105-9 261 will expire in 2023; therefore, the Air Force is proposing to extend the withdrawal for continued military training use.

- Action Description:

The Air Force proposes to extend the withdrawal of public land as described in PL 105-261 at the Mountain Home Range Complex, Idaho. The *Juniper Butte Range Withdrawal Act* reserved approximately 11,816 acres of public land for military use: a tactical training range, no-drop targets, and emitter sites.

Under the No Action Alternative or Alternative in ACAM, the withdrawal of public lands would not be extended for military training use, and the lands described under the Proposed Action would be relinquished back to the BLM.

- Point of Contact

Name: Radhika Narayanan
Title: Contractor
Organization: Versar, Inc.
Email:
Phone Number: (757) 557-0810

- Activity List:

Activity Type		Activity Title
2.	Construction / Demolition	Demolition and removal of facilities at Mountain Home Range Complex as part of No Action Alternative
3.	Personnel	Juniper Butte Range Personnel Commuting (Baseline Emissions)
4.	Emergency Generator	Backup Generators at the Juniper Butte Range (Part of Baseline Ground-Based Operational Emissions)

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location

County: Owyhee; Twin Falls
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Demolition and removal of facilities at Mountain Home Range Complex as part of No Action Alternative

- Activity Description:

Upon termination of the land withdrawal, under PL 105-261, lands would be relinquished to the BLM. Approximately 12,500 square feet of building infrastructure would either be demolished or removed, and approximately 62,082 linear feet of boundary and interior fencing would be dismantled and removed.

- Activity Start Date

Start Month: 1
Start Month: 2023

- Activity End Date

Indefinite: False
End Month: 12
End Month: 2023

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	0.418626
SO _x	0.007672
NO _x	2.294979
CO	3.257666
PM 10	24.513573

Pollutant	Total Emissions (TONs)
PM 2.5	0.090602
Pb	0.000000
NH ₃	0.001373
CO _{2e}	736.5

2.1 Demolition Phase

2.1.1 Demolition Phase Timeline Assumptions

- Phase Start Date

Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration

Number of Month: 10
Number of Days: 0

2.1.2 Demolition Phase Assumptions

- General Demolition Information

Area of Building to be demolished (ft²): 12500
Height of Building to be demolished (ft): 12

- Default Settings Used: Yes

- Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Concrete/Industrial Saws Composite	1	8
Rubber Tired Dozers Composite	1	1
Tractors/Loaders/Backhoes Composite	2	6

- Vehicle Exhaust

Average Hauling Truck Capacity (yd³): 20 (default)
 Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.1.3 Demolition Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Concrete/Industrial Saws Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0382	0.0006	0.2766	0.3728	0.0127	0.0127	0.0034	58.549
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.316	000.002	000.241	003.506	000.009	000.008		000.023	00320.042
LDGT	000.378	000.003	000.413	004.709	000.011	000.010		000.024	00411.658
HDGV	000.691	000.005	001.080	015.443	000.024	000.021		000.044	00752.986
LDDV	000.131	000.003	000.136	002.381	000.004	000.004		000.008	00308.501
LDDT	000.266	000.004	000.387	004.046	000.007	000.006		000.008	00437.634
HDDV	000.538	000.013	005.426	001.822	000.169	000.155		000.029	01481.841
MC	002.411	000.003	000.857	013.650	000.027	000.024		000.054	00397.874

2.1.4 Demolition Phase Formula(s)

- Fugitive Dust Emissions per Phase

$$PM10_{FD} = (0.00042 * BA * BH) / 2000$$

PM10_{FD}: Fugitive Dust PM 10 Emissions (TONs)
 0.00042: Emission Factor (lb/ft³)
 BA: Area of Building to be demolished (ft²)
 BH: Height of Building to be demolished (ft)
 2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)
 NE: Number of Equipment
 WD: Number of Total Work Days (days)

H: Hours Worked per Day (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hour)
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = BA * BH * (1 / 27) * 0.25 * (1 / HC) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
BA: Area of Building being demolish (ft²)
BH: Height of Building being demolish (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd³ / 27 ft³)
0.25: Volume reduction factor (material reduced by 75% to account for air space)
HC: Average Hauling Truck Capacity (yd³)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.2 Site Grading Phase

2.2.1 Site Grading Phase Timeline Assumptions

- Phase Start Date

Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration

Number of Month: 2
Number of Days: 0

2.2.2 Site Grading Phase Assumptions

- General Site Grading Information

Area of Site to be Graded (ft²): 186246
 Amount of Material to be Hauled On-Site (yd³): 0
 Amount of Material to be Hauled Off-Site (yd³): 0

- Site Grading Default Settings

Default Settings Used: Yes
 Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Graders Composite	1	8
Other Construction Equipment Composite	1	8
Rubber Tired Dozers Composite	1	8
Tractors/Loaders/Backhoes Composite	2	7

- Vehicle Exhaust

Average Hauling Truck Capacity (yd³): 20 (default)
 Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HdGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HdGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.2.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Graders Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0757	0.0014	0.4155	0.5717	0.0191	0.0191	0.0068	132.91
Other Construction Equipment Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0483	0.0012	0.2497	0.3481	0.0091	0.0091	0.0043	122.61
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH₃	CO_{2e}
LDGV	000.316	000.002	000.241	003.506	000.009	000.008		000.023	00320.042
LDGT	000.378	000.003	000.413	004.709	000.011	000.010		000.024	00411.658
HDGV	000.691	000.005	001.080	015.443	000.024	000.021		000.044	00752.986
LDDV	000.131	000.003	000.136	002.381	000.004	000.004		000.008	00308.501
LDDT	000.266	000.004	000.387	004.046	000.007	000.006		000.008	00437.634
HDDV	000.538	000.013	005.426	001.822	000.169	000.155		000.029	01481.841
MC	002.411	000.003	000.857	013.650	000.027	000.024		000.054	00397.874

2.2.4 Site Grading Phase Formula(s)

- Fugitive Dust Emissions per Phase

$$PM10_{FD} = (20 * ACRE * WD) / 2000$$

PM10_{FD}: Fugitive Dust PM 10 Emissions (TONs)
 20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
 ACRE: Total acres (acres)
 WD: Number of Total Work Days (days)
 2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)
 NE: Number of Equipment
 WD: Number of Total Work Days (days)
 H: Hours Worked per Day (hours)
 EF_{POL}: Emission Factor for Pollutant (lb/hour)
 2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
 HA_{OnSite}: Amount of Material to be Hauled On-Site (yd³)
 HA_{OffSite}: Amount of Material to be Hauled Off-Site (yd³)
 HC: Average Hauling Truck Capacity (yd³)
 (1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)
 HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
 VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
 0.002205: Conversion Factor grams to pounds
 EF_{POL}: Emission Factor for Pollutant (grams/mile)
 VM: Vehicle Exhaust On Road Vehicle Mixture (%)
 2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
 WD: Number of Total Work Days (days)
 WT: Average Worker Round Trip Commute (mile)

1.25: Conversion Factor Number of Construction Equipment to Number of Works
 NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL} : Vehicle Emissions (TONs)
 VMT_{WT} : Worker Trips Vehicle Miles Travel (miles)
 0.002205: Conversion Factor grams to pounds
 EF_{POL} : Emission Factor for Pollutant (grams/mile)
 VM: Worker Trips On Road Vehicle Mixture (%)
 2000: Conversion Factor pounds to tons

2.3 Trenching/Excavating Phase

2.3.1 Trenching / Excavating Phase Timeline Assumptions

- Phase Start Date

Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration

Number of Month: 11
Number of Days: 5

2.3.2 Trenching / Excavating Phase Assumptions

- General Trenching/Excavating Information

Area of Site to be Trenched/Excavated (ft²): 186246
Amount of Material to be Hauled On-Site (yd³): 0
Amount of Material to be Hauled Off-Site (yd³): 0

- Trenching Default Settings

Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Excavators Composite	2	8
Other General Industrial Equipment Composite	1	8
Tractors/Loaders/Backhoes Composite	1	8

- Vehicle Exhaust

Average Hauling Truck Capacity (yd³): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.3.3 Trenching / Excavating Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Graders Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0757	0.0014	0.4155	0.5717	0.0191	0.0191	0.0068	132.91
Other Construction Equipment Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0483	0.0012	0.2497	0.3481	0.0091	0.0091	0.0043	122.61
Rubber Tired Dozers Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CH ₄	CO _{2e}
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.316	000.002	000.241	003.506	000.009	000.008		000.023	00320.042
LDGT	000.378	000.003	000.413	004.709	000.011	000.010		000.024	00411.658
HDGV	000.691	000.005	001.080	015.443	000.024	000.021		000.044	00752.986
LDDV	000.131	000.003	000.136	002.381	000.004	000.004		000.008	00308.501
LDDT	000.266	000.004	000.387	004.046	000.007	000.006		000.008	00437.634
HDDV	000.538	000.013	005.426	001.822	000.169	000.155		000.029	01481.841
MC	002.411	000.003	000.857	013.650	000.027	000.024		000.054	00397.874

2.3.4 Trenching / Excavating Phase Formula(s)

- Fugitive Dust Emissions per Phase

$$PM10_{FD} = (20 * ACRE * WD) / 2000$$

PM10_{FD}: Fugitive Dust PM 10 Emissions (TONs)
 20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
 ACRE: Total acres (acres)
 WD: Number of Total Work Days (days)
 2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$$

CEE_{POL}: Construction Exhaust Emissions (TONs)
 NE: Number of Equipment
 WD: Number of Total Work Days (days)
 H: Hours Worked per Day (hours)
 EF_{POL}: Emission Factor for Pollutant (lb/hour)
 2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd³)
HA_{OffSite}: Amount of Material to be Hauled Off-Site (yd³)
HC: Average Hauling Truck Capacity (yd³)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd³)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$$VMT_{WT} = WD * WT * 1.25 * NE$$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

3. Personnel

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Remove

- Activity Location

County: Twin Falls; Owyhee
Regulatory Area(s): NOT IN A REGULATORY AREA

- **Activity Title:** Juniper Butte Range Personnel Commuting (Baseline Emissions)

- Activity Description:

A total of 30 personnel commute from Mountain Home AFB to the Juniper Butte Range and the various emitter sites (Page 12, Enhanced Training in Idaho: Final Environmental Impact Statement, Preface). Commute miles via restricted roads 92.5 miles from Mountain Home Range Complex to Murphy Hot Springs (nearest town to Juniper Butte Range). We have used average person round trip commute miles to be 45. These emissions are part of the baseline emissions for Juniper Butte Range Mountain Home Range Complex. They would be eliminated if No Action Alternative is implemented.

- Activity Start Date

Start Month: 1
Start Year: 2018

- Activity End Date

Indefinite: No
End Month: 12
End Year: 2022

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	-0.919127
SO _x	-0.005082
NO _x	-0.910304
CO	-9.832310
PM 10	-0.024223

Pollutant	Total Emissions (TONs)
PM 2.5	-0.021048
Pb	0.000000
NH ₃	-0.050493
CO _{2e}	-771.4

3.2 Personnel Assumptions

- Number of Personnel

Active Duty Personnel: 30
Civilian Personnel: 0
Support Contractor Personnel: 0
Air National Guard (ANG) Personnel: 0
Reserve Personnel: 0

- Default Settings Used: No

- Average Personnel Round Trip Commute (mile): 45

- Personnel Work Schedule

Active Duty Personnel: 5 Days Per Week
Civilian Personnel: 5 Days Per Week
Support Contractor Personnel: 5 Days Per Week
Air National Guard (ANG) Personnel: 4 Days Per Week
Reserve Personnel: 4 Days Per Month

3.3 Personnel On Road Vehicle Mixture

- On Road Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	37.55	60.32	0	0.03	0.2	0	1.9
GOVs	54.49	37.73	4.67	0	0	3.11	0

3.4 Personnel Emission Factor(s)

- On Road Vehicle Emission Factors (grams/mile)

	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
LDGV	000.385	000.002	000.323	003.939	000.011	000.010		000.025	00338.181
LDGT	000.470	000.003	000.550	005.514	000.013	000.011		000.026	00436.182
HDGV	000.837	000.005	001.388	017.877	000.028	000.025		000.044	00758.397
LDDV	000.143	000.003	000.154	002.364	000.004	000.004		000.008	00328.464
LDDT	000.334	000.004	000.499	004.644	000.007	000.006		000.008	00477.745
HDDV	000.632	000.013	006.525	002.102	000.222	000.204		000.029	01508.266
MC	002.434	000.003	000.862	014.024	000.028	000.025		000.053	00397.679

3.5 Personnel Formula(s)

- Personnel Vehicle Miles Travel for Work Days per Year

$$VMT_P = NP * WD * AC$$

VMT_P: Personnel Vehicle Miles Travel (miles/year)
NP: Number of Personnel
WD: Work Days per Year
AC: Average Commute (miles)

- Total Vehicle Miles Travel per Year

$$VMT_{Total} = VMT_{AD} + VMT_C + VMT_{SC} + VMT_{ANG} + VMT_{AFRC}$$

VMT_{Total}: Total Vehicle Miles Travel (miles)
VMT_{AD}: Active Duty Personnel Vehicle Miles Travel (miles)
VMT_C: Civilian Personnel Vehicle Miles Travel (miles)
VMT_{SC}: Support Contractor Personnel Vehicle Miles Travel (miles)
VMT_{ANG}: Air National Guard Personnel Vehicle Miles Travel (miles)
VMT_{AFRC}: Reserve Personnel Vehicle Miles Travel (miles)

- Vehicle Emissions per Year

$$V_{POL} = (VMT_{Total} * 0.002205 * EF_{POL} * VM) / 2000$$

V_{POL}: Vehicle Emissions (TONs)
VMT_{Total}: Total Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Personnel On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

4. Emergency Generator

4.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Remove

- Activity Location

County: Owyhee; Twin Falls
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Backup Generators at the Juniper Butte Range (Part of Baseline Ground-Based Operational Emissions)

- Activity Description:

The Description of Proposed Action and Alternatives does not indicate how many permanent emergency power backup generators are installed at the Juniper Butte Range Mountain Home Range Complex. The Air Force indicated there would be backup units in key facilities at Mountain Home Range Complex. Assumed three units (assumed to be MEP 806) for each of the three key facilities at the Juniper Butte Range. These emissions are likely to stop because of the No Action Alternative.

- Activity Start Date

Start Month: 1
Start Year: 2018

- Activity End Date

Indefinite: No
 End Month: 12
 End Year: 2022

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	-0.084746
SO _x	-0.071381
NO _x	-0.349313
CO	-0.233280
PM 10	-0.076241

Pollutant	Total Emissions (TONs)
PM 2.5	-0.076241
Pb	0.000000
NH ₃	0.000000
CO _{2e}	-40.4

4.2 Emergency Generator Assumptions

- Emergency Generator

Type of Fuel used in Emergency Generator: Diesel
 Number of Emergency Generators: 3

- Default Settings Used: Yes

- Emergency Generators Consumption

Emergency Generator's Horsepower: 135 (default)
 Average Operating Hours Per Year (hours): 30 (default)

4.3 Emergency Generator Emission Factor(s)

- Emergency Generators Emission Factor (lb/hp-hr)

VOC	SO _x	NO _x	CO	PM 10	PM 2.5	Pb	NH ₃	CO _{2e}
0.00279	0.00235	0.0115	0.00768	0.00251	0.00251			1.33

4.4 Emergency Generator Formula(s)

- Emergency Generator Emissions per Year

$$AE_{POL} = (NGEN * HP * OT * EF_{POL}) / 2000$$

AE_{POL}: Activity Emissions (TONs per Year)
 NGEN: Number of Emergency Generators
 HP: Emergency Generator's Horsepower (hp)
 OT: Average Operating Hours Per Year (hours)
 EF_{POL}: Emission Factor for Pollutant (lb/hp-hr)