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JOINT

LAND

USE





AUGUST 2010

Please see the next page.



C.L. "BUTCH" OTTER GOVERNOR

August 27, 2010

I am pleased to present the State of Idaho Joint Land Use Study (JLUS). This study was completed through the collaborative efforts of local, state, and federal officials, agency representatives, residents, land owners, business representatives, tribal government, citizens and military leadership from the Idaho National Guard and Mountain Home Air Force Base.

The study was completed with the assistance and support of a Department of Defense, Office of Economic Adjustment (OEA). A grant from OEA provided the resources for this "one of a kind" alliance so military and civilian partners could assess a comprehensive list of compatibility concerns, including land uses, and develop management strategies to prevent and minimize encroachment issues in the study area. The next phase of this project will be prioritizing and implementing short and long term plans and strategies proposed in the JLUS.

By its very design the study focus was on the needs of communities to accommodate growth, development and public health and safety, combined with the military's need to sustain and develop military readiness, future missions, and other national defense objectives.

I would like to express gratitude to everyone who participated in the Idaho JLUS program. The commitment and hard work of all participants will have a powerful and positive impact for years to come.

As Always – Idaho, "Esto Perpetua"

C.L. "Butch" Otter Governor of Idaho Please see the next page.

IDAHO

JOINT LAND USE STUDY



Idaho Department of Commerce 700 West State Street Boise, Idaho 83720

prepared by:



FINAL

August 2010

This study was prepared under contract with the Idaho Department of Commerce, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of the Department of Commerce and does not necessarily reflect the views of the Office of Economic Adjustment.



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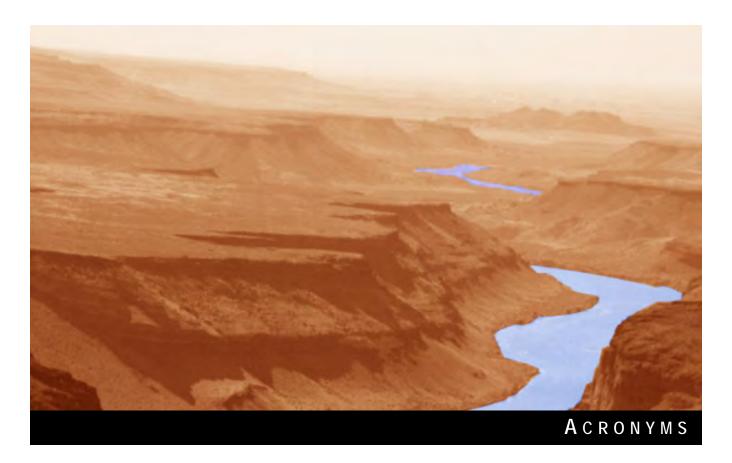
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Α

ABCZ	.Air Base Commercial Zone
ABHZ	.Air Base Hazard Zone
ACC	.Air Combat Command
ACHD	.Ada County Highway District
ACI	.Area of City Impact
ACZ	.Airport Commercial Zone
ADNL	.A-weighted (sound level)
АЕНІ	.Alternative Energy Holdings Inc.
4FB	.Air Force Base
4FI	.Air Force Instruction
4GL	.above ground level
4ΙΑ	.Airport Influence Area
AICUZ	.Air Installation Compatible Use Zone
ALS	assault landing strip
ANG	.Air National Guard
40I	.Area of Impact
APZ	.Accident Potential Zone
APZ I	.Accident Potential Zone I
APZ II	.Accident Potential Zone II
4R	Army Regulations
ARNG	.Army National Guard
ATCAA	.Air Traffic Control Assigned Airspace

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B BASHBird / Wildlife Aircraft Strike Hazard BLMBureau of Land Management BO.....Bureau of Reclamation BOIBoise Airport BRACBase Realignment and Closure BSU.....Boise State University С CDNLC-weighted CDOCommunity Development Overlay CGWA.....Critical Groundwater Area COMPASS......Community Planning Association of Southwest Idaho CUP.....conditional use permit CZClear Zone D dB.....decibel dBAA-Weighted Decibel dBP.....Unweighted Peak DNLDay-Night Average Sound Level DOA.....Department of Agriculture DOD......Department of Defense DOEDepartment of Energy DOI Department of Interior E EAenvironmental assessment EISenvironmental impact statement EODexplosives ordnance disposal EPAEnvironmental Protection Agency ESQDexplosive safety quanitity distance ETIEnhanced Training in Idaho EUAexclusive use area F FAA.....Federal Aviation Administration FAR.....floor area ratio FO.....Field Office FONSIFinding of No Significant Impact

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FRFO.....Four Rivers Field Office

G
GPGeneral Plan
GWMAgroundwater management areas
T .
IBCInternational Building Code
IDANGIdaho Air National Guard
IDARNGIdaho Army National Guard
IDFGIdaho Department of Fish and Game
IDLIdaho Department of Lands
IDNGIdaho National Guard
IFRInstrument Flight Rules
IMDIdaho Military Division
INMIntegrated Noise Model
INRMPIntegrated Natural Resource Management Plan
IRCInternational Residential Code
ITDIdaho Transportation Department
IWFMPIntegrated Wildland Fire Management Plan
J
JBRJuniper Butte Range
JLUSJoint Land Use Study
JPCJLUS Policy Committee
K
kVkilovolt
L _
LOSlevel-of-service
LUPZLand Use Planning Zone
LUPZLand Use Planning Zone
LUPZLand Use Planning Zone LRTPLong Range Transportation Plan
LUPZLand Use Planning Zone LRTPLong Range Transportation Plan LZLanding Zone
LUPZLand Use Planning Zone LRTPLong Range Transportation Plan LZLanding Zone
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LUPZLand Use Planning Zone LRTPLong Range Transportation Plan LZLanding Zone M MATESMobilization and Training Equipment Site MFPManagement Framework Plan
LUPZLand Use Planning Zone LRTPLong Range Transportation Plan LZLanding Zone MATESMobilization and Training Equipment Site MFPManagement Framework Plan MHAFBMountain Home Air Force Base
LUPZLand Use Planning Zone LRTPLong Range Transportation Plan LZLanding Zone MATESMobilization and Training Equipment Site MFPManagement Framework Plan MHAFBMountain Home Air Force Base MHRCMountain Home Range Complex
LUPZLand Use Planning Zone LRTPLong Range Transportation Plan LZLanding Zone MATESMobilization and Training Equipment Site MFPManagement Framework Plan MHAFBMountain Home Air Force Base MHRCMountain Home Range Complex MIAMilitary Influence Area

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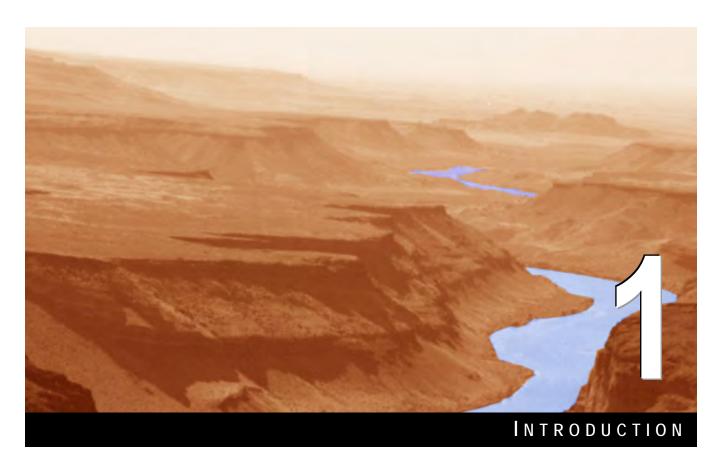
MSLmean sea level

MSA.....Munitions Storage Area

N

NACONational Association of Counties
NCANational Conservation Area
NEPANational Environmental Policy Act of 1969
NGOsNon-Governmental Organizations
NHPANational Historic Preservation Act
NOENap of the Earth
NRCSNational Resource and Conservation Service
NRHPNational Register of Historic Places
NVDnight vision device
NZsNoise Zones
O
OEAOffice of Economic Adjustment
OIOwyhee Initiative
OPDoperations per day
OTAOrchard Training Area
P
DEIG Des des sous et à l'accesse de l'Accesse de Chatesse et
PEISProgrammatic Environmental Impact Statement
PIRPrecision Instrument Runway Approach Zone
R
REPIReadiness and Environmental Protection Initiative
RMPResource Management Plan
RMPResource Management Plan ROWright of way
RMPResource Management Plan ROWright of way RPZRunway Protection Zone
RMPResource Management Plan ROWright of way
RMPResource Management Plan ROWright of way RPZRunway Protection Zone
RMPResource Management Plan ROWright of way RPZRunway Protection Zone
RMPResource Management Plan ROWright of way RPZRunway Protection Zone SAIASikes Act Improvement Act
RMPResource Management Plan ROWright of way RPZRunway Protection Zone SAIASikes Act Improvement Act SCAFRSaylor Creek Air Force Range
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RMPResource Management Plan ROWright of way RPZRunway Protection Zone SAIASikes Act Improvement Act SCAFRSaylor Creek Air Force Range SCSSoil Conservation Service SHPOState Historic Preservation Office SOPStandard Operating Procedure SUPSpecial Use Permit TWGTechnical Working Group U

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The military installations and operations in Idaho are critical to local, regional, and state economies, generating nearly 12,000 jobs and nearly \$1 billion in direct and indirect economic activity annually. This activity also results in significant tax revenues that accrue to these entities.

Throughout the country, incompatible development has been a factor in the curtailment or reduction of military training operations and / or restructuring of mission critical components to other installationstypically out of state. To protect the military mission in the State, the health of the economies and industries that rely on them, and consider the rights of adjacent private property owners, collaboration and joint planning among the installations, counties and local communities must occur throughout southwest Idaho. A mechanism used to foster collaboration and joint planning is the Joint Land Use Study (JLUS). The intent of the JLUS is to mitigate both existing and anticipated encroachment issues through improved coordination among stakeholders in the region: the Cities of Boise, Grand View, and Mountain Home; Ada, Elmore and Owyhee Counties; Mountain Home Air Force Base (AFB), Idaho National Guard, Shoshone Paiute Tribes, federal and state agencies, and the public.

Southwest Idaho is expected to experience economic and population growth in the future based on the extensive amount of open land, visibility and access afforded along the Interstate 84 corridor and continued development pressure in the southern portion of the Treasure Valley. As development interest and pressure continues to extend to the south and east of Boise and to the west of Mountain Home, a coordinated effort is needed to ensure growth is managed in a manner that allows the installations and their supportive training areas to achieve their many faceted roles in the nation's defense while remaining vital members of the local communities and major contributors to the regional and state economies. Similarly, the military must also acknowledge the rights of private property owners when evaluating mission expansion / contraction or new mission placement both within and outside the "fence".

1.1 What is a Joint Land Use Study?

A JLUS is a planning process accomplished through the collaborative efforts of a comprehensive list of stakeholders in a defined area of study. These stakeholders include local community and federal officials, residents, business owners, Native American tribal governments, and the military to identify compatible land uses and growth management guidelines within and adjacent to active military installations. The intent of the process is to establish and foster a working relationship among military installations and their proximate communities to act as a team to prevent and / or curtail encroachment issues associated with future mission expansion and local growth. Although primarily funded by the Department of Defense (DOD) Office of Economic Adjustment (OEA) a JLUS is produced by, and for, local stakeholders.

JLUS Goal

The goal of the Idaho JLUS is to protect the viability of current and future missions at Mountain Home Air Force Base (MHAFB), Mountain Home Range Complex (MHRC), Gowen Field, and Orchard Training Area (OTA), while at the same time guiding growth, sustaining the economic health of the region, and protecting public health and safety.

JLUS Objectives

To help meet this goal, three primary objectives were identified.

Understanding. Convene community and military representatives to identify, confirm and understand the issues in an open forum, taking into consideration both community and military viewpoints and needs. This includes public awareness, education and input organized in a cohesive outreach program.

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- Collaboration. Encourage cooperative land use and resource planning between associated military installations and surrounding communities so that future community growth and development are compatible with the training and operational missions at each installation while at the same time seeking ways to reduce operational impacts on adjacent lands.
- Actions. Provide a set of mutually supported tools, activities, and procedures from which local jurisdictions, agencies, and the installation can select, prepare and approve / adopt and then use to implement the recommendations developed during the JLUS process. The actions proposed include both operational measures to mitigate installation impacts and local government and agency approaches to reduce impacts on military operations. These tools will help decision makers resolve compatibility issues and prioritize projects within the annual budgeting process of their respective entity / jurisdiction.

1.2 Why Prepare a Joint Land Use Study?

What is a compatibility issue?

Section 3 lists 24 factors commonly used to categorize compatibility issues.
Compatibility issues can cover a wide range of concerns.
Sample issues discussed in this JLUS include:

- Noise impacts associated with range usage at OTA
- Urban growth near OTA
- Aircraft noise in the region

In addition to the many positive interactions between local jurisdictions, agencies, and the military, the activities or actions of one entity can also pose unintended negative impacts on another, resulting in conflicts. As the jurisdictions develop and expand in response to growth and market demands, land use approvals have the ability to locate urban development closer to military installations and operational / training areas. The result can initiate new or foster existing land use and other compatibility issues, often referred to as encroachment, which can have negative impacts on community safety, economic development, and sustainment of military activities and readiness. This threat to military readiness activities is currently one of the military's greatest concerns.

Collaboration and joint planning among military installations and local communities and agencies should occur to protect the long-term viability of existing and future military missions. Working together also enhances the health of economies and industries of the communities before incompatibility becomes an issue. Recognizing the close relationship that should exist between installations and adjacent communities, the DOD-OEA implemented the JLUS program in an effort to mitigate existing and future conflicts and enhance communication and coordination among all affected stakeholders. This program endeavors to preserve the sustainability of local communities while protecting current and future operational and training missions at MHAFB, MHRC, Gowen Field, and OTA.

Regional Economic and Local Importance

Located in southwest Idaho, each of these military installations and operations areas provides a significant contribution to the local and regional economies. The following provides an overview of this positive impact.

MHAFB / MHRC

Economically, MHAFB generates a significant economic impact on the City of Mountain Home and the surrounding Treasure Valley region. In fiscal year 2008, the Base had an estimated local economic impact of over \$1 billion, as summarized below:

- Total Annual Payroll \$694 million
- Total Annual Construction and Procurement \$312 million

Note: The amounts above are based on a Gross Multiplier Index (GMI) of 1.90 provided by the Boise State University Department of Economic.

Total employment at the base is just under 5,100 with approximately 4,200 military personnel and over 900 civilian (appropriated and non-appropriated) personnel.

Even though the MHRC has work locations, it does not have any permanently assigned on-site personnel.

GOWEN FIELD / OTA

The economic impact of the Idaho National Guard, including Gowen Field, for fiscal year 2008 was estimated at approximately \$304 million. The total impact is summarized as follows:

- Federal \$286 million
 - o Pay and Allowances \$179 million
 - o Construction \$11 million
 - o Goods and Services \$61 million
 - o Other \$35 million
- State \$18 million

The Idaho Army National Guard and Air Guard at Gowen Field are one of the top 20 employers within the greater Treasure Valley region. Currently, a total of more than 1,700 employees are located within the installation, comprised of over 200 civilians and 1,500 permanent-party military personnel.

Military Strategic Importance

MOUNTAIN HOME AIR FORCE BASE (MHAFB)

Throughout its history, MHAFB has served as the host of, and provided training airspace, for a wide range of bomber (i.e., B-24, B-29, B-47, B-52, B-1), fighter (i.e., P-38, P-63, F-4, F-111, F-15, and F-16) and communications / refueling / reconnaissance (i.e., C-19, SA-1-6/KB-29H, KC-97, KC-135/RF-4C) pilots. The base has been stationed with an array of bomber aircraft since its opening in 1943 that were vital to many worldwide missions over the past

See Section 2.1 for more information on the military units described in this section.

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66 years. Today, the majority of training and operational activity that takes place at MHAFB and the MHRC are conducted with fighter aircraft.

The 366thFighter Wing is currently stationed at the Base and trains pilots and aircrews using the F-15C Eagle and F-15E Strike Eagle fighter aircraft. As a part of the Air Combat Command (ACC), MHAFB provides mission-ready combat fighter aircraft for peacetime or wartime operations around the world.

MOUNTAIN HOME RANGE COMPLEX (MHRC)

The MHRC supports unit-level and composite force training providing air crews with a realistic training environment to hone their combat skills. In addition, mission activities such as air-to-ground weapons training, search and rescue training, survival training, convoy escort training and ground based air defense radar threat simulation occur within the land space areas of the MHRC. While primarily used by active duty units from MHAFB and Air National Guard units from Gowen Field, the MHRC not only supports other Air Force and DOD users across the nation, but also provides training airspace for military aviators from other partner nations.

GOWEN FIELD

Gowen Field serves as the base of operations for both the Idaho Air National Guard (IDANG) and Idaho Army National Guard (IDARNG), and is the headquarters for the State of Idaho Military Division. It also supports reserve units for the Army, Navy, and Marines. Pilot training for the A-10 Thunderbolt takes place at Gowen Field. These aircraft are used as close air support aircraft for ground based personnel and have been very effective in recent conflicts. The Army National Guard also performs armor, helicopter (including the AH-64 Apache and UH-60 Blackhawk), and other operations out of Gowen Field. The IDARNG also operates the Armor Training Center out of Gowen Field.

ORCHARD TRAINING AREA (OTA)

Located approximately 13 miles south of Gowen Field, the OTA is a major training site for the IDARNG and serves as an annual training site for other guard units from throughout the country. The Orchard Training Area's mission is to provide an established facility for use by Guard and Reserve for specified periods of training.

Local Communities Working Together

The regional presence of MHAFB, MHRC, Gowen Field, and OTA contributes more than just economic impacts. The incorporated cities of Boise, Grand View, Mountain Home and the other surrounding communities provide housing for a large number of active and retired military personnel and dependants. The local communities also provide goods and services to the installations, such as schools and libraries, while the military in return gives back to the local communities through the involvement of military personnel in local charities, volunteering opportunities, and community outreach programs. The military also responds with critical services when needed.

Personnel at the installations also maintain environmental and cultural resources on lands where training and operations are conducted.

1.3 JLUS Study Area / Focus Areas

The Idaho JLUS is unique compared with many other joint land use studies in that it consists of two focus areas due to the scope of the areas considered and the extensive amount of land they encompass. The two focus areas are included within the designated study area as shown on Figure 1-1. The study area is bounded by the northern boundary of Ada County on the north, the Idaho / Nevada state boundary on the south, the eastern boundary of Owyhee and Elmore counties on the east, and the Idaho / Oregon state boundary on the west. The two focus areas include the Mountain Home Air Force Base / Mountain Home Regional Complex (MHAFB / MHRC) and the Gowen Field / Orchard Training Area (Gowen Field / OTA)

MHAFB / MHRC Focus Area

The MHAFB / MHRC Focus Area includes land in and around MHAFB, MHRC, and OTA as shown on Figure 1-2. Extending this focus area north to include the OTA was based on input from the committees assisting with the development of this JLUS.

This focus area is situated in the Snake River Basin between the Danskin and Owyhee Mountain Ranges in the southwestern portion of Idaho. The Base is located in Elmore County, 12 miles southwest of the City of Mountain Home and approximately 50 miles southeast of the City of Boise.

See Section 2.1 for more information special use airspace.

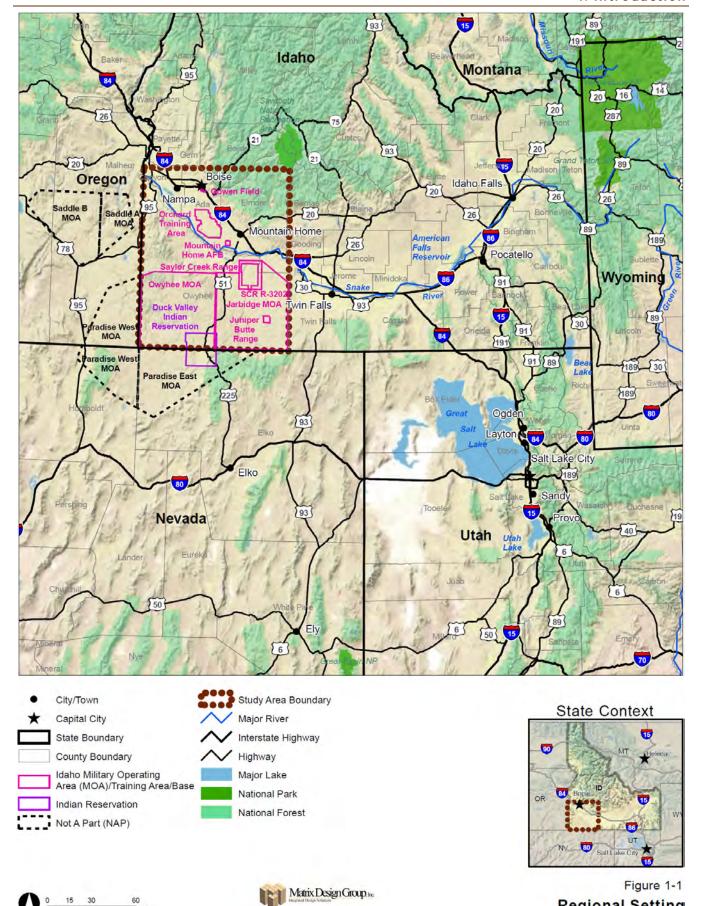
The MHRC includes all of the lands within the Owyhee Military Operations Area (MOA), Jarbidge MOA, and special use airspace R-3202. The Jarbidge and Owyhee MOAs are located in Owyhee County. The R-3204 (Juniper Butte Range) is located in the Owyhee MOA. The Paradise MOA and Saddle MOA are located in Nevada and Oregon, respectively and are not included as a part of this JLUS, which focuses exclusively on areas in the state of Idaho. Within the Jarbidge MOA, the Saylor Creek Range covers 109,466 acres and the Juniper Butte Range covers 12,000 acres of land. Also included in the MHRC are five No Drop target complexes, 30 Electronic Emitter Parking Sites, and the Grasmere Electronic Combat Site. Detailed descriptions of the two focus areas are provided in Section 2.

GOWEN FIELD / OTA Focus Area

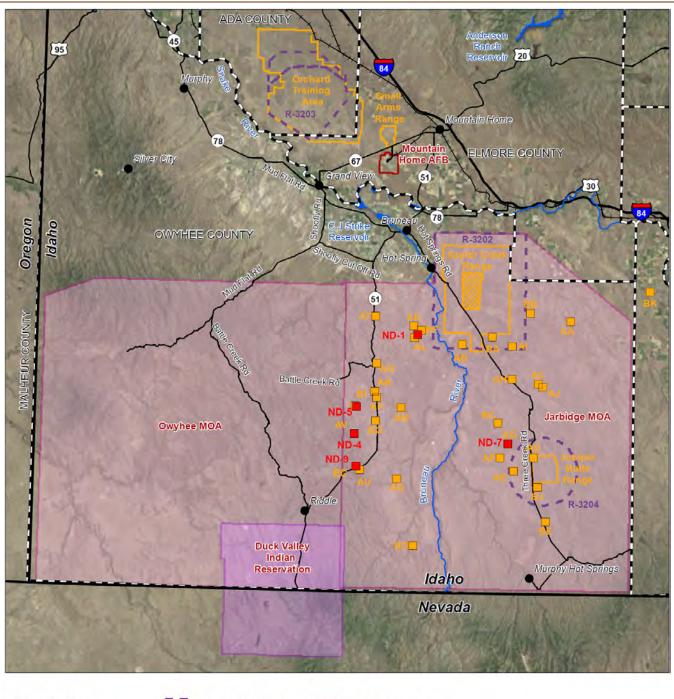
The Gowen Field / OTA Focus Area includes lands in and around the Idaho National Guard at Gowen Field and extends south to include the northern boundary of the OTA as shown on Figure 1-3. Gowen Field is located on 576 acres of land adjacent to the Boise Municipal Airport in unincorporated Ada County. However the area is located with the City of Boise Area of City Impact (ACI) The Orchard Training Area lies approximately 13 miles to the south of Gowen Field and includes approximately 136,948 acres of land.

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Regional Setting



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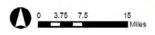




Figure 1-2 MHAFB/MHRC FOCUS AREA

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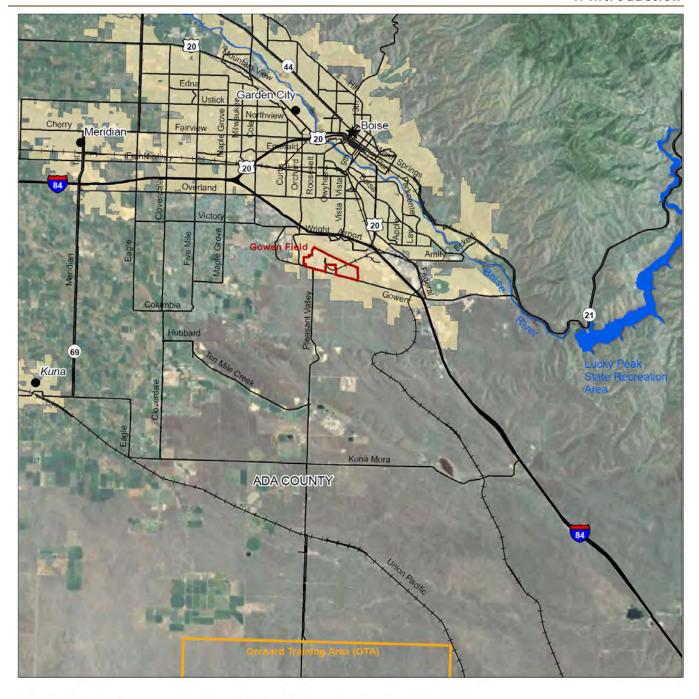








Figure 1-3
GOWEN FIELD FOCUS AREA

OTA is located in the Morley Nelson Snake River Birds of Prey National Conservation Area, an unpopulated portion of the western Snake River Plain and the Mountain Home Plateau.

1.4 JLUS Process Timeline / Overview

The Idaho JLUS began in mid-2008 and was completed in the 3rd Quarter of 2010. The project timeline and major milestones are presented in Figure 1-4 below. Additional details pertaining to key elements of the JLUS planning process are found in the following pages.

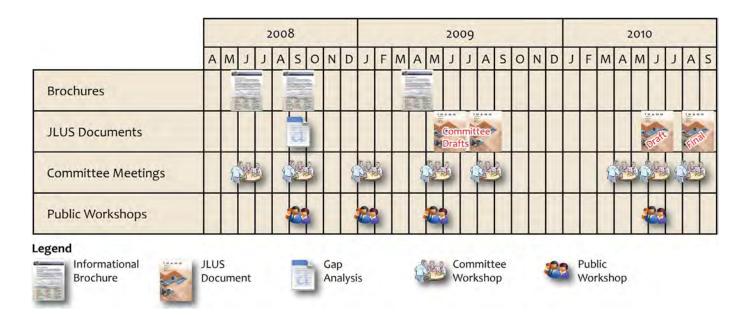


Figure 1-4. JLUS Process Timeline

1.5 Public Outreach

As highlighted in the objectives stated previously, the JLUS process was designed to create a locally relevant plan that builds consensus and obtains support from the various stakeholders involved. To achieve the JLUS goal and objectives, the Idaho JLUS process included a public outreach program that included a variety of opportunities for interested parties to contribute to the development of this study.

Stakeholders

Stakeholders include individuals, groups, organizations, and governmental entities interested in, affected by, or affecting the outcome of the JLUS project. An early step in any planning process is the identification of stakeholders. Informing or involving them early in the project is instrumental in the identification of their most important issues to address and resolve

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through the development of integrated strategies and measures. Stakeholders identified for the Idaho JLUS included, but were not limited to, the following:

- Local jurisdictions (cities and counties)
- DOD officials (including OEA representatives) and military installation personnel
- Local, regional, and state planning, regulatory, and land management agencies
- The public (including landowners)
- Shoshone Paiute Tribes
- Environmental advocacy organizations
- Nongovernmental organizations (NGOs)
- Other special interest groups (including local educational institutions and school districts)

Policy Committee and Technical Working Group

The development of the Idaho JLUS was guided by two committees, the JLUS Policy Committee (JPC) and the Technical Working Group (TWG). Since this JLUS is organized into two distinct focus areas, a JPC and TWG were established for each focus area. Those involved on the committees are shown on Tables 1-1 and 1-2.

Table 1-1. MHAFB / MHRC Committee Roles and Responsibilities

Role	Responsibilities	Participants
Sponsors	CoordinationAccountabilityGrant ManagementFinancialContribution	Office of Economic AdjustmentIdaho Department of Commerce
Policy Committee	 JLUS Direction Approval of Budget Study Oversight Draft and Final JLUS Approval Policy Recommendation Approval Monitoring Implementation of Adopted Policies 	 Bureau of Land Management City of Grand View City of Mountain Home (Economic Development Office) Shoshone Paiute Tribes Elmore County Board of Commissioners Idaho Department of Lands Military Affairs, Idaho Military Division Mountain Home Air Force Base Office of Economic Adjustment (ex-officio) Owyhee County Board of Commissioners
Technical Working Group	 Provides Expertise to Address Technical 	Ada CountyBureau of Land Management

MHAFB / MHRC JPC & TWG Meetings

1: June 2008

2: October 2008

3: January 2009

4: May 2009

#5: August 2009

6: April 2010

7: June 2010

#8: August 2010

Role	Responsibilities	Participants	
	Issues Identify and Study Issues Evaluate Implementation Options to the JPC Alternatives Report Development Recommendations	 Elmore-Ada Water Project Elmore County Givens Pursley LLP Idaho Department of Fish and Game Idaho Department of Lands Idaho Department of Transportation Idaho Department of Water Resources Idaho Farm Service Agency Idaho Power Mountain Home Air Force Base Mountain Home Chamber of Commerce Owyhee Cattleman's Association Owyhee County Sage Community Resources Simplot Land and Livestock Southwest Idaho RC&D University of Idaho 	

Table 1-2. Gowen Field / OTA Committee Roles and Responsibilities

Table 1-2. Gowen Field / OTA Committee Roles and Responsibilities					
Role	Responsibilities	Participants			
Sponsors	CoordinationAccountabilityGrant ManagementFinancial Contribution	Office of Economic AdjustmentIdaho Department of Commerce			
Policy Committee	 JLUS Direction Approval of Budget Study Oversight Draft and Final JLUS Approval Policy Recommendation Approval Monitoring Implementation of Adopted Policies 	 Ada County Commissioner Ada County Highway District Bureau of Land Management City of Boise Elmore County Commissioner Idaho Department of Lands Idaho Air National Guard Idaho Army National Guard Military Affairs, Idaho Military Division Office of Economic Adjustment (ex-officio) State of Idaho 			
Technical Working Group	 Provides Expertise to Address Technical Issues Identify and Study Issues Evaluate Implementation Options to the JPC Alternatives Report Development Recommendations 	 Ada County Boise Airport Bureau of Land Management City of Boise Compass Elmore-Ada Water Project Idaho Army National Guard Idaho Department of Lands Idaho Department of Fish and Game Idaho Department of Transportation 			

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Role	Responsibilities	Participants	
		 Idaho Department of Water Resources Idaho Farm Service Agency Idaho Air National Guard Idaho Power Rose Law Group Sage Community Resources Snake River Birds of Prey Southwest Idaho RC&D 	

The JPCs were composed of members that represent elected officials from participating jurisdictions, military leadership and senior representatives from other interested and affected agencies and the State. The JPCs were responsible for the overall direction of the JLUS, preparation and approval of the study design, approval of draft and final written reports, and approval of policy recommendations.

Each focus area also included the creation of a TWG. The TWGs were formed to support the JPCs and were responsible for identifying and studying technical issues. The TWGs include area planners, city and county managers and their professional staff, military base planners, local airport representatives, business and development community's representatives, natural resource protection organizations, and other subject matter experts as needed.

The JPCs and TWGs served as liaisons to their respective stakeholder groups. JPC and TWG members were charged with conveying committee activities and information to their organizations or constituencies and relaying their organization's comments and suggestions to both committees for consideration. JPC members were encouraged to set up meetings with their organizations and / or constituencies to facilitate this input.

Meetings were held throughout the process to ensure the JLUS identified and appropriately addressed local issues. The meetings conducted are highlighted below:

- Meeting # 1 (June 2008) This workshop served as the initial kick-off for the committees. This meeting defined the project, presented information on the JLUS program and process, and included a facilitated exercise with committee members to identify preliminary compatibility issues.
- Meeting # 2 (October 2008) This workshop presented the draft compatibility issues, the draft findings from the gap analysis survey, and discussed the prioritization of compatibility issues based on established criteria.
- Meeting # 3 (January 2009) This workshop made an assessment of the identified encroachment issues, prioritized issues, and discussed strategy types that could be applied in addressing identified issues.

Gowen Field / OTA JPC & TWG Meetings

1: June 2008

2: October 2008

3: January 2009

4: May 2009

5: August 2009

6: April 2010

7: June 2010

#8: August 2010

- Meeting # 4 (May 2009) This workshop provided an overview of Sections 1 – 4 of the JLUS as a preliminary draft. The purpose of this review was to provide a good basis for the committees' review of the sections.
- Meeting # 5 (August 2009) At this workshop, committees reviewed the Draft JLUS report.
- Meeting # 6 (April 2010) At this workshop, committees reviewed the revised Draft JLUS report.
- Meeting # 7 (June 2010) At this workshop, the committees reviewed public comments on the Draft JLUS and provide direction that was used to prepare the final JLUS document.
- Meeting #8 (August 2010) This workshop was for the review of comments received on the Draft JLUS and to provide direction on changes to incorporate into Final JLUS.

Public Forums

In addition to the JPC and TWG meetings, a series of public forums were held throughout the development of the study. These forums provided an opportunity for the exchange of information with the greater community, assisted in identifying the issues to be addressed in the JLUS, and provided input on the strategies proposed. Each forum included a traditional presentation and facilitated exercise providing a "hands on," interactive opportunity for the public to participate in the development of the plan.

The date and a brief summary of each forum is presented below:

- September 30, 2008 for the Gowen Field / OTA Focus Area and October 1, 2008 for the MHAFB / MHRC Focus Area – During these workshops, information on the JLUS process and expected product was presented. A facilitated discussion was held on the identification of issues and challenges for the JLUS to address with attendees.
- January 21, 2009 for the Gowen Field / OTA Focus Area, and January 20, 2009 for the MHAFB / MHRC Focus Area – These forums provided an overview of the existing conditions, land use, and development trends within the individual focus areas. They also included a discussion of existing compatibility tools that can be used during the JLUS process.
- May 18, 2009 for the MHAFB / MHRC focus area and May 19, 2009 for the Gowen Field / OTA focus area – These forums presented the draft compatibility factors, planning tools, and strategies to the public.
- June 28 and 29, 2010 These forums provided the official presentation of the Draft JLUS to the public and allowed for public comment.

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Native American Coordination

The State of Idaho, Department of Commerce, in coordination with the Office of Economic Adjustment, provided an overview of the Idaho JLUS process at an informal meeting with representative of the Shoshone-Paiute Tribes of the Duck Valley Reservation Tribal Council in late 2009. Following this meeting, the Department of Commerce provide updated to the Tribes and extended offers to hold workshops with the Tribes if requested. The Tribes were also provided a copy of the Draft Idaho JLUS.

Public Outreach Materials



www.landusecompatibility.com/idaho/index.htm

Fact Sheet. At the beginning of the JLUS program, a Fact Sheet was developed describing the JLUS program, objectives, methods for the public to provide input into the process, and the Idaho JLUS proposed focus areas. This Fact Sheet was made available at the meetings for review by interested members of the public.

Compatibility Factors. This brochure described each of the 24 standard compatibility factors used for JLUS development. While every factor will not apply to the Idaho JLUS, this list provides a means to ensure a comprehensive evaluation of compatibility factors in the study area.

Strategy Tools. JLUS strategies constitute a variety of actions local governments, military installations, agencies and other stakeholders can take to promote compatible land use planning. This brochure provides an overview of the strategy types that could be applied to compatibility issues in Idaho.

Website. In addition to these documents, a project website was developed and maintained that provided stakeholders, the public, and media representatives with access to project information. This website was maintained for the duration of the entire project to ensure information was easily accessible. Information contained on the website included: program points of contact, schedules, documents, maps, public meeting information, and downloadable comment forms.

1.6 JLUS Implementation

It is important to note that once the JLUS process is completed, the final document is **not** an adopted plan. It is a strategic guide that will be used by local jurisdictions, agencies, and organizations in the two focus areas to guide their future compatibility efforts. To that end, the Idaho Department of Commerce will be seeking acceptance of the study by stakeholders to confirm their collective support for identified implementation efforts. For instance, local jurisdictions may use the strategies in this JLUS to guide future general plan / comprehensive plan and zoning updates, as well as to assist in the review of development proposals. MHAFB, MHRC, Gowen Field, and OTA will use the JLUS to guide their interaction with local jurisdictions on future projects, as well as manage internal planning processes with a compatibility based approach. It is through the future actions of the stakeholders involved that the JLUS strategies will become a reality.

The key to implementation of the strategies presented in this JLUS is the establishment of the JLUS Coordinating Committee that oversees the implementation of the JLUS after it is complete. Through this Committee, local jurisdictions, MHAFB, MHRC, Gowen Field, OTA, and other interested parties will be able to continue their initial work together to establish procedures, recommend or refine specific actions for member agencies, and make adjustments to strategies over time to ensure the JLUS remains relevant to the planning issues of the two focus areas.

1.7 JLUS Organization

The following is a brief overview of the organization of the Idaho JLUS, including the contents of each of the six sections and materials included in the appendices.

Section 1, Introduction. Section 1 provides an introduction and context for the Idaho JLUS. This section describes the strategic and local importance of the installations, the working relationships among the entities, the background and intent of the JLUS, the study area and its two focus areas, the objectives used to guide development of the JLUS, the stakeholders involved in developing the JLUS, public outreach methods, implementation premise, and the organization of the JLUS document.

Section 2, Study Area Profile. In developing a JLUS, an informed understanding of the installations, military training areas, and county / local jurisdictions within the two focus areas is necessary. For the Idaho JLUS, this section provides: an overview of the installations' history, a description of the primary activity areas on the installations, a look at the current missions and military units located at those installations, military family housing assets, the economic impact of the installations on the region, and a discussion of future missions. This is followed by an overview of the region's growth potential and a profile of Ada, Elmore and Owyhee Counties and the Cities of Boise and Mountain Home within the focus areas, including population, housing, and employment statistics.

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Section 3, Compatibility. Compatibility, in relationship to military readiness, can be defined as the balance or compromise between community needs and interests and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully.

In order to develop potential solutions, it is critical to understand the conditions and implications of existing and potential compatibility issues. In this section, the JLUS presents the compatibility issues identified for the Idaho JLUS. These issues were identified based on input from the JPC and TWG, members of the public, existing plans and technical reports, and evaluation by the project team.

Section 4, Existing Plans and Programs. This section provides an overview of relevant plans, programs, and studies which are tools to address compatibility issues in the focus areas. Section 4 also evaluates the effectiveness of each existing plan or program relative to addressing compatibility issues identified and described in Section 3.

Section 5, Shoshone-Paiute Tribal Profile. Section 5 provides important information about the Native American presence within the Idaho JLUS focus areas. The Shoshone-Paiute tribes are an important stakeholder in the JLUS process, and this section details the tribes' history, as well as current conditions on the Duck Valley Indian Reservation.

Section 6, Recommendations. The final section of the JLUS presents a specific course of action that has been developed cooperatively with representatives from local jurisdictions, MHAFB, MHRC, Gowen Field, Orchard Training Area, state and federal agencies, local organizations, and interested individuals and landowners. The result of a collaborative planning process, the recommendations in this section represent a consensus forged on collaborative planning: a realistic, coordinated approach to compatibility planning developed with the input, involvement and support of the stakeholders.

Appendices. The main JLUS document is supported by the following key reference documents. These documents are available electronically from the Idaho Department of Commerce (on the JLUS website).

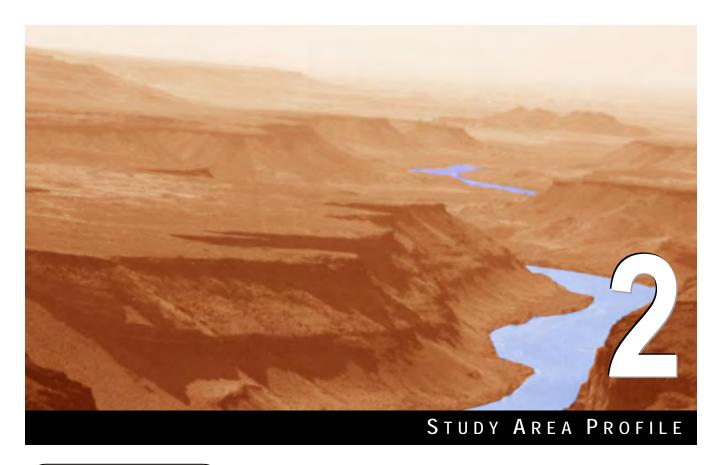
Appendices

The appendices for this document are available electronically at: www.landusecompatibility.com /idaho/index.htm

- A. Idaho JLUS Fact Sheet
- B. Idaho Compatibility Factors Brochure
- C. Idaho Compatibility Tools Brochure
- D. MHAFB AICUZ Study (1998), Volumes I and II
- E. Sample Avigation Easement
- F. FAA Part 77
- G. Guidelines for Sound Insulation of Residences Exposed to Aircraft Operations

Please see the next page.

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In this section				
#	Title	Page		
2.1	Military Installations and Ranges	2-2		
2.2	F-35 Lightning II / Joint Strike Fighter Basing	2-27		
2.3	Study Area Profile and Growth Trends	2-30		
2.4	County and City Profiles	2-38		
2.5	Regional Assessment	2-45		

This section provides important information about the military and civilian entities within the Idaho Joint Land Use Study (JLUS) focus areas. The following section presents an overview of the history and current operations at Mountain Home Air Force Base (MHAFB), Mountain Home Range Complex (MHRC), Gowen Field, and Orchard Training Area (OTA). Profiles and analyses of development trends and growth potential in the jurisdictions within the two Idaho JLUS focus areas (MHAFB / MHRC and Gowen Field / OTA) are also provided.

Describing the various activities performed within the two focus areas' military installations and training areas provides valuable insights into the importance of MHAFB, MHRC, Gowen Field, and the OTA as national strategic assets. It also provides the reader with an understanding of the activities conducted at these installations and their importance in being addressed in this JLUS. This information will provide stakeholders with the information needed to make informed decisions about the future development and economic growth of their communities. These decisions ultimately impact the continued existence and future sustainability of the State's primary military installations, ranges, and training areas.

2.1 Military Installations and Ranges

MHAFB/MHRC FOCUS AREA

MOUNTAIN HOME AIR FORCE BASE

History

Originally named Mountain Home Army Airfield, construction for the installation began in November 1942, and the field was officially opened on August 7, 1943. After its opening, airmen from the United States (U.S.) Army Air Force began training for action in World War II. The first unit assigned to Mountain Home Army Airfield was the 396th Bombardment Group training with B-17 Flying Fortresses. The 396th was moved to Moses Lake, Washington before training was started, and was subsequently replaced with crew training for B-24 Liberators. The various units that were involved in B-24 training were the 470th Bombardment Group, the 490th Bombardment Group, and the 494th Bombardment Group. All of these units trained for possible missions during World War II. Training for the new B-29 Super Fortress briefly took place in 1945, until the base was declared inactive in October of the same year, following the end of World War II.

The base was reactivated and renamed Mountain Home Air Force Base in December 1948 when the newly formed U.S. Air Force assigned the 5th Reconnaissance Group and the 5th Strategic Reconnaissance Wing there. The Base remained open until April 1950 when it was again closed. MHAFB was again reopened the next year with the arrival of the 580th, 581st, and 582nd Air Resupply and Communications Wings. Training for these units included covert and special operations.

Eventually, all of those wings were ordered overseas, and MHAFB was transferred to Strategic Air Command (SAC). This transfer brought the assignment of the 9th Bombardment Wing in May 1953. To be prepared and keep up-to-date with the latest equipment, the 9th Bombardment Wing began to convert their aircraft to the new B-47 Stratojet and KC-97 Stratotanker.

The Air Force began phasing out B-47s in 1965 and announced that the 67th Tactical Reconnaissance Wing would move to MHAFB. This move also included the transfer of control of the base to Tactical Air Command (TAC). The 67th used RF-4C Phantom II aircraft to conduct photographic, visual, radar, and thermal reconnaissance missions. In 1968, the inclusion of F-4D Phantoms to the 67th added tactical fighter operations to the unit; however, the Phantoms were reassigned in 1970.

Between 1972 and 1991, MHAFB hosted the F-111 Aardvark. In March 1980, MHAFB sent part of its F-111 fleet to be modified and converted to EF-111A Ravens, electronic combat aircraft. The F-111 and EF-111A deployed to Panama and OPERATION JUST CAUSE (1989), as well as to Saudi Arabia and

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contributed to actions during OPERTATION DESERT SHIELD and OPERATION DESERT STORM (1990-1991).

In June 1992, Air Combat Command (ACC) assumed control of MHAFB during Air Force restructuring. The unit stationed at MHAFB was the 366th Wing, an air interdiction composite wing comprised of F-16CJs, F-15s (E, C, and D models), B-52Gs, and KC-135Rs. In 1992, the 34th Bomb Squadron (34 BS) was assigned to the 366th Wing and brought with it the B-52G Stratofortress. The 34 BS was remotely stationed at Castle AFB in California until 1996 when it moved to MHAFB. It was the only B-52 unit armed with the long-range HAVE NAP missile, which allowed for deep interdiction bombing capacity. Also added in 1992 was the 22nd Air Refueling Wing, which included KC-135R Stratotankers. These aircraft allowed the Wing to be able to deploy anywhere in the world at a moment's notice.

Beginning in 1996, the B-52s were gradually replaced with B-1B Lancers from Ellsworth AFB in South Dakota. Also in 1996, the 726th Air Control Squadron was transferred from Shaw AFB in South Carolina to MHAFB. The addition of this squadron brought mobile radar surveillance and command and control capabilities. Its mission was to find the most efficient course of action for moving an airpower expeditionary force to a pre-selected location anywhere in the world. One important mission was the deployment of approximately 1,200 personnel, nearly one-third of the active duty population at MHAFB, to Saudi Arabia in 1997 during Operation Southern Watch. In 2002, the bomber and refueling aircraft were reassigned to different bases. With the loss of these assets, the 366th Wing was renamed the 366th Fighter Wing (FW), and its mission as the Air Force's premiere air expeditionary force ended. Source: http://www.globalsecurity.org; http://www.strategic-air-command.com

Current Wing Unit at Mountain Home AFB

366th Fighter Wing



The host unit of MHAFB is the 366 FW, which reports to Air Combat Command (ACC). Today, the Wing consists of the 389th Fighter Squadron, the 390th Fighter Squadron, the 391st Fighter Squadron, which blend the firepower of F-15E Strike Eagles and F-15C Eagles, and the 428th Fighter Squadron using F-15SG Strike Eagles. The mission of the 366 FW is "to prepare Airmen and their families, professionally and personally, for expeditionary operations and foster an environment that promotes integration of all facets of wing operations." There are four subordinate units that support the wing's mission. These are the Operations Group, Mission Support Group, Medical Group, and Maintenance Group. Source: http://www.mountainhome.af.mil

Current Mission Operations at Mountain Home AFB

Designed for rapid deployment and mobilization of its F-15 aircraft and personnel to all parts of the world for peacetime or wartime conditions, the 366 FW at MHAFB is an important asset to the United States Air Force (USAF) and national security. This is accomplished through training and the

F-15E Strike Eagle



Length: 63.8 ft Height: 18.5 ft Wingspan: 42.8 ft

Speed:

1,875 mph (mach 2.5+) Ceiling: 60,000 ft

Range:

2,400 miles w/ 3x external fuel tanks & conformal fuel tanks

Role:

Air-to-air Air-to-ground

Crew: 2
Armament:

1x 20mm multibarrel internally mounted gun w/500 rounds of ammunition

Air-to-air

AIM-7F/M Sparrows AIM-9M Sidewinders AIM-120 AMRAAM

<u>Air-to-ground</u>

Can carry most weapons

in the Air Force inventory

development of pilots and crewmen who are prepared for deployment when they are needed.

The three types of aircraft stationed at MHAFB are the F-15C/D Eagle and the F-15E Strike Eagle. The F-16C Fighting Falcon was also in operation until March 2007, but was transferred from MHAFB as a result of the continued implementation of the 2005 Base Realignment and Closure (BRAC) process across the country. F-15s are all-weather tactical fighters that provide an edge due to their outstanding maneuverability, range, and weapons systems flexibility. They are effective at both long and close range aerial combat, as well as ground targeting. The avionics systems, which include advanced radar, heads-up display, and flight instruments, also set F-15s ahead of other aircraft. The F-15E is a two-seat variant of the F-15. The upgraded navigation and weapons systems allow for more precise and deep interdiction missions. Table 2-1 displays the number and types of aircraft that operated at MHAFB in fiscal year 2008 (FY08).

Table 2-1. Operating Aircraft at MHAFB, FY08

Squadron	Aircraft Type	Aircraft Assigned	Hours
389 FS	F-15E	21	4,549
390 FS	F-15C/D	20	3,289
391 FS	F-15E	31	6,509
TOTAL		72	14,347

Source: Richard Scheuch, MHAFB Base Planner, 366 CES/CEPD, April 9, 2009

Future Mission Operations at Mountain Home AFB

The 2005 BRAC report recommended the redistribution of 18 F-15C aircraft and 18 F-16 aircraft from MHAFB to other installations. The loss of F-15C and F-16 squadrons would be offset with the addition of 18 F-15E aircraft from the 3rd Wing at Elmendorf AFB in Alaska and 3 F-15E aircraft from attrition reserve. This redistribution of aircraft has resulted in the operation and maintenance of one type of aircraft at MHAFB. This reorganization of aircraft is scheduled to be completed by 2011.

Source: http://www.defenselink.mil/brac/pdf/pt2 o5 afo.pdf

Due to its unique training facilities and range resources, MHAFB has also hosted international air force personnel. The Republic of Singapore Air Force (RSAF) is in the process of organizing a fighter squadron to train at MHAFB. The initial members of the RSAF arrived in September 2008 to complete the logistics prior to the arrival of remaining personnel. A new USAF squadron, the 428th Fighter Squadron, was activated on May 18, 2009 under the 366th Operations Group as the new RSAF flying and training unit responsible for qualifying all RSAF F-15SG crews. The RSAF personnel located at MHAFB are slated to train with the 366 FW for the next 5 to 20 years. Ten F-15SG aircraft will be stationed at MHAFB, along with approximately 179 RSAF active duty personnel, 128 support personnel, and their families. The first aircraft arrived the first week of May 2009.

 $Source: \ http://www.mountainhome.af.mil/news/story.asp?storyID=123117650, \ "Republic of Singapore air and the content of t$

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force begins arriving at Mountain Home AFB," 10 Oct. 2008, Bill Richey, Idaho Military Division Military Affairs, June 10, 2009

Installation Setting at Mountain Home AFB

MHAFB is located on approximately 6,851 acres of land in Elmore County, Idaho. It is sited about ten miles southwest of the City of Mountain Home and 50 miles southeast of the City of Boise, the largest metropolitan area in the region. The Base lies in the Snake River Basin between the Owyhee and Danskin mountain ranges.

Located in the southwest portion of the Base, the only runway (Runway 12/30) is approximately 13,500 feet long by 200 feet wide and is oriented in a southeast/northwest position as shown on Figure 2-1.

Associated with the runway are taxiways A through H, main apron areas designated as Ramps A through E, and pavement pads and hangar accesses. Adjacent to these areas are aircraft maintenance and operations facilities, hangars, and storage. Some commercial areas, including the Base Exchange and gas stations, as well as a school, are centrally located on the Base. The northeastern portion of the Base includes family housing, a hospital and several health clinics. A golf course is located south of the family housing, and other recreational areas are scattered throughout the center of the Base. Industrial areas, including a supply depot, warehouses, motor pool, and ammunition storage are also sited throughout the western half of the Base. Source: MHAFB ICRMP Public Final, dated 2006

Other facilities that are auxiliary to MHAFB are the 3,182-acre Small Arms Range Annex, the 3-acre C.J. Strike Dam Recreation Annex. There are four outlying facilities: Grasmere Electronic Combat Site, Rattlesnake Radar Station, Middle Marker, and Seneca Ground Wave Emergency Network Station with a combined area of 51 acres. In total, MHAFB and its associated facilities and ranges occupy over 135,000 acres of land, composed of Air Force-owned land, private property easements, rights of way, public domain permits, and public lands withdrawn from use.

Source: www.mountainhome.af.mil, Mountain Home AFB General Plan Draft 2007, Mountain Home AFB Economic Impact Analysis FY07

The Small Arms Range is situated one mile north of MHAFB. It is a total of 3,184 acres, of which 1,622 is withdrawn from public use and 1,560 acres are leased from the State. Withdrawal of public land generally means withholding an area of Federal land from settlement, sale, location, or entry, under some or all of the general land laws or transferring jurisdiction over an area of Federal land. The majority of the land on the Small Arms Range is an undeveloped area used for safety buffers. The only development located on the range is a complex covering roughly eight to ten acres that includes a parking area, supply building, firing line, and a set of earthen berms. This area provides training for small arms fire. Approximately 190 acres in the southeast have also been used for explosive ordnance disposal.

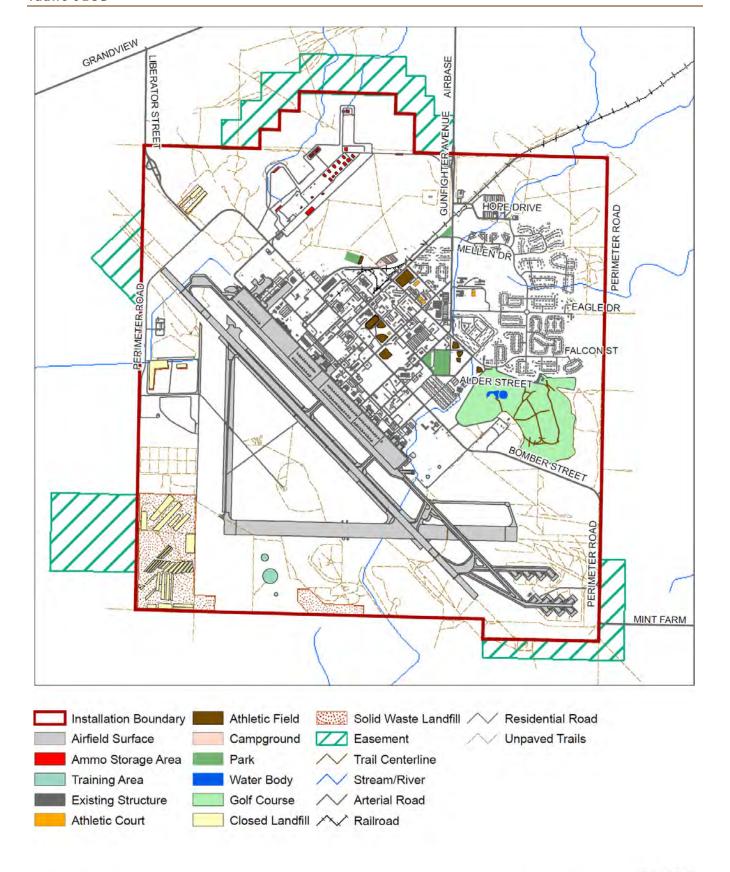


Figure 2-1
MOUNTAIN HOME AFB





MOUNTAIN HOME AFB INSTALLATION OVERVIEW

The C.J. Strike Dam Recreation Annex is an outdoor recreation facility that was established in 1958 for MHAFB personnel and their families. Located approximately eight miles southwest of MHAFB, the annex includes a parking area, picnic pavilions, a marina building, a boat launching ramp, and a floating dock. The land is leased from the Idaho Power Company.

The Rattlesnake Radar Station is located approximately 20 miles northeast of MHAFB. This facility is enclosed by a chain-link fence and includes a maintenance building, concrete pad, and a microwave antenna. its tactical radar provides airspace control support to the unit responsible for managing airspace at the Mountain Home Range Complex.

The Middle Marker site is approximately 50 by 70 feet in size and located west of the runway at MHAFB. Its fenced area contains an Instrument Landing Systems (ILS) building, cloud sensors, and antennae supports. Source: Mountain Home AFB Integrated Cultural Resources Management Plan, Final [Public] 2006, Mountain Home Range Complex Comprehensive Range Plan, FY 2007-2012, approved 17 Oct 06

Demographics at Mountain Home AFB

In FY08, MHAFB reported a total population (military, civilians, and military dependents) of 10,402 people. Table 2-2 illustrates the allocation of the military and non-military population within the installation.

Table 2-2. MHAFB Population, FY08

	Non -Military	
Туре	Employees	Total
Active Duty Military		4,173
Active Duty Military Dependents		5,321
Appropriated Fund Civilians	562	562
General Schedule and Wage	417	
Grade Employees		
Defense Commissary Agency	41	
Employees		
Contract Employees	104	
Non-Appropriated Fund Civilians	346	346
and Private Business		
Non-Appropriated Fund	185	
Employees		
Army and Air Force Exchange	144	
Service Employees		
Wells Fargo	6	
Pioneer Federal Credit Union	11	
TOTAL BASE POPULATION	908	10,402

Source: Mountain Home AFB FY08 Economic Impact Analysis

Military Housing at Mountain Home AFB

Table 2-3 identifies the composition of active military personnel and their dependants living on and off-base. Approximately 36 percent of the military personnel stationed at MHAFB and their dependents reside on base, with the

remainder living primarily in the surrounding communities of Mountain Home, Grand View, Glenn's Ferry, Boise, and Nampa.

Table 2-3. Military Housing Status

-	, ,		
Class	Living On Base	Living Off-Base	Total
Active Duty	1,462	2,559	4,021
Dependents	2,060	3,055	5,115
TOTAL	3,522	5,614	9,136

Source: Mary Dunn, MHAFB Housing Facilities Chief, 366 CES/CEAC, April 14, 2009

Note: Differences in total number of Active Duty personnel between Table 2-2 and Table 2-3 are due to the timeframe in which the data was collected.

MHAFB has a total of 1,155 housing units, which are reserved for enlisted personnel and officers and their families. Table 2-4 shows the distribution of family housing on the Base. In addition, MHAFB also has four dormitory buildings, with a total bed capacity of 680.

Table 2-4. On-Base Family Housing

	2	3	4	Total
Housing Type	Bedroom	Bedroom	Bedroom	Units
Officer	0	166	73	239
Enlisted	291	488	137	916
TOTAL	291	654	210	1,155

Source: Mary Dunn, MHAFB Housing Facilities Chief, 366 CES/CEAC, April 14, 2009

The Sagebrush Inn at MHAFB provides visitor housing at the Base. The Inn includes 113 visiting quarter rooms, including 98 visiting airmen quarters, and 15 temporary lodging facilities. These 15 units are comprised of 10 two-bedroom units, 4 three-bedroom units, and 1 four-bedroom unit.

Source: www.mountainhome.af.mil

Installation Economic Impact at Mountain Home AFB

The total economic impact of Mountain Home AFB on the surrounding region is measured in the categories of annual payroll and annual construction and procurement. Annual payroll accounts for payments made for direct employment at the installation, which includes military, civilian employees, and retirees. In FYo8, the annual payroll at MHAFB was just over \$694 million. Annual construction and procurement includes expenditures made by the Base for services, construction contracts and materials. This category totaled more than \$312 million for FYo8, with slightly more than \$168 million comprised of construction contracts. The total estimated economic impact on the surrounding community for FYo8 was more than \$1 billion. The organization of the total economic impact by category is shown in Table 2-5 and Figure 2-2.

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Table 2-5. MHAFB Economic Impact, FYo8

Category	Value
Annual Payroll	\$694,074,543
Military	\$373,796,954
Appropriated Fund Civilian	\$46,748,278
Nonappropriated Fund Civilian	\$9,961,311
Retiree	\$263,568,000
Annual Construction and Procurement	\$312,487,828
Construction Contracts	\$168,240,155
Services, Materials, Equipment & Supplies	\$103,610,908
Commissary, BX, NAF, Lodging, Medical	\$28,453,995
Education	\$12,182,770
TOTAL	\$1,006,562,371

Note: The amounts above are based on a Gross Multiplier Index (GMI) of 1.90 provided by the Boise State University Department of Economic.

Source: Mountain Home AFB FYo8 Economic Impact Analysis

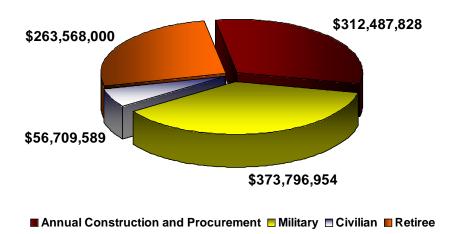


Figure 2-2. MHAFB Economic Impact, FY08

Although it was not included as a specific category, an important component of the economic impact of the base is indirect jobs, which are jobs created from military related expenditures. An estimated 1,601 indirect jobs were created in FY08, with an average annual salary of \$32,900. These jobs equate to an estimated local and regional annual impact of over \$52 million.

Mountain Home Range Complex

In addition to Mountain Home AFB, the 366 FW also maintains and operates MHRC, which currently covers an area measuring 7,414 square nautical miles (over 9,818 square miles) of airspace and training ranges, including 122,000 acres of land used for air-to-ground training. The Range Operating Authority for MHRC is the 366th Operations Group Commander. The air-to-ground training ranges are operated, maintained, and supported by the Primary Training Range contractor through a contract with Air Combat Command (ACC). The electronic combat range assets within MHRC are operated and maintained by the 266th Range Squadron, an Idaho Air National Guard unit.

What is Special Use Airspace (SUA)?

Special use airspace (SUA) was developed to advise pilots of an activity or surface area that dictates special rules or notices and may possibly be hazardous. The designation of SUA identifies for other users the area where military activity occurs (air or land operations), provides for segregation of that activity from non-participating aviation activities, and allows charting to keep airspace users informed. There are five main types of SUA, two of which are located in the study areas. The two types in the study areas are as follows.

Military Operations Area (MOA)

A MOA is a type of SUA, in addition to restricted areas and prohibited areas, where military operations are of a nature that justify limitations on aircraft not participating in those operations. These areas are identified on aviation charts by a defined area marked with "MOA," preceded by the MOA's name. MOA altitudes differ for each individual area and can be determined by consulting sectional chart legends. Local flight service facilities maintain current schedules and contacts for the agency controlling each MOA.

Restricted Area (RA)

RAs are an important asset to the DoD because they allow for the use of weapon systems for training and testing purposes. These areas are necessary for ground weapons and artillery firing, aerial gunnery, and dropping inert and practice bombs. RAs provide locations for training and testing to support combat readiness of aviation and ground combat units while separating these activities from the public and general aviation users.

These areas are identified by the letter "R" followed by a number on Federal Aviation Administration sectional charts, enroute charts, and terminal area charts. The floor and ceiling altitudes, operating hours, and controlling agency can be found in the sectional chart legend.

The Complex is comprised of the Jarbidge Military Operating Area (MOA) and the Owyhee MOA, both located in Owyhee County and shown on Figure 2-3, as well as the Paradise East MOA located in northern Nevada, and Paradise West MOA located in eastern Oregon. The Paradise MOA is not included in the study area for this JLUS and so is not discussed. The Jarbidge MOA includes the landscape of these areas is predominantly characterized by rolling grass and sagebrush primarily comprised of state and federally owned rangeland.

There are no major population centers in the vicinity of the Saylor Creek and Juniper Butte ranges. The majority of the land used for operations in MHRC is withdrawn for Air Force use.

The MHRC's land and airspace provide both composite force, which utilizes various types of aircraft and weapons systems to create a well-rounded group, and unit-level aircrews, consisting of a specific type of aircraft, such as a unit of F-15 aircraft, with a realistic training environment to help them accomplish their mission in support of wartime and peacetime contingencies. This involves training activities such as air-to-ground, air-to-air, electronic combat, combat search and rescue, large force engagement convoy escort, joint tactical air control, ground based air defense radar threat simulation, and survival, evasion, resistance, and escape (SERE). The range complex is primarily used by F-15 units from MHAFB and Idaho Air National Guard (IDANG) A-10 aircraft from Gowen Field; however, personnel from other Air Force and DOD installations from across the nation also use the facilities.

The airspace within MHRC is comprised of two restricted areas (R-3202 and R-3204), four MOAs, Air Traffic Control Assigned Airspace, and Military Training Routes (MTRs).

MHAFB personnel currently schedule four Instrument Routes (IR), which are airspace segments identified to be flown, to the maximum extent possible, under Instrument Flight Rules (IFR) or instrument mode. Instrument Routes were created through a joint venture with the Federal Aviation Administration (FAA) and the DOD. These routes have been mutually developed for the purpose of conducting low-altitude, high-speed military flight training. These routes are IR300, IR303, IR304, and IR313. MHAFB also has two scheduled MTRs that either traverse or utilize entry/exit points in MHRC airspace. Additionally, the IDANG has two MTRs that traverse or end in the MHRC.

Source: http://www.mapps.org/issues/Disney_Airspace_Briefing.pdf

Flares are authorized in Owyhee and Jarbidge MOAs above 2000 feet above ground level (AGL), except over the Saylor Creek Range impact area where flares are authorized down to 700 feet AGL. Flares over Jarbidge MOA are authorized above 2000 feet AGL. During fire season Category 4, flare altitudes are restricted. In fire season Category 5, ordnance delivery operations must cease, unless precluded

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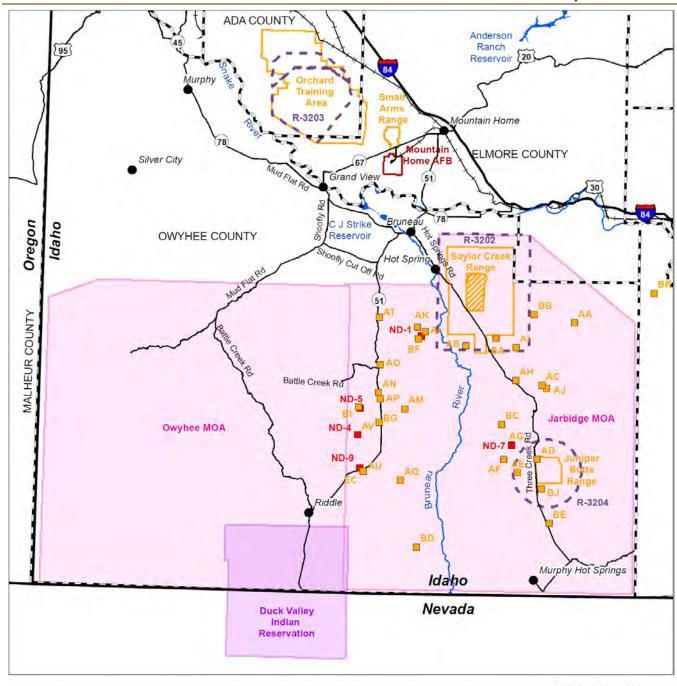
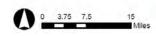






Figure 2-3
MOUNTAIN HOME
RANGE COMPLEX ASSETS





as determined to be mission essential. In accordance with the Wildland Fire Management Plan, in Category 4, flare usage over Saylor Creek Range, Jarbidge MOA, and the MOAs is restricted to above 5000 feet AGL. Other flight restrictions are enacted over the Duck Valley Indian Reservation, as well as seasonally from April to June over selected canyons that support recreation and Bighorn Sheep habitat.

Saylor Creek Range

Established in 1954, the Saylor Creek Range is the largest air-to-ground training range within the MHRC. It covers 109,466 acres and has a 12,840-acre impact area. The impact area is located under R-3202. The impact area is fenced off and has warning signs posted approximately every 600 feet to warn personnel and civilians of the activities and the potential danger that they pose to uninformed trespassers or personnel.

Source: http://www.mountainhome.af.mil/library/factsheets/factsheet.asp?id=12668 Range Information Fact Sheet.

This range is comprised of the North Tower Area and the West Gate Area. The major facilities that are located in the North Tower Area include the range control officer tower, the vehicle maintenance shop, the old maintenance complex, a helicopter pad, an emergency generator and pump house. The major facilities located in the West Gate Area include the operations and maintenance building, and the 266th Range Squadron maintenance building. Saylor Creek Range also contains three EC sites.

The range of the complex is situated approximately 29 miles southeast of MHAFB and supports day and night-time training operations. It includes a variety of targets to provide realistic training for aircrews. There are roughly 116 targets, of which 87 can be ground scored by the Weapons Impact Scoring System (WISS). The WISS operates through fixed-mounted cameras mounted on towers around the range. There are 33 cameras mounted on four towers within Saylor Creek Range. These cameras provide video feedback to operators via fiber optic lines. The target cameras are selected by the operator, who places a cursor on the bomb impact location. The system then scores the bomb impact. The target types include an airfield, on-ground aircraft, surface-to-air missile (SAM) sites, anti-aircraft artillery (AAA) sites, convoys, and industrial complexes. Some of the targets can be illuminated or heated for night and infrared training.

Although high explosives ordnance is currently not permitted on the Saylor Creek Range, the types of ordnance that are allowed include smaller sized practice bombs, inert general purpose bombs (up to 2,000 pounds) laser guided munitions, combat lasers, 20 mm and 30 mm training practice rounds, and aircraft chaff/flares. The impact area allows flares to be dropped at 700 feet AGL. The normal operating hours for Saylor Creek Range are from 7:30 am to 10:00 pm, Monday through Friday. Livestock grazing is allowed outside of the impact area and is managed by the Bureau of Land Management (BLM).

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The Saylor Creek Range has been in operation for over 50 years, and so the possibility of finding unexploded ordnance (UXO) outside of the impact area exists. Although modern aircraft that utilize the range have very accurate equipment and weapons guidance systems, the aircraft training in the past at the range were not as accurate. Ordnance was periodically released outside of the impact area. In most cases, it was collected immediately, but the potential exists today to find such ordnance outside of the impact area.

Juniper Butte Range

The other air-to-ground training range within MHRC is the Juniper Butte Range. Established in 1998 and completed in 2001, it is located in R-3204. Major facilities at the Juniper Butte Range include the operations and maintenance complex, a water pump house, and a generator building. This range provides day and night-time training activities and is located approximately 52 miles south of MHAFB and covers 12,112 acres of land. The entire range is considered an impact area; however targets are only permitted within a 662-acre area located in the center of the range and is fenced off. Similar to the Saylor Creek Range, the fenced area has warning signs posted approximately every 600 feet.

Livestock grazing is permitted outside of this area and is managed by the BLM. The Juniper Butte Range has a smaller selection of targets than Saylor Creek. Of the 88 targets on-site, 77 of them are capable of being scored by WISS. There are 24 fixed-mounted WISS cameras on three towers at the Juniper Butte Range. The types of targets on this range include two surface to Air (SAM) sites, several tank and armored vehicle convoys, railroad cars, and an industrial complex. Some of the targets can be illuminated or heated for night and infrared training.

Only inert ordnance is authorized to be dropped at the Juniper Butte Range. This includes 25 pound BDU-33 practice bombs. These practice bombs emit a cloud of smoke upon impact to identify where they landed in relation to the intended target. To help aid in visual scoring of targets, they can contain two types of signal devices, classified as "hot" or "cold". Hot-spot signals include phosphorus that causes a narrow flame to be released upon impact, followed by white smoke. This signal can be viewed in both day and night operations. BDU-33s dropped at Juniper Butte Range utilize cold-spot signals, which typically use titanium tetrachloride and only produce smoke upon impact. This impedes night scoring due to a lack of visual light. No-spot BDU-33s are also dropped at Juniper Butte Range, in which no smoke is emitted. The Large Scale Target Scoring System (LSTSS) is a state-of-the-art system used at Juniper Butte Range that can score the accuracy of combat laser spots as well. It utilizes fixed-site scoring sensors mounted on small towers to score targets. Not all laser targets in the range can be scored with this instrument, only those within its line of sight and those facing its sensors. When scoring, the LSTSS captures the energy emitted by the laser and graphically depicts the geometric center of the laser spot to an operator, who then scores the hit (in feet) to determine accuracy. The normal operating hours for the Juniper Butte Range are from 7:30 am to 10:00 pm, Monday through Friday. Only

7.5 hours, Monday through Thursday, are open for ordnance usage during fire season, which typically ranges from May to October.

Other Facilities

MHRC includes five no-drop target sites used for simulated weapons delivery. Actual ordnance is not authorized in these areas, only training lasers. Three of these sites are five acres in size and contain targets such as SAM systems, simulated buildings, and radar sites. These three areas are fenced, and the other two are not. One area is a three-acre site that only contains SAMs. The last no-drop area is 640 acres and includes tanks, SAM sites, and AAA. One of the five-acre sites is located in the Jarbidge MOA while the other four are located in the Owyhee MOA.

There are 34 electronic emitter sites throughout the MHRC designed to simulate enemy threats. One of these is located at the Grasmere EC site, three are on the Saylor Creek Range, and the remaining 30 are scattered throughout the MHRC. Twenty of these sites are referred to as A-sites and are one-quarter acre, while the other ten B-sites are one acre. All of the B-sites have security fences around their boundaries. Of the 30 sites, eight are located in the Jarbidge South MOA, 14 in the Jarbidge North MOA, 11 in the Owyhee MOA, and one just northeast of the Jarbidge North MOA boundary. The Grasmere EC site is a fenced seven-acre facility, 65 miles southwest of MHAFB. It provides EC training operations, as well as EC systems maintenance. It includes a crew facility building with a kitchen, common area, and a 12-room dormitory.

Supersonic Flight

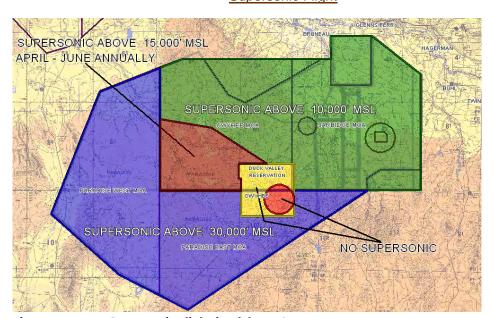


Figure 2-4. Supersonic Flight in Idaho MOAs

Supersonic flight is one of the four speeds of flight, referred to as the regimes of flight. The regimes of flight are subsonic, transonic, supersonic, hypersonic. Mountain Home AFB aircraft are authorized to conduct supersonic flights as part of training the Owyhee MOA, the Jarbidge MOA, and in the Air Traffic Control Assigned Airspace (ATCAA) above the Paradise East and Paradise West MOAs (see Figure 2-4). Airspace within the Owyhee and Jarbidge MOAs spans from 100 feet AGL to 17,999 feet above mean sea level (MSL). In

Paradise East / West, the airspace is currently from 14,500 feet to 17,999 feet MSL. Airspace between 18,000 feet MSL and 50,000 feet MSL is ATCAA, which is assigned by the FAA for Mountain Home AFB use, when

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Supersonic Flight

Vehicles that fly at supersonic speeds are flying faster than the speed of sound. The speed of sound is about 768 miles per hour at sea level. These speeds are referred to by Mach numbers. The Mach number is the ratio of the speed of the aircraft to the speed of sound. Flight that is faster than Mach 1 is supersonic. Supersonic includes speeds up to five times faster than the speed of sound, or Mach 5. Source: www.nasa.gov



A U.S. Air Force F-22 breaks the sound barrier.

requested. Within the Owyhee and Jarbidge MOAs, supersonic speeds may be attained at or above 10,000 feet MSL. Aircraft operating supersonic in the Owyhee and Jarbidge MOAs and northward generally conduct these types of operations in an east-west orientation. This is because the geometry of the airspace is more conducive for the high-velocity speed envelopes. It has the additional benefit of helping reduce the effects of sonic booms on local populations. As a result of the Enhanced Training in Idaho (ETI) Environmental Impact Statement (EIS), no supersonic flight is allowed over the southern portion of the Owyhee MOA between April and June annually.

Within Paradise East and West MOAs, supersonic flight may occur at or above 30,000 feet MSL. Consequently, unlike within some other Air Force airspace, there are no designated supersonic 'corridors' here. As a result of the 1996 agreement between the Shoshone-Paiute Tribes and the U.S. Government, supersonic flight is never allowed over the Duck Valley Reservation.

The frequency of aircraft attaining supersonic speeds over these areas is dependent upon the missions being conducted (i.e., air-to-air combat training, air-to-ground smart munitions release training, etc.). Mountain Home aircraft use the Owyhee and Jarbidge MOA airspace more than the Paradise MOAs for supersonic flights due to the lower, waiver-authorized, supersonic floors. The aircraft generally fly at above 20,000 feet MSL when supersonic, as it allows them to optimize the characteristics and kinetic energy of the munitions being employed.

As described by NASA, a sonic boom is a loud, thunder-like noise heard by a person on the ground when an aircraft flies overhead at supersonic speeds. Air reacts like a fluid to supersonic objects, and as objects travel through the air, the air molecules are pushed aside with great force. This force forms a shock wave, much like the wave created by the front, or bow, of a boat moving in water. The shock wave forms a cone of pressurized air, and a sharp release of pressure after the buildup of a shock wave is heard as a sonic boom. It is similar to the sharp release of pressure when a pin pops a balloon and makes a loud noise. It is important to understand that the higher an aircraft's altitude when it breaks the sound barrier, the lower the impact of the sonic boom to those on the ground. The same is true for aircraft flying overhead at supersonic speeds.

Source: http://www.mountainhome.af.mil/library/factsheets/factsheet.asp?id=12668Range Information Fact Sheet. Source: Mountain Home Range Complex Comprehensive Range Plan, FY 2007 – 2012, 17 Oct. 2006; Byron Schmidt, Chief of Airspace Management, Mountain Home AFB, August 11, 2010.

Gowen Field and Orchard Training Area Focus Area

The other JLUS focus area includes facilities and training areas associated with the operational missions and training of the Idaho National Guard (IDNG). This includes Gowen Field and the OTA (see Figure 2-5). The IDNG, as well as the Bureau of Homeland Security are administered by the State of Idaho Military Division.

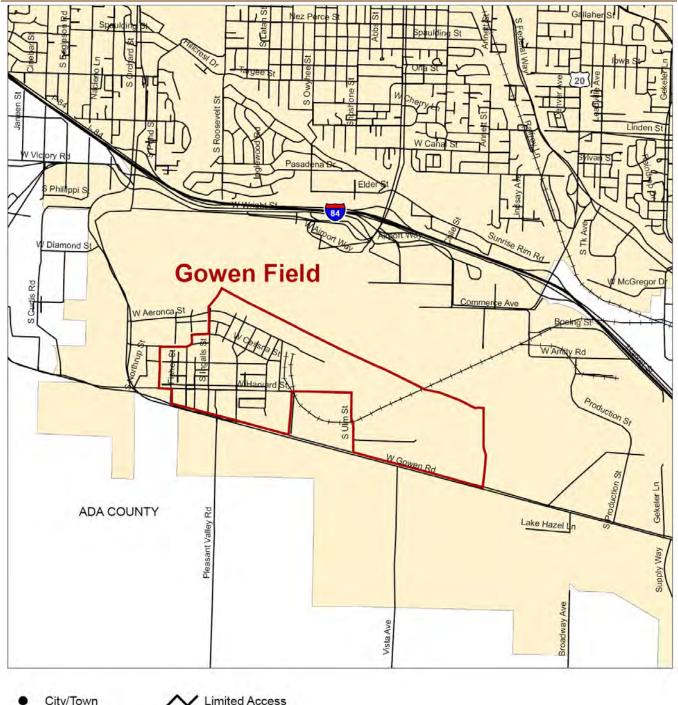








Figure 2-5
GOWEN FIELD INSTALLATION OVERVIEW

A-10/A0-10 Thunderbolt II



Length: 53.3 ft
Height: 14.7 ft
Wingspan: 57.5 ft
Speed: 420 mph
Ceiling: 45,000 ft
Range: 800 miles
Role:

A-10: close air support A0-10: airborne forward air control

Crew: 1

Armament: 1x 30mm GAU-8/A 7-barrel Gatling gun

Up to 16,000 pounds of mixed ordnance on 8 x under-wing and 3 x under-fuselage pylon stations, including 500 pound Mk-82 and 2,000 pounds Mk-84 series low/high drag bombs, incendiary cluster bombs, combined effects munitions, mine dispensing munitions, AGM-65 Maverick missiles and laser-quided/ electro-optically guided bombs; infrared countermeasure flares; electronic countermeasure chaff; jammer pods; 2.75-inch rockets; illumination flares and AIM-9 Sidewinder missiles.

OVERVIEW

Gowen Field is the headquarters for all operations performed by the IDNG in the State of Idaho. It also provides training and education for all military services throughout Idaho, including the U.S. Army, Navy, Marine Corps, and Reserve units.

National Guard

The Army National Guard (ARNG) and the Air National Guard (ANG) are administered by the National Guard Bureau, a joint bureau of the departments of the Army and Air Force, located in the Pentagon, Washington D.C.

The National Guard has a unique dual mission, with both Federal and State responsibilities. During peacetime, the Governor, through the State Adjutant General, commands National Guard forces. The Governor can call the National Guard into action during local or statewide emergencies, such as storms, drought, and civil disturbances. In addition, the President of the United States can activate the National Guard to participate in federal missions. Examples of this are the many National Guard units that have deployed to support operations in Bosnia, Afghanistan, and Iraq. When federalized, National Guard units are commanded by the Commander of the theatre in which they are operating.

The dual mission is a provision of the U.S. Constitution and the United States Code of Laws and results in each guardsman holding membership in the National Guard of his or her state and in the National Guard of the United States.

Army National Guard

The Army National Guard is one branch of the U.S. Total Army, consisting of the Active, Guard, and Reserve components. The Army National Guard is composed of civilians who serve their country on a part time basis. Each state and territory has its own Army National Guard as provided by the U.S. Constitution.

Air National Guard

The Air National Guard is one of the seven Reserve components of the U.S. Armed Forces that augments the Active components in the performance of their missions. Similar to the ARNG, the ANG has both a federal and state mission.

The ANG provides almost half of the Air Force's tactical airlift support, combat communications functions, aeromedical evacuations, and aerial refueling. In addition, the Air National Guard has total responsibility for air defense of the entire United States.

History of Gowen Field

In 1936, the City of Boise began purchasing and leasing land three miles south of the City to provide an area to construct a new airport. In 1938, Boise Air Terminal opened with an 8,800-foot runway, the longest in the United States at the time. The Army Air Corps established a base just south of the Boise Air Terminal in 1941. This leased land was used during World War II to train B-17 Flying Fortress and B-24 Liberator bombing crews. During World War II, over 6,000 personnel were stationed here.

The name Gowen Field was adopted in 1941 in honor of an Idaho Army-Air Corps pilot killed in a 1938 crash in Panama. The portion of the field used by the Army Air Corps was returned to the City after World War II ended. In 1947, the IDANG began leasing the field and continues to do so to this day.

Units at Gowen Field

Gowen Field is located on 576 acres south of the Boise Airport's Air Terminal in Ada County. It is home of the Air and Army National Guard, as well as reserve units of the Army, Navy and Marines. Gowen Field's primary responsibility is providing quality training facilities for reserve and active-component military forces. The major units based at Gowen Field are described below.

124th Wing

The 124th Wing of the Idaho ANG is Gowen Field's host unit, operating A-10 close air support aircraft. The unit is operationally-gained by both the Air Combat Command (ACC) and the Air Mobility Command (AMC) of the U.S. Air Force, meaning that in times of need, it can be called into action by



these groups, and conforms with federally and state-mandated missions of the National Guard. The 190th Fighter Squadron, flying the A-10 Thunderbolt, is assigned to the 124th Wing.

116th Cavalry Brigade Combat Team

The 116th Cavalry Brigade Combat Team (BCT) is an ARNG unit located throughout the states of Idaho, Montana, Oregon, and Utah. It is the largest of 15 Heavy Separate Brigades in the U.S. and consists of two armor battalions, a Combat Engineering Battalion, a Field Artillery Battalion, and a Support Battalion. The equipment used by this group is the most



modern in the Army inventory. Units based in Idaho include the BCT headquarters, field artillery, maintenance, and reconnaissance. Source: IDNG Comprehensive Installation Plan Draft, February 2008

1st Battalion - 183rd Aviation Battalion (1-183 AVN)

This battalion is the air component of the IDARNG. It is equipped with AH-64 Apache attack helicopters and UH-60 Blackhawk utility helicopters. The 1-183 AVN has three separate missions. The wartime mission is to destroy enemy



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forces through the use of aerial firepower, mobility, and shock effect. The state mission is to provide units and equipment for immediate deployment during natural disasters and civil disturbances within the State of Idaho. The community support mission is to provide personnel to support local community events and activities.

Source: http://www.idahoarmyguard.org/ArmyAviation/1-183/183History.asp

Current Mission Operations at Gowen Field

The primary type of aircraft that is trained out of Gowen Field is the A-10 Thunderbolt, also known as the Warthog. This one-seat aircraft is one of the most effective air-to-ground weapons systems currently used by the U.S. Its high velocity, armor piercing rounds are devastating against tanks, armored vehicles, ground forces, and buildings. It can take off and land on short runways, has a range of 800 miles from where it was deployed, and is capable of staging near the battlefield until it is needed. These features, along with its versatility over various types of low level terrain, made it a key aviation asset in conflicts such as Operation Desert Storm and Operation Enduring Freedom.

To supplement A-10 pilots and associated personnel, the IDANG initiated the first A-10 Intelligence Formal Training Unit (IFTU) in 2007. The IFTU is located at Gowen Field and is designed to educate intelligence professionals with technical expertise that will be useful when determining special logistics and needs for A-10 missions. Classes are expected to begin the first half of 2009. There will be up to eight classes each year, with twelve students in each class.

Source: A-10 Intelligence Training to Take Place in Idaho, Jan. 6, 2009, from http://www.124wg.ang.af.mil/news/index.asp

The IDARNG also utilizes various weapons systems at Gowen Field. The helicopter support includes the AH-64 Apache and the UH-60A Blackhawk. The ground vehicles that operate out of Gowen Field, and train heavily at Orchard Training Area (OTA), include the M1A1 Abrams tank, the M2A3 Bradley infantry fighting vehicle, and the M109A6 Paladin self-propelled artillery. Figure 2-6 provides information and logistics of the major weapons systems used by the IDNG at Gowen Field.

Future Mission Operations at Gowen Field

As part of the 2005 BRAC recommendations, the four C-130 aircraft of the 124th Wing have been redistributed to Cheyenne, Wyoming, and the wing will increase its number of A-10 aircraft from 15 to 18. Gowen Field is a prime location for A-10 aircraft due to its proximity to various air-to-ground ranges and scoring systems. As a result of this move, several construction projects will also be implemented to accommodate the change of mission and enhance capabilities.

Installation Setting of Gowen Field

Gowen Field is located within 576 acres of land adjacent to Boise Municipal Airport. Approximately 30 percent of the land area is used as open space,

M1A1 Abrams Tank	M2A3 Bradley Infantry Fighting Vehicle	M109A6 Paladin Self- propelled Artillery	AH-64 Apache Attack Helicopter
Length:	Length:	Length:	Length:
32.04 ft	21.17 ft	32 ft	58.17 ft
Height:	Height:	Height:	Height:
8 ft	11.8 ft	10.6 ft	15.2 ft
Width:	Width:	Width:	Width:
12 ft	11.83 ft w/ armor tiles	10.3 ft	17.15 ft (main rotors)
	10.75 ft w/o armor tiles		
Speed: 42 mph	Speed: 45 mph	Speed: 40 mph	Speed: 173 mph
Crew: 4	Crew: 3 crew 6 dismounted infantry	Crew: 4	Crew: 2
	Role:	Role:	Role:
Armor	Infantry transport	Indirect fire	Attack helicopter
	Anti-tank	Artillery	
Weight:	Weight:	Weight:	Weight:
69.5 tons	33.5 tons combat	31.8 tons – combat	5.9 tons empty
	loaded	loaded	
	25 tons unloaded	28.2 tons - empty	
Armament:	Armament:	Armament:	Armament:
120 mm cannon	25 mm M242	155 mm cannon	30 mm chaingun
50 cal MG	Bushmaster cannon		AGM-114 Hellfire
7.62 mm MG (coax)	TOW II missile system 7.62 mm MG (coax)		missiles AGM-122 Sidearm
7.62 mm MG (loader)	7.02 mm WG (coux)		missile
			AIM-9 Sidewinder
			missile
			2.75-in Hydra-70 rockets

Figure 2-6. Idaho Army National Guard Major Weapons Systems

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landscaping, recreation, and/or undeveloped. Some of these areas include picnic pavilions, sporting fields and courts, and a running track. There are several hangars and apron areas where aircraft are stationed when not in use. These are primarily adjacent to taxiways and the southern runway of the airport (Runway 10R-28L). Buildings on the base include 29 barracks buildings, 7 bachelor quarters buildings, 7 dining facilities, and 29 command and control buildings. Other amenities include two laundry facilities, a chapel, a base theater, an Army & Air Force Exchange Service (AAFES) base exchange, 14 education buildings (32 classrooms), and two medical support facilities. An additional assault strip runway was built in 2002 with funding from the DOD (located south of Gowen Field) to be used for military training activities. It measures 5,000 feet in length by 90 feet in width. Source: IDNG Gowen Field Training Center Brief PowerPoint presentation; Boise Airport Master Plan Update, Final Draft September 2008

Gowen Field Demographics

Due to a different system of tabulating employee numbers, the available data for employment at Gowen Field was based on an overall total for the entire Treasure Valley. According to COMPASS, this valley is roughly defined by the mountains to the north, mountains and desert to the south, the eastern edge of Ada County to the east, and the western edge of Canyon County to the west with a deep gorge cut by the Snake River and the Bonneville Flood 20,000 years ago. The number of Active Guard Reserve and technician personnel for this area is 1,513. There are also 228 State employees within this geographic area, comprising a total of over 1,700 personnel. Source: LTC Henrik Fast, IDNG Deputy Human Resources Officer, January 30, 2009

Gowen Field Housing

There are seven buildings at Gowen Field for Bachelor Officer Quarters (BOQ) and Bachelor Enlisted Quarters (BEQ). These buildings house two soldiers per room and have a total capacity of 600 soldiers. Gowen Field has a large amount of open bay barracks space where soldiers and students are housed. There are 28 male barracks buildings, each with a sleeping capacity of 100 people. This allows for a total capacity of 2,800 male soldiers. There is only one female barracks building, which has 8 bays. Each bay has the capacity for 30 soldiers, providing a total capacity of 240 female soldiers.

Economic Impact of Idaho National Guard

Due to variances in reporting economic impacts utilized by the Air Force and the National Guard, the total economic impact for FYo8 is reported for the entire IDNG, and as such, does not contain information for each installation. However, since Gowen Field is the headquarters for the IDNG, it accounts for a large majority of the reported economic impact. In FYo8, the IDNG had a total economic impact of a little over \$304.6 million. This was comprised of state and federal dollars. State dollars accounted for a little more than \$18.34 million and federal dollars were just over \$286.12 million. Federal expenditures were further broken down by Air National Guard and Army National Guard into the categories of Pay and Allowances, Constructions, and Goods and Services. Table 2-6 illustrates the breakdown of the federal portion

of the economic impact and Figure 2-7 illustrates the composition of state and federal expenditures.

Table 2-6. IDNG Economic Impact, FY08

	Air National	Army National	
Category	Guard	Guard	Total
Pay and Allowances	\$83,979,000	\$94,474,800	\$178,453,800
IDT/AD	\$47,931,800	\$30,838,400	
Tech	\$19,646,500	\$35,836,200	
AGR	\$16,400,700	\$27,800,200	
Construction	\$778,000	\$10,377,400	\$11,156,100
Major	N/A	\$1,626,900	
Minor	N/A	\$1,113,400	
RPOM/SRM	\$778,700	\$5,899,200	
State (DPW)	N/A	\$1,737,900	
Goods and Services	\$29,837,750	\$31,637,100	\$61,474,850
Other	N/A	N/A	\$35,066,803
Grants (State)	N/A	N/A	\$25,933,198
CFA (State)	N/A	N/A	\$24,781,714
(less CFA Opns)	N/A	N/A	-\$15,648,109
TOTAL	\$114,595,450	\$136,489,300	\$286,151,554

Source: Idaho National Guard FY08 Economic Impact Analysis



Figure 2-7. IDNG Economic Impact, FY08

ORCHARD TRAINING AREA

Orchard Training Area consists of 143,304 acres of training and maneuver area located approximately 13 miles south of Gowen Field. It is located within the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA). OTA is located on lands managed by the BLM and the State of Idaho, and the majority of the surrounding land is currently unpopulated. Most of the terrain at OTA is characterized by low sloped, high desert ranging from 3,000 to 3,300 feet in elevation. Big Foot Butte and Christmas Mountain Butte are the highest points in OTA, at elevations of 3,535 feet and 3,497 feet, respectively. Through the Memorandum of Understanding (MOU) executed between the

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Pleasant Valley Road Tank Trail

- Parallels Pleasant Valley road approximately 10 miles from Gowen Field to the Union Pacific Main Line Rail Road tracks, then on the gravel Pleasant Valley Road to the OTA.
- Used year around by the Armor Training Battalion about twice every other week and more frequently May through August by OTA training units.
- Wheeled vehicle(s):
 - o Individual and convoys, use the paved Pleasant Valley Road and adhere to posted speed limits and traffic restrictions.
 - Traffic can exceed several hundred trips per day and night during annual training periods.
- Tracked vehicle(s):
 - O Must have road guards posted at the six locations where tracked vehicles cross civilian roadways and at the rail road tracks.
 - O Speed on the tank trail is 15 mph in most locations and slowed to 5 mph when passing housing located within 50 yards of trail.
 - Use limited to between
 8AM and 10PM or
 daylight hours only.
 - Tank trail is watered past housing area near tracks prior to use whenever conditions are dusty.

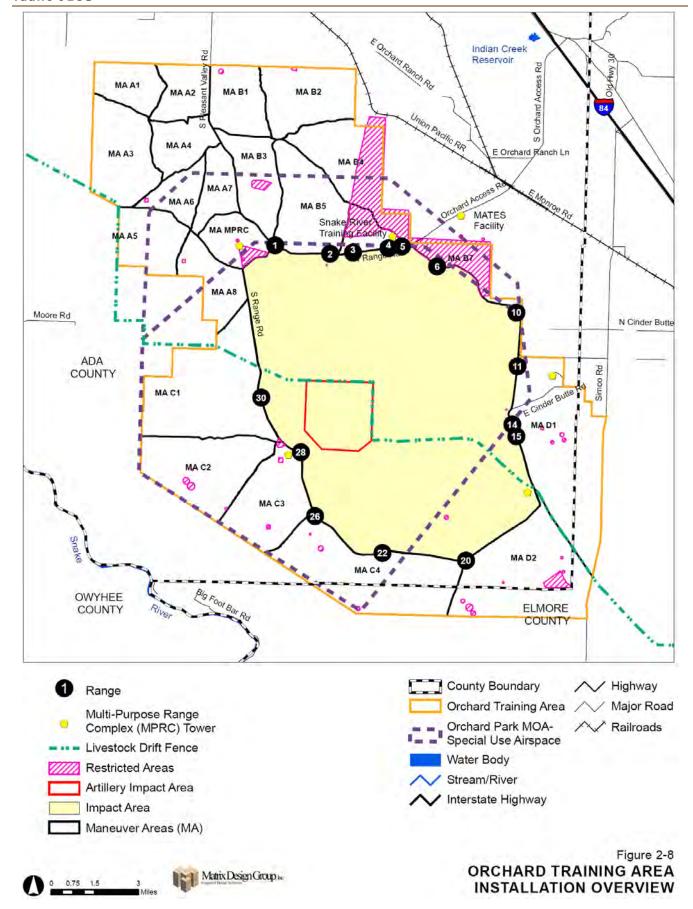
BLM and the Idaho Military Division (IMD) that establishes parameters for the use of the OTA, personnel using the training area are responsible for maintaining, protecting, and conserving cultural, environmental, and important species habitat areas that are located within the OTA boundaries.

Orchard Training Area has been used by the IDARNG since 1953 and is also used by the IDANG and other branches/units of the military from Idaho, Nevada, Montana, Oregon, and Washington. Under the current MOU with the BLM, training on the land is authorized until the year 2040, with provisions to extend this term further into the future. The land use at Orchard Training Area is identified as range, training areas, and maneuver areas as shown on Figure 2-8. The training and maneuver areas are primarily accessed from the north, via Pleasant Valley Road, an asphalt two-lane road. The condition of this road is generally rated as fair to good, with a small section being in poor condition and requiring its asphalt replaced. Parallel to this road is a tank trail that is used by tracked vehicles (i.e., tanks, armored personnel carriers, self-propelled artillery, etc.) to travel between Gowen Field and the OTA. Pleasant Valley Road is a public road and, as such, is used by non-military vehicles. It provides access to private homes located along its length between Gowen Field and the OTA. In several locations, these vehicles must cross the tank trail to access their properties. Additional range access is available from an access road connected to Interstate 84 (I-84) in the town of Orchard.

Operations at the OTA differ depending on the season. It is more heavily used during the summer months, which coincides with the traditional availability of Guardsmen. During winter months, most of the activities are contained to the area's northern area, which supports year-round schools conducted by the 1st Armor Training Battalion, 204th Regional Training Regiment. This includes National Guard units from around the country.

The Orchard Training Area is divided into two primary types of areas to support training: the Impact Area and the Maneuver Area. The Impact Area, which is located on approximately 65,300 acres in the center of the OTA, is where live ammunition is targeted. This includes self-propelled artillery, which is fired from established sites around the perimeter of the Impact Area. At the center of the Impact Area is a 3,400-acre Artillery Impact Area. The Impact Area is restricted from the public for safety reasons. The Maneuver Area is approximately 72,750 acres and provides land for tracked and wheeled vehicle training.

The facilities at the OTA provide a variety of different training activities that support joint operations for battalion level force-on-force maneuver, company and platoon collective level training, and crew or individual collective training. Both air and ground training operations can occur here. A minimal amount of structures are placed on the grounds, which include range towers, control facilities, maintenance buildings, training facility, a helipad, barracks, and medical evacuation buildings. An ammunition supply point is also located in the northeastern portion of the training area.



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There are 16 designated ranges that support tank, helicopter, field artillery, mortar, grenade, rifle, and small arms training. There are also 10 maneuver areas around the perimeter of the Impact Area. The facilities at OTA include:

- Multipurpose Range Complex-Heavy (MPRC-H)
- Crew served weapons ranges
- Individual weapons qualification ranges
- Hellfire AH-64 range 3
- Artillery and mortar firing ranges
- Engineer qualification ranges

There is a portion of restricted airspace for training labeled Restricted Areas 3203A, B, and C. The air facilities located at Orchard Training Area include:

- Phantom Drop Zone
- Saylor Creek Drop Zone
- Ryan Drop Zone
- Stone Orion Drop Zone
- Tailor Drop Zone

Source: IDNG Comprehensive Installation Plan Draft, Feb. 2008, pg. 3.1-5

Mobilization and Training Equipment Site (MATES)

Located northeast of the Orchard Training Area boundary is the Mobilization and Training Equipment Site (MATES) facility. The MATES is a site at which a portion of the 116th Brigade Combat Team's equipment is positioned by direction of the Chief, National Guard Bureau, and maintained to support unit mobilization and training at OTA. Some of this equipment comes from 116th BCT units in Montana, Oregon, and Utah. Currently, the MATES contains a battalion's worth of armored personnel carriers, tanks, and infantry fighting vehicles. To be prepared for future missions at the OTA, a new rail spur is under construction to connect the MATES with the nation's rail system. This will be used to transport tracked and wheeled vehicles and supplies, along Pleasant Valley Road. Upgrades to water storage and water treatment lagoons are also planned for fiscal year (FY)09 and FY10.

Airspace

Much of the airspace over OTA, approximately 75 percent, is classified as special use airspace (R-3203). R-3203 is that airspace defined by the lateral limits detailed in Federal Aviation Administration Order 7400.8, Special Use Airspace, Subpart B, and is activated no less than 24 hours in advance by Notice to Airmen (NOTAM). In general, restricted airspace covers the central and southern portions of the training area and include the Multi-Purpose Range Complex (MPRC), firing ranges, maneuver areas, and the artillery impact area. The majority of the restricted airspace – over the MPRC, firing ranges, and artillery impact area – is Class A and Class B airspace. The

northernmost restricted airspace is Class D, while the southernmost restricted airspace is Class C. The vertical limit for each sector is listed below:

- (1) R-3203 Class A surface to 15,000 feet above MSL.
- (2) R-3203 Class B Boise 15,000 feet MSL to and including 22,000 feet above MSL.
- (3) R-3203 Class C surface to and including 6,000 feet above MSL.
- (4) R-3203 Class D surface to and including 22,000 feet above MSL.

In addition to the airspace noted above, there are two established flight corridors between Gowen Field and OTA to facilitate aircraft training missions. These routes, one to the north end of the Boise Airport runway (Green Route) and one to the south end of the runway (Blue Route) are follow a general north-south heading. Procedures for ingress from OTA to the Boise Airport call for an altitude of 3,700 feet AGL. Egress procedures call for an altitude of 4,000 feet AGL.

Future Improvements

To keep up with continuing training operations and to maintain its status as the premier military training area in Idaho (and the U.S.), several construction and improvement projects are scheduled for the OTA. A key project to address the increased military activities on the OTA is the development of the Organizational Readiness Training Center (ORTC). This complex is designed to meet the additional requirements to support OTA soldiers' housing, feeding, and administrative needs close to where they are training. For these reasons, the ORTC will consist of barracks, dining facilities, administration buildings, and parking areas. Funding for the first phase is secured and includes one 200-soldier barracks and one dining facility. Planning and design are well under way with construction scheduled to start in 2011. Phase 2, scheduled to begin planning in 2011, will include additional barracks, administration buildings, and officer / noncommissioned officer (NCO) quarters. At the project's 2018 build out, the ORTC is anticipated to include 29 buildings.

In addition to the ORTC, the IDNG plans for the Orchard Training Support Complex (OTSC) includes a Range Control facility on the southern edge at the entrance to the OTA. Adjacent to MATES a "Tent City" consisting of concrete pads for tents, water hydrants and electrical service pedestals and a large graveled vehicle parking/assembly area to accommodate temporary training units that cannot be accommodated in the barracks. On the north side of the ASP is designated an area for future alternate energy photovoltaic cells.

Several other projects scheduled for the OTA are listed below.

- Construct a mobile Military Operations on Urban Terrain (MOUT) training site to simulate close quarter cityscape combat.
- Construct a Battalion Level Forward Operating Base (FOB).

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- Construct an Urban Assault Course.
- Construct a Live Fire Shoot House.
- Construct a Brigade Level FOB.
- Construct a Combined Arms Collective Training facility.
- Modernize the MPRC-H.
- Complete Expansion of Range 15 Crew Served Weapons Qualification.
- Construct an Unmanned Aerial Vehicle (UAV) Airstrip.
- Construct Counter-Improvised Explosive Device training lane.

There is also a proposal that entails BLM swapping BLM-administered property in areas away from OTA for private lands adjacent to OTA. The goal of this proposal is to create buffer areas around the installation to reduce the potential for noise impacts, protect threatened and endangered species, and to reduce the possibilities of incompatible uses being located on lands adjacent or proximate to the training area.

2.2 F-35 Lightning II / Joint Strike Fighter Basing

The U.S. Congress approved the next generation F-35 Lightning II fighter aircraft, which has advanced stealth, speed, and advanced electronics to ensure air dominance over any battlefield. The F-35 was developed as a cutting edge, 5th-generation strike fighter to be produced in three common versions serving the Air Force, Marine Corps, Navy, and international partners to meet their similar needs. The F-35A is the Air Force variant of the F-35 and is designed to complement the F-22A Raptor and replace aging and legacy aircraft such as the F-16 and A-10. The commonality reduces F-35 acquisition and operating costs, and it allows enhanced interoperability between the military services and partnering nations, ensuring they can fight "shoulder-to-shoulder." The F-35A is intended to be the Air Force's premier strike aircraft through 2040.

The Air Force proposes to establish training for the new F-35A, also known as the Joint Strike Fighter (JSF), at one or more existing Air Force installations within the continental United States. Idaho Air Force installations were considered as potential homes for this new aircraft.

Environmental Impact Statements

On December 30, 2009, Air Force officials published the Notice of Intent (NOI) in the Federal Register to prepare an environmental impact statement (EIS) to assess the potential environmental impacts of basing the JSF aircraft at one or more existing Air Force and Air National Guard installations within the continental United States. Two EIS documents were discussed. One would cover siting of an initial (first round) operational unit and another for to evaluate the beddown of a training unit.

F-35A Lightning II



Length: 50.5 ft
Wingspan: 35 ft
Speed: Mach 1.67
Ceiling: 60,000 ft
Range: 1,200 miles without
external fuel tanks
Role: Close air support &
Ground attack support

Crew: 1

Armament:

1x 25mm GAU-22/A cannon

Munitions capacity of
18,000 lbs. Munitions
options primarily held in
internal weapons bays, but
external pylons may also be
used.

Air Superiority munitions center on 2 x AIM-12OC AMRAAM

Ground Attack support centers around 2 x GBU-31 JDAM guided bombs, but other munitions include: Up to 8 x GBU-38 bombs Current generation TV/laser-guided air-to-surface missiles, guided bombs, and munitions dispensing bombs.

Earlier, on October 29, 2009, Secretary of the Air Force Michael Donley announced five operations candidate bases. They included Hill AFB in Utah; MHAFB, Idaho; Shaw AFB/McEntire Joint National Guard Base, South Carolina; Burlington Air Guard Station, Vermont; and Jacksonville AGS, Florida. At that time, the secretary also announced training base candidates. They included Boise AGS (Gowen Field), Idaho; Eglin AFB, Florida; Holloman AFB, New Mexico; Luke AFB, Arizona; and Tucson AGS, Arizona.

Teams with the Air Force surveyed the candidate bases for F-35 operational and training bases for feasibility, timing, cost and planning purposes to meet initial operational capability timelines. On July 29, 2010, Air Force officials announced that the Air Force had selected the preferred alternative locations for the initial operational base as Hill AFB, Utah, and Burlington Air Guard Station, Vermont. The preferred alternative location for training is Luke AFB, Arizona. Kathleen Ferguson, the deputy assistant secretary for installations stated that the identification of preferred basing alternatives was "not a final basing decision." "The preferred alternatives with other reasonable alternatives will continue to be evaluated in the Environmental Impact Analysis Process."

Although MHAFB and Gowen Field were not identified as the preferred basing alternatives for purposes of the environmental impact analysis process, they could continue to be evaluated as alternatives in the environmental impact analysis process (EIS), and could be ultimately selected for the initial basing. This possibility was not precluded by the announcement in July 2010.

MHAFB or Gowen Field could also be potential sites for later basing options for the F-35 following the initial (first round) basing selection currently under evaluation with the EIS, and may be considered in the future for other aircraft or missions that can not be projected at this time. As with all federal actions, future actions, such as these, would need to follow the process included in the National Environmental Policy Act (NEPA). This process would be similar to the process for the F-35 initial basing EIS described below.

In order to keep the Idaho JLUS current with changes that may come in the future, a strategy (Strategy 86) was included in Section 6 that provides for this possibility and for the subsequent update of this JLUS.

NEPA Process (F-35 Initial Basing EIS)

The EIS process schedule for the operational and training EISs is currently stated as follows:

Notice of Intent (NOI) to Prepare an EIS

Publication of the NOI in the Federal Register started the public involvement phase of the process.

Operational and Training EIS – December 28, 2009; Revised January 12, 2010; Revised March 16, 2010

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Scoping Period for Mountain Home AFB

The scoping process actively involves the public and government agencies in identifying the environmental issues to be addressed in the EIS as well as other potential alternatives to accomplish the purpose and need. The Air Force is conducting multiple scoping meetings.

Operational EIS – February 16-19, 2010 Training EIS – February 8-12, 2010

Draft EIS

The Draft EIS presents an initial analysis of the environmental impacts for the Proposed Action and each of the identified alternatives. The Draft EIS is filed with the U.S. Environmental Protection Agency and distributed to interested parties.

Operational EIS – 2010 Training EIS – Late 2010

Notice of Availability / Public Hearings and Comment Period

The Notice of Availability for the Draft EIS is published in the Federal Register and provided to the public for review and comment. The public comment period gives the public 30 days to comment on the analysis presented in the Draft EIS.

Operational EIS – Summer 2010 Training EIS – Late 2010

Final EIS

The Final EIS will provide responses to comments received on the Draft EIS. The Final EIS is filed with the U.S. Environmental Protection Agency and distributed to interested parties.

Operational EIS – Winter 2010 Training EIS – Winter 2010 / 2011

Notice of Availability / Public Review Period

The Notice of Availability for the Final EIS is published in the Federal Register and provided to the public. After publication of the Final EIS, interested parties are given 30 days to review the document. The Proposed Action will not proceed until the public review period is complete.

Operational EIS – Winter 2010 Training EIS – Spring 2011

Record of Decision

After reviewing comments from the public and considering the environmental effects, the decision maker will select an alternative and issue a Record of Decision. The Record of Decision is published in the Federal Register and provided to the public.

Operational EIS – Winter 2011 Training EIS – Late Spring 2011

2.3 Study Area Profile and Growth Trends



The Idaho JLUS includes two distinct focus areas, which involve the jurisdictions of Ada County, Elmore County, Owyhee County, the City of Boise, and the City of Mountain Home. The JLUS focus areas are delineated according to the various compatibility issues identified during the JLUS process.

Community Planning Association of Southwest Idaho (COMPASS)



Source: COMPASS Strategic Plan 2006

When an urban area reaches a population of 50,000 people, it is required by the federal government to form a metropolitan planning organization (MPO). The Community Planning Association of Southwest Idaho (COMPASS) is the MPO for Ada County, including the City of Boise. COMPASS also includes Canyon County in its purview; however, this county is not part of the JLUS study area. Although its name was not changed until 1999, with the inclusion of Canyon County, COMPASS has served as the MPO for the Boise area since the 2000 Census, when the Boise Urbanized Area reached a population of 200,000 and became a Transportation Management Area. Today, COMPASS is responsible for managing transportation issues and setting priorities for the investment of federal transportation dollars that are apportioned to its jurisdictional area. COMPASS is comprised of elected officials and members from local jurisdictions, highway districts, school districts, and other local and state agencies involved in planning and transportation.

Study Area Trends

The following sections provide a profile of the counties and cities within the MPO region and the JLUS study area in relation to population growth, housing growth, and housing median home values. This information assists in setting the context for the JLUS.

POPULATION

County Population Growth Trends

The counties located in the COMPASS planning area (Ada and Canyon counties) and those included in the JLUS study area (Ada, Elmore, and Owyhee counties) have experienced differing levels of population growth

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over the last few decades (see Table 2-7). Since 1990, Ada and Canyon counties have consistently experienced the most significant amount of growth and have historically been much greater (in terms of percentage increase) than the State of Idaho as shown on Table 2-7. This table uses U.S. Census Bureau statistics. In the decade between 1980 and 1990, Ada and Canyon counties experienced total growth of 122.3 percent and 122.8 percent, respectively. They have also experienced annual growth of between 1 percent and 4 percent. These are about twice as high as the State's population growth during that time, which was 53.5 percent (total) and between 1 percent and 2.5 percent (annually). Between 1990 and 2009, Owyhee County's population only increased a total of 33.7 percent and between 0.1 percent and 2.4 percent annually. Elmore County experienced annual decline of 0.2 percent from 1980 to 1990 and again between 2000 and 2009 The county's population increased 3.2 percent annually between 1990 and 2000. It should be noted that the largest annual population growth for all the counties and for Idaho occurred between 1990 and 2000. Canyon County experienced near consistent growth of about 4 percent for both 1990 - 2000 and 2000 - 2009.

Population estimates provided by COMPASS indicate that Ada County had a 98.4 percent (202,415 residents) total increase in population between 1990 and 2009. This is 11.5 percent higher than the growth derived from U.S. Census Bureau statistics. Similarly, the MPO showed a 112 percent total increase in Canyon County's population (100,844 residents) during that same timeframe, compared with 107 percent increase based on U.S. Census Bureau statistics. Annual growth for Ada and Canyon counties based on COMPASS and U.S. Census Bureau figures for 1990 to 2000 were aligned at 3.9 percent. For 2000 to 2009, COMPASS annual growth was higher than those calculated using U.S. Census Bureau data. Annual Ada County growth during this time period according to COMPASS data was 0.6 percent greater than U.S. Census Bureau. Canyon County annual growth during this period was slightly higher (by 0.2 percent) using COMPASS data.

Table 2-7. County Populations, 1990-2009

		Population			1990 – 2009	
Jurisdiction	1990 Census	2000 Census	2009 Estimate	# Change	% Change	
Idaho	1,006,749	1,293,953	1,545,801	539,052	53.5%	
Ada County	205,775	300,904	384,656	178,881	86.9%	
Canyon County	90,076	131,441	186,615	96,539	107.2%	
Elmore County	21,205	29,130	28,820	7,615	35.9%	
Owyhee County	8,392	10,644	11,223	2,831	33.7%	
COUNTY TOTAL	325,448	472,119	611,314	285,866	87.8%	

Note: Census Estimates dated July 1 of the stated year.

Source: U.S. Census Bureau, 2010

City Population Growth Trends

The cities in the region and in the JLUS study area have experienced a varied amount of growth since 1990. Table 2-8 provides total growth between 1990

and 2008 for some key cities and unincorporated areas. Cities for Ada and Canyon counties were provided to give the reader an understanding of population growth in the COMPASS planning area. Population estimates for cities were not available from the U.S. Census Bureau for incorporation into this report; therefore, estimates for 2008 were used.

The Boise-Nampa MSA (Boise MSA) is an area consisting of five counties (Ada, Boise, Canyon, Gem, and Owyhee counties) in southwestern Idaho, anchored by the cities of Boise and Nampa. It is the state's largest officially designated metropolitan area and includes Idaho's three largest cities – Boise, Nampa, and Meridian. The Boise MSA annual growth of 3.8 percent between 1990 and 2000 was on par with that of Ada County's 3.9 percent. These exceeded Idaho's annual growth of 2.5 percent for that period. At 3.2 percent, the MSA's annual growth surpassed the county's for 2000 to 2008 (2.9 percent).

Within the JLUS study area between 1990 and 2000, the City of Boise annual growth matched that of Ada County (3.9 percent). COMPASS population estimates show similar growth of 4.0 percent for Boise over this timeframe. Since the 1980s, Boise accounted for approximately 61 percent of the county's population, and between 12 and 14 percent of the state total. However, from 2000 to 2008, the annual growth for Boise dropped to 1.3 percent, less than half that of Ada County, and less than the State. COMPASS data shows a slightly higher annual growth of 1.8 percent. Although Boise still accounted for 13.5 percent of the State total, it only made up about 54 percent of the Ada County total. This can be attributed to the rise and growth of nearby urban centers such as the cities of Eagle and Meridian, urban expansion outside of Boise in unincorporated Ada County, and a decrease in annexations by Boise. That being said, the unincorporated areas of Ada County saw about a 1 percent decrease in population between 1990 and 2000 and a 1.1 percent annual growth from 2000 to 2008.

Grand View is a very small city, and although it had growth of 40.0 percent from 1990 to 2007, its population was actually estimated to have declined from 2000 to 2007. Of the four cities analyzed, Kuna had the largest percentage of growth, with 17.5 percent averaged annually between 1990 and 2000. This drastic increase was due partially to the low population of only 1,955 in 1990. It was also in response to several annexations and growth of the city. The population growth increased further from 2000 to 2007 with an average annual growth of 19.7 percent. The City of Mountain Home experienced an average annual growth of 4.1 percent from 1990 to 2000, but only 1.4 percent annually from 2000 to 2007. This is due in part to the city beginning to reach its build out capacity in which new housing areas can be been developed. Mountain Home grew from comprising approximately 35 percent the total population of Elmore County in 1980 to slightly more than 42 percent in 2007. This growth has occurred because Mountain Home serves as the urban center of Elmore County, is adjacent to MHAFB, which spurs new commercial and industrial uses, and houses a growing commuter workforce for the Boise Valley.

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Table 2-8. City Populations, 1990-2008 – U.S. Census Bureau

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		Population		1990 –	2008
	1990	2000	2008		
Jurisdiction	Census	Census	Estimate	# Change	% Change
Metropolitan Statistical Area				.	
Boise City-Nampa MSA	319,596	464,840	598,719	279,123	87.3%
Ada County					
Boise	126,685	185,787	205,314	78,629	62.1%
Eagle	3,327	11,085	19,471	16,144	485.2%
Garden City	6,369	10,624	11,713	5,344	83.9%
Kuna	1,955	5,382	13,354	11,399	583.1%
Meridian	9,596	34,919	66,916	57,320	597.3%
Star	648	1,795	5,065	4,417	681.6%
Unincorporated	57,843	53,107	58,017	174	0.3%
TOTAL	206,423	302,699	379,850	173,427	84.0%
Canyon County					
Caldwell	18,586	25,967	42,331	23,745	127.8%
Greenleaf	648	862	893	245	37.8%
Melba	252	439	560	308	122.2%
Middleton	1,851	2,978	5,594	3,743	202.2%
Nampa	28,365	51,867	80,362	51,997	183.3%
Notus	380	458	623	243	63.9%
Parma	1,597	1,771	1,870	273	17.1%
Wilder	1,232	1,462	1,473	241	19.6%
Unincorporated	37,165	45,637	50,414	13,249	35.6%
TOTAL	90,076	131,441	184,120	94,044	104.4%
Elmore County					
Mountain Home	7,913	11,143	12,382	4,469	56.5%
Owyhee County					
Grand View	330	470	462	132	40.0%

Source: U.S. Census Bureau, 2010

Future Population Projections

COMPASS also provides population forecast data for jurisdictions within its planning area, which includes Ada and Canyon Counties. For the purposes of this JLUS, the information is available for Ada County and the City of Boise. In August 2007, a document titled "Economic and Population Forecasts for Ada and Canyon Counties in Idaho (2007-2040) was completed by Idaho Economics, for COMPASS. This document examined population, housing, and job growth projections for Ada and Canyon Counties. It also provided projections for populations of several nearby counties, including Elmore and Owyhee.

Each of the three counties in the JLUS study area are projected to increase steadily in population over the next 30 years. Ada County will see the largest increase in population of the 30 year period, both in terms of quantity and percentage, with average annual growth of approximately 2.5 percent. Elmore County is expected to generate the next highest population increase, with average annual growth of 1.4 percent over the 30 year period. Lastly,

Owyhee County will experience average annual growth of approximately 1.1 percent from 2010 to 2040. The largest population increases for all three counties is projected to take place between 2030 and 2040, with an increase of 184,540 people, 6,110 people, and 1,720 people for Ada, Elmore, and Owyhee counties, respectively. Table 2-9 shows the population projections for the three counties from 2010 to 2040.

Table 2-9. JLUS Study Area Population Projections by County, 2010-2040

	Population Projection						
Jurisdiction	2010 2020 2030 2040						
Ada County	413,320	541,970	691,420	875,960			
Elmore County	30,550	35,260	40,550	46,660			
Owyhee County	11,800	13,340	14,920	16,640			
TOTAL	455,670	590,570	746,890	939,260			

Source: Economic and Population Forecasts for Ada and Canyon Counties in Idaho, 2007-2040

HOUSING TRENDS

County Housing Trends

The growth trends of new housing units for the three counties included in this JLUS coincide with the population growth that has taken place. Ada County generated the largest amount of new housing unit growth between the years of 2000 to 2007 with an increase of 29.3 percent. This was a greater percentage increase than the State of Idaho, which generated a 19.6 percent increase. In 2007, Ada County accounted for slightly more than 24 percent of the state's total housing units. The more sparsely populated Elmore and Owyhee counties also experienced positive housing growth, although to a much lesser extent than Ada County. In 2007, housing units in Elmore County comprised approximately two percent of the state total, while Owyhee County accounted for less than one percent. Table 2-10 illustrates the numerical and percentage growth of housing units in the three counties, compared to the State of Idaho, for the years between 2000 and 2007.

Table 2-10. Total Housing Units, 2000-2007 (Counties)

	Total Housing Units		Differ	ence
Jurisdiction	2000	2007	Increase	Percent
Idaho	527,824	631,071	103,247	19.6%
Ada County	118,516	153,208	34,692	29.3%
Elmore County	10,527	11,925	1,398	13.3%
Owyhee County	4,452	4,794	342	7.7%
COUNTY TOTAL	133,495	169,927	36,432	27.3%

Source: Idaho Department of Labor, www.census.gov

City Housing Trends

The City of Boise has increased its number of housing units, which coincides with its increase of population in recent years. In the years between 2000 and 2007, the City has added 12,161 new housing units, for an increase of

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15.6 percent. This increase only accounted for approximately 35 percent of the increase for Ada County, illustrating the fact that Ada County is growing significantly in other areas outside of the city of Boise. A large amount of growth is occurring in other major cities such as Meridian, while unincorporated areas, such as those south of Boise in the direction of OTA, are also experiencing development activity. Housing unit data for the cities of Grand View, Kuna, and Mountain Home were unavailable for 2007, and so a comparison could not be made for them. Table 2-11 illustrates the increases in housing units for the City of Boise from 2000 to 2007.

Table 2-11. Total Housing Units, 2000-2007 (Cities)

	Total Housing Units			
Jurisdiction	2000	2007	% Change	County
Idaho	527,824	631,071	19.6%	N/A
City of Boise	77,850	90,011	15.6%	Ada
City of Grand	228	N/A	N/A	Owyhee
View				
City of Kuna	1,793	N/A	N/A	Ada
City of Mountain	4,738	N/A	N/A	Elmore
Home				
CITY TOTAL	84,609			

Note: N/A = Not Available Source: www.census.gov

HOUSING VALUE TRENDS

When examining regional growth trends, the cost of housing can provide insight into areas that may be more attractive based on affordability. Rapidly rising housing prices in urbanized areas between 2000 and 2007 was seen as a key determinant to expansion into unincorporated areas. Nationally, after a significant increase since the mid-1990s, housing values have significantly dropped in recent months. The impact of this trend on housing values within the JLUS focus areas remains to be seen, as updated information is not currently available.

County Housing Value Trends

The median housing values for the three counties in this JLUS study area increased substantially between 2000 and 2008. Elmore County experienced the lowest monetary and lowest percentage increase. However, at a value increase of almost \$67,000 and experiencing an approximate 62 percent increase respectively, value increases were still significant. It was one percent lower than the State's increases over the same years. Ada County captured the highest monetary increase (\$103,400), while Owyhee County claimed the highest percentage increase (89.8 percent). Table 2-12 provides numerical and percentage increases for the counties compared to the state for median housing values between 2000 and 2008.

Table 2-12. Median Housing Values, 2000-2008 (Counties)

		Median Housing Values		Change	
Jurisdiction	2000	2008	Value	% Change	
Idaho	\$106,300	\$183,700	\$77,400	72.8%	
Ada County	\$124,700	\$228,100	\$103,400	82.9%	
Elmore County	\$93,200	\$159,798	\$66,598	71.5%	
Owyhee County	\$82,500	\$156,604	\$74,104	89.8%	

Source: http://quickfacts.census.gov and www.city-data-com

City Housing Value Trends

The cities analyzed in this JLUS exhibited median housing growth trends similar to the counties in which they are located. Boise showed a little more variation from Ada County, with 2008 Boise housing values approximately \$12,000 lower and nearly four percent lower than Ada County in terms of the eight-year value change. The City of Grand View was well below the housing value increase that Owyhee County experienced, with an end result price in 2008 nearly \$43,000 lower. The City of Kuna saw a greater percentage increase than Ada County; however the 2008 housing value was much lower (over \$20,000 lower). With an increase of 69.7 percent and approximately \$64,000, Mountain Home was very close to value increases reported in Elmore County. Table 2-13 illustrates the housing value trends for the four JLUS cities from 2000 to 2008.

Table 2-13. Median Housing Values, 2000-2008 (Cities)

	Median Housing Values		Change	
Jurisdiction	2000	2008	Value	% Change
Idaho	\$106,300	\$183,700	\$77,400	72.8%
City of Boise	\$120,700	\$216,500	\$95,800	79.4%
City of Grand View	\$70,500	\$113,703	\$43,203	61.3%
City of Kuna	\$95,600	\$178,529	\$82,929	86.7%
City of Mountain Home	\$91,400	\$155,099	\$63,699	69.7%

Source: http://quickfacts.census.gov and www.city-data-com

ECONOMIC CONDITIONS

Agriculture and natural resource management continues to be an important aspect of the three counties in this JLUS. However, the Ada County Comprehensive Plan has identified that large scale agricultural operations are likely to see significant declines in the future as urbanization of rural areas continues to be experienced. Rising land prices and a continually contracting agricultural land base are likely to result in smaller scale operations for producing local agricultural products and services. Similar situations are occurring in selected portions of Elmore County as land prices and production costs continue to rise, which often results in land sales and the eventual transition to a developed land use pattern. In Owyhee County, the confluence and existence of the Snake and Bruneau Rivers have historically provided the economic base for agricultural usage.

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The City of Boise and its expanding urban area is continuing to grow its industrial and manufacturing corridors. These areas rely on the manufacture and production of goods and services rather than on agricultural practices. Boise is also experiencing growth in its science, engineering, and technology sectors. Substantial research and development has been initiated, and continues to be explored, on power, alternative energies, and agricultural biosciences. Boise and its outlying areas host several national and international high-tech companies, including Micron Technology, Hewlett Packard, Microsoft, and Sybase.

Real Estate Market

According to the National Bureau of Economic Research, the latest United States' recession began in December 2007. Significant job losses across the country are directly related to the residential and commercial real estate markets.

Commercial Market

The Treasure Valley office market felt the impact of this recession, which was made evident in declining rental rates and increasing vacancy. Office vacancy continued to rise throughout the Treasure Valley, climbing from 14.6 percent at the end of 2008, to 18 percent in the fourth quarter 2009.

The Treasure Valley industrial market continued to feel the effects of a down economy in the second half of 2009, The overall perception of the industrial market is negative. With the housing boom officially ending in 2008, the ripple effect for the industrial market continues to grow. Vacancies continued to increase with more sublease space coming on the market as tenants downsized or went out of business, and lease pricing steadily dropped. Colliers International expects the industrial market to stay relatively flat for one or two more years and believes the Treasure Valley economy will need to improve to help bring this market back. Source: Colliers International, Year-End Real Estate Market Review, 2009

Residential Market

The local job market has had its setbacks. Unemployment reached 9.1 percent in November 2009, largely driven by pullbacks from Micron, Hewlett Packard, the SuperValu acquisition of Albertsons, the demise of DBSI, and the collapse of the home-building sector. Source: Colliers International, Year-End Real Estate Market Review, 2009. There was a net loss of 15,000 jobs just within the Boise MSA for calendar year 2009. Source: Metrostudy, Treasure Valley Executive Briefing 4Q 2009. For February 2010, the United States Department of Labor, Bureau of Labor Statistics calculated the state unemployment rate at 9.5 percent, which places is at 29th place among other states along with Arizona, Massachusetts, Washington, and West Virginia. Source: http://www.bls.gov/.

Within Ada County, it was reported in 4th Quarter (Q4) 2009 that 1 in every 103 homes experienced or were under foreclosure actions. This equates to nearly 1 percent of all homes in the county, which is considered high. During

the last five months of 2009, the average resale price for detached homes in Ada County was approximately \$190,000. This is a decrease from the peak of about \$265,000 in September 2007, which is when the downward trend in resale prices began. The late-2009 resale price is the lowest since before July 2006. Based on the Intermountain Multiple Listing Service, the 2010 year-to-date average selling price for existing homes in Ada County continues to be just over \$191, 000. Source: http://www.intermountainmls.com/Statistics/Static.aspx.

Overall, housing starts and closings for detached units in the Treasure Valley market have steadily decreased between Q4 2006 and Q4 2009 with decreases of 28 percent and 32 percent, respectively. Housing starts and closings for attached units in the Treasure Valley market have also generally trended downwards, but this is between Q1 2008 and Q4 2009, and at rates of 14 percent and 41 percent, respectively. Within Ada County, annual starts and closings for attached and detached housing units combined has also shown a downward trend beginning in Q1 2007 and continuing through Q4 2009 at decreases of 15 percent and 27 percent, respectively. Source: Metrostudy, Treasure Valley Executive Briefing 4Q 2009.

2.4 County and City Profiles

Land ownership within the two focus areas is shown on Figure 2-9 for the MHAFB / MHRC Focus Area, and on Figures 2-10 and 2-11 for the Gowen Field / OTA Focus Area.

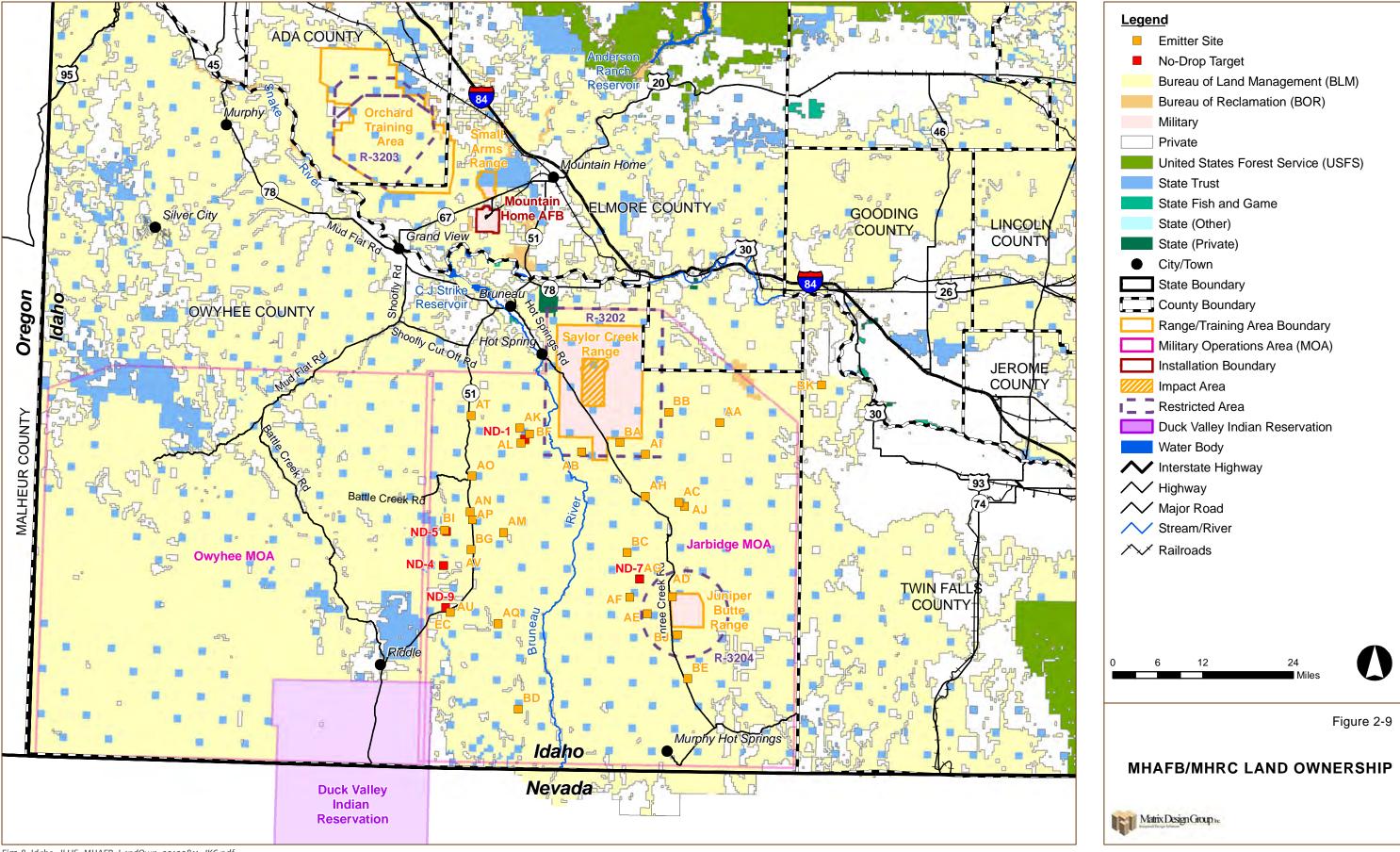
Ada County



Founded in 1864, Ada County covers approximately 1,055 square miles of land and five square miles of water in southwestern Idaho. Ada County is home to Idaho's state capitol, the City of Boise, and has the largest population of any county in Idaho. Most of the other cities in the County are located in the northwest portion of the county and include Star, Eagle, Meridian, and Garden City. The City of Kuna is located 18 miles southwest of Boise, near the County's western border. The County is surrounded by Boise County to the northeast, Elmore County to the east, Owyhee County to the south, Canyon County to the west, and Gem County to the northwest.

According to the Idaho Department of Commerce, land ownership within the County is 62.7 percent privately owned, 29.1 percent federally owned, 7.0 percent owned by the state, and 1.1 percent owned by city and county as shown on Figures 2-9 and 2-10. The major land uses are roughly 25.6 percent agricultural, 69.0 percent rangeland, and only 4.5 percent urban. The top employing industries in the county include retail trade, health care and social assistance, state and local government, manufacturing, administrative waste services, and construction. COMPASS projects that construction, wholesale and retail trade, and service industries will continue to experience significant growth through COMPASS's forecast period of 2030.

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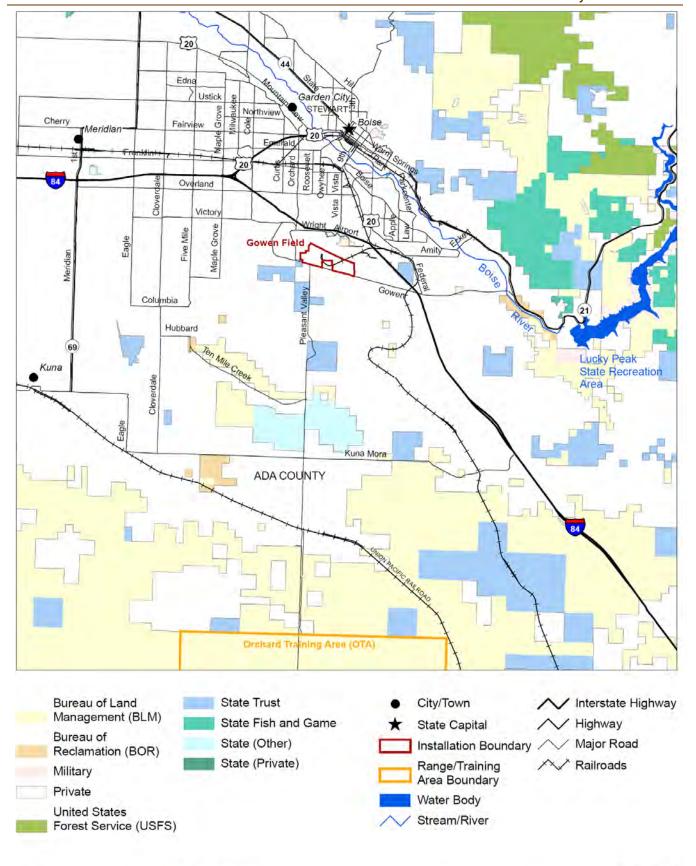


Figure 2-10

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Matrix Design Group

GOWEN FIELD LAND OWNERSHIP

Ada County permits planned communities on private properties of 640 acres in size or greater in rural areas of the county. The county does this to maintain the flexibility to have planned communities throughout the county, to be clear about the extent of regulations needed to accommodate the Orchard Training Area, and to ensure that those regulations are not more restrictive than necessary to accommodate the military's use.

The County's primary east-west transportation corridor is I-84, which extends in a northwest and southeast direction across the County. In the decade between 1997 and 2007, Ada County's population grew rapidly with 36 percent growth. During that same time, the state experienced only 22 percent population growth. Source: Idaho Department of Labor, Idaho Department of Commerce

Elmore County



Elmore County was established in 1889, with a land area of approximately 3,103 square miles. The geography of the County is diverse and includes arid high desert areas, lush fertile agricultural areas, and rugged mountains. Much of the land in the County, 72 percent, is owned by several departments of the federal government including: the U.S. Forest Service; the DOD; and the BLM as shown on Figure 2-11. The remaining 28 percent is privately owned land. Elmore County is home to Mountain Home Air Force Base. The Base is currently the County's largest employer. Other significant employment industries in the County include retail trade, state and local government, and farming. The majority of the land in Elmore County is used as rangeland, forest, or agricultural production.

The main highway through the County is I-84, which crosses the southern part of the County as it transects northwest and southeast through Idaho. Mountain Home AFB is accessed by State Highway 67 from I-84.

The County's population in July 2007 was 28,856 with 76 percent of the population located in urban areas and 24 percent listed as rural. Though significantly smaller than the state's growth trends, Elmore County experienced increased population growth of 6 percent between 1997 and 2007. Source: Idaho Department of Labor; http://www.elmorecounty.org/; http://www.city-data.com/county/Elmore County-ID.html

Owyhee County



Bordering Ada, Elmore, Canyon, and Twin Falls Counties as well as the States of Oregon and Nevada, is Owyhee County. Established in 1863, Owyhee County is Idaho's second largest county in Idaho in terms of land size, encompassing approximately 7,666 square miles in southwestern Idaho. North America's tallest sand dunes are the main natural feature of Bruneau Dune State Park, rising over 470 feet. Bruneau Canyon is located in the southern part of the County. More than three-quarters of the land is federally owned by the BLM. The remaining land is comprised of 17.5 percent private

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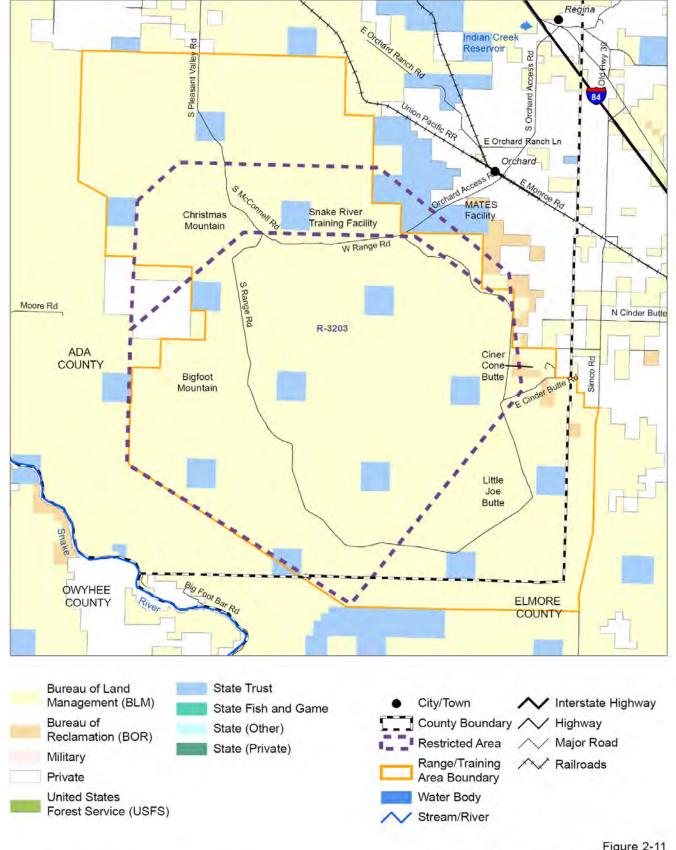


Figure 2-11
ORCHARD TRAINING AREA
LAND OWNERSHIP





Information regarding the Duck Valley Indian Reservation and the Shoshone-Paiute Tribes in Owyhee County, Idaho, and Elko County, Nevada, may be found in Section 5. ownership and 6.7 percent state land, with less than 1 percent owned by city and county jurisdictions. Over 93 percent of the land is used for rangeland, with the remaining areas consisting of mainly agricultural and forest lands.

State Highway 51 is oriented north and south through Owyhee County. It begins at the Nevada border and joins the east-west State Highway 78 at the northern part of the County.

Exhibiting one of the lowest population densities in the state, the County has increased its population by approximately 7 percent between 1997 and 2007, but it only translates to 725 new residents. Source: Idaho Department of Labor

City of Boise



The City of Boise is Idaho's capital and the state's largest city. It is home to Boise State University (BSU), the state's largest university with an enrollment of over 18,600 students. It encompasses 63 square miles and is located in the southwestern part of the state, approximately 50 miles east of the Oregon border. At the city's southeastern end are Boise Airport and the adjacent Idaho National Guard at Gowen Field.

Several large business headquarters are located within the City of Boise, including Micron Technology, Boise Cascade, the Washington Division of URS Corporation, and Albertson's (now owned by Supervalu). Hewlett Packard also has one of its most significant research and development facilities here.

I-84 is the main transportation corridor in the City; however, U.S. Route 20/26 joins with I-84. In addition, there are a number of state highways that intersect the City including State Highway 21, 44, and 55.

Source: Idaho Department of Labor; City of Boise

City of Grand View

The City of Grand View is a small incorporated city in Owyhee County with a population of less than 500 people. The land around the city is primarily used for agriculture. The incorporated area of the city covers 0.6 square miles of land and is located approximately 10 miles southwest of Mountain Home AFB.

Grand View is accessed by State Highway 78 trending east to west, and by State Highway 67, which is oriented north-south and then turns east towards Mountain Home AFB.

City of Kuna



The City of Kuna is located in Ada County, approximately 18 miles southwest of Boise. As of March 2009, the city covered approximately 18 square miles, but is considering future annexations. It is served by State Highway 69, which connects to I-84 to the north of the City.

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Kuna is known as the "Gateway City to the Birds of Prey National Conservation Area." The City is surrounded by fertile irrigated lands and scenic ranges. A large part of its economic base is agriculture, including corn, alfalfa, beans, sugar beets, grains, seeds, mint, dairy, and beef.

Kuna has experienced significant growth in the past two decades, being among the fastest growing cities in the State of Idaho. From 2000 to 2007, the population increased an average of 19.7 percent annually. This can be attributed in part to the quality of life, above average education system, affordability of homes, and location to other major cities. The City has also been in the process of annexing additional lands and is estimated to have an area of city impact that touches the area of city impact of Boise in the near future. This annexation process will promote the city's continued growth.

City of Mountain Home

The City of Mountain Home is approximately 35 miles southeast of Boise and consists of just over 5 square miles of land. It is approximately 10 miles northeast of Mountain Home AFB and is where many of the installation's employees reside. The city also has a strong agricultural base and is home to the Marathon Cheese Packaging Plant, among other businesses. It is also the county seat for Elmore County.

Like the City of Boise, I-84 is the main transportation corridor. U.S. Route 20 joins I-84 at Mountain Home as well as State Highway 51. There are many recreational and scenic areas near Mountain Home that are easily accessible, including hiking, camping, and fishing.

2.5 Regional Assessment

Infrastructure

HIGHWAYS

The major highways serving Ada County include:

- I-84, which travels east-west through southern Idaho;
- I-184 branches off of it directly into downtown Boise;
- State Highway 21, which trends north-south and is east of Boise;
- State Highway 44, which trends east-west is north of the City;
- State Highway 55, which trends north-south and intersects Highway 44;
- State Highway 69, which travels north-south into the City of Kuna; and
- U.S. Highways 20 and 26, which trend east-west from Boise to Caldwell.

I-84 is the major highway that serves the JLUS study area in Elmore County as shown on Figure 2-12. Business Route 84 follows the old Oregon Trail Highway into the City of Mountain Home and State Highway 51 trends north-south and connects to Business Route 84. State Highway 67 trends east-west and serves as the access road to Mountain Home AFB. There are three key interchanges on I-84 between Boise and the City of Mountain Home – Blacks Creek, Orchard / Mayfield, and Simco Road. These interchanges provide access to undeveloped lands on either side of the highway, including lands adjacent to the Orchard Training Area. This access could invite new development to these areas as I-84 provides high speed connectivity to Boise, the state's largest city.

In Owyhee County, the major routes are Highway 78 which trends east-west and the north-south oriented Highway 51.

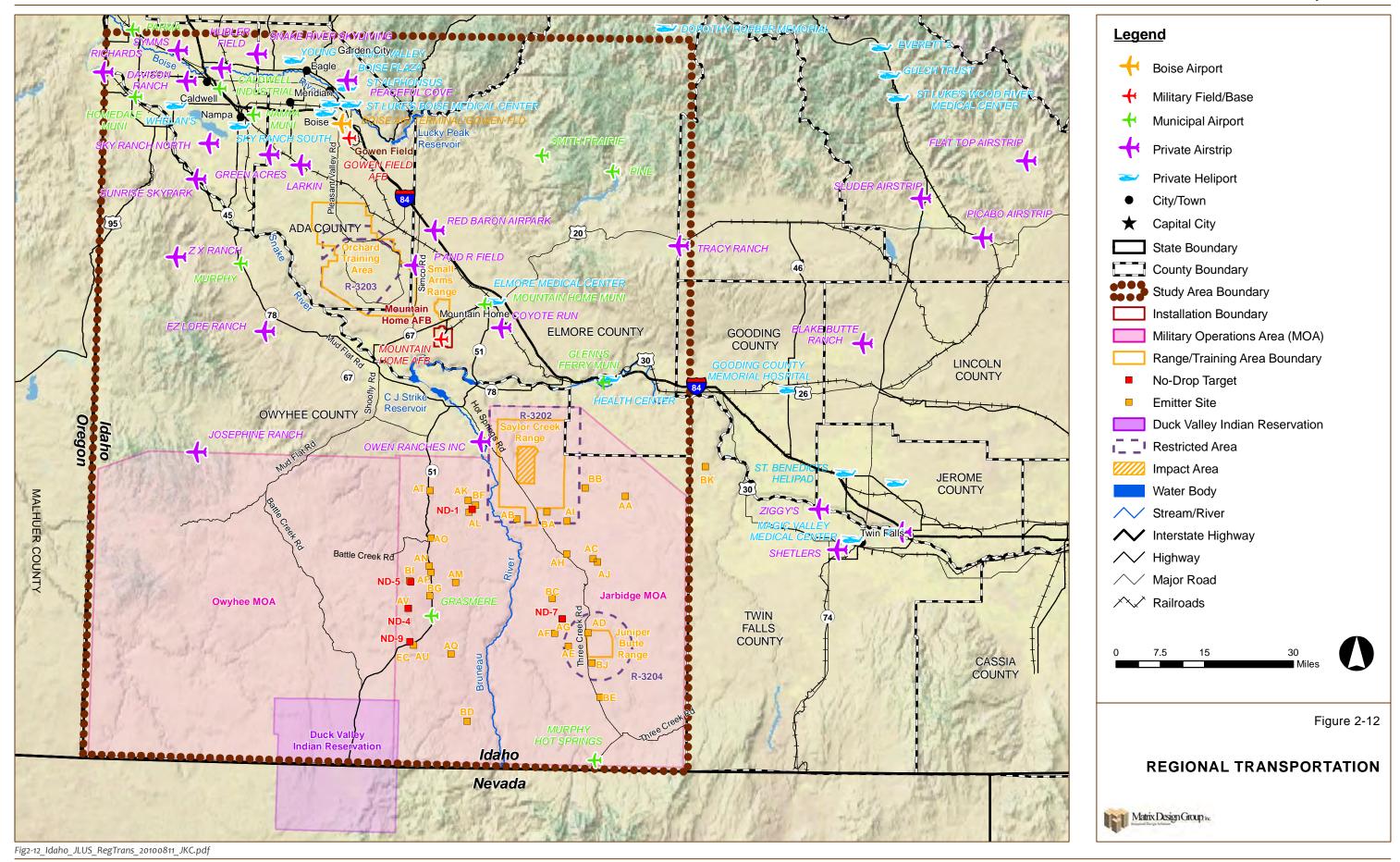
Highway Planning

The 2006 Communities in Motion (CIM) plan, a long range transportation plan that includes Ada and Elmore Counties, has been undergoing an update that is scheduled to be approved in the Fall of 2010. The CIM plan was developed by COMPASS in participation with local governments and the Idaho Transportation Department. It evaluated population projections, employment growth, current and future transportation needs, safety, financial capacity, and preservation of the human and natural environment. The CIM plan emphasizes higher densities and mixed-use neighborhoods with jobs, shopping, and services located closer to housing. During the plan development, several potential projects were identified to address current and future growth issues.

Currently, the I-84, Orchard to Isaacs Canyon Corridor project directly affects movement in and around Gowen Field / Orchard Training Area. This project is the result of a planning and environmental study that recommended improvements for the corridor, including replacing existing pavement, adding lanes to the interstate from Broadway Avenue Interchange to the Eisenman Interchange, and reconstructing the Orchard and Vista interchanges to meet future capacity requirements. The Broadway and Gowen Interchange improvements are not included in GARVEE funding, but they are still planned for improvement in the long range plan.

While the Idaho Transportation Department is responsible for building and maintaining State and Interstate Highways, the Ada County Highway Department (ACHD) is responsible for building, operating, maintaining, and improving more than 1,800 miles of urban streets, rural roads, alleys, and public rights-of-way in Boise, Eagle, Garden City, Kuna, Meridian, Star, and unincorporated areas of Ada County. Developers who build homes and businesses in Ada County are responsible for constructing "local" roads, and then we assume the responsibility for maintaining them. We review all land development applications for homes and businesses in Ada County to ensure that the designs for local roads meet engineering and safety standards in order to keep Ada County's ground transportation network safe and efficient. As local roads are being built, we inspect and test them to ensure that they

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are constructed properly. ACHD was established by voter referendum as an independent government entity (a special-purpose district) in 1971 and is the only countywide highway district in Idaho.

The 2009 ACHD Capital Improvements Plan details several streets projects that would have potential impacts to Gowen Field and the Orchard Training Area. These projects include the following:

Farman / Gowen Intersection Improvements – In the fall of 2010, ACHD plans to make interim improvements to approximately 204 yards of Gowen Road between Farman Street and Pleasant Valley Road. Currently, Gowen Road is a two-lane road with a center turn lane, which is reportedly inadequate to support the volume of traffic requiring ingress and egress to the Gowen Field via the Farman / Gowen intersection. Gowen Road is scheduled to be widened to four lanes (two through lanes and two turn lanes). The Farman / Gowen intersection will also be signalized to control the traffic flow into and out of Gowen Field. ACHD's long-term plan is to evaluate possible re-routing or other improvements to the road network in this area.

Lake Hazel Road Realignment – Phase 1 of this two-phase project is scheduled to occur between 2014 and 2018. It calls for widening about 2 miles of Lake Hazel Road between Cole Road and Pleasant Valley Road from two lanes to five lanes. Phase 2 of this alignment project is scheduled on the 2009 ACHD CIP for between 2019 and 2027. This phase would purchase rights-of-way to preserve a corridor for the future construction of approximately 5 miles of roadway linking Pleasant Valley Road with Interstate 84.

Orchard Street Realignment – This project seeks to realign Orchard Street beginning northwest of the Boise Airport and connecting it with Lake Hazel Road approximately 2 miles to the south. The 2009 ACHD CIP lists four separate elements to this project. The first element will reconstruct / widen about 1.5 miles of Orchard Street from two lanes to five lanes between the Interstate 84 onramp and Gowen Road. This is scheduled for 2014 to 2018.

The other three elements are scheduled for between 2019 and 2027 and call for rights-of-way purchases to preserve three corridors for future roadway construction. One of these elements is between Gowen Road and a planned Orchard Street east-west split, one is between this split and Lake Hazel Road taking Orchard Street to the west, and one is between the split and Lake Hazel Road taking Orchard Street to the east and Pleasant Valley Road.

Kuna-Mora Road Corridor Study – Communities in Motion, the long-range transportation planning document established by the COMPASS, determined that Kuna-Mora Road is vital to the region due to its potential as an alternate to I-84; consequently, the Plan recommended that Kuna-Mora Road from McDermott Road to I-84 be preserved as an expressway.

The first phase of the Kuna-Mora Road Corridor Study evaluated the 21-mile corridor stretching from the Ada/Canyon county line east to Interstate 84 looking at forecast land use conditions and traffic volumes. Phase I

established the corridor's function, determined what the road might look like and established related preservation needs. Phase I did not determine a roadway alignment. The ACHD Commission adopted the Phase I study recommendations on November 19, 2008.

Phase II will look specifically at the 7-mile segment of Kuna-Mora Road from the Canyon County line east to Eagle Road. Phase II will evaluate potential alignment options for this segment of the roadway. A preferred alignment will ultimately be established for the segment. As of summer 2009, Phase II has been put on hold due to budget constraints within the District.

The Kuna-Mora Road Corridor Study includes a total of four phases. Subsequent phases will look at the 21-mile long corridor in segments and will establish preferred alignments.

RAIL

The JLUS study area is served by the Union Pacific Railroad which provides connections to points in the United States, Canada, and Mexico, and the Idaho Northern and Pacific Railway Company (INPR). The railroads are an important asset in Idaho's transportation system and economy. Because the Idaho Transportation Department does not own or operate the rail lines, its role is to assist in the preservation of essential rail lines through planning and the use of economic development and transportation programs. Source: Idaho Transportation Department

AIR

Within Ada County, Boise Airport (BOI) serves as the primary commercial service airport in southwestern Idaho. The airport is located in southeastern Boise, just five minutes from downtown. It has two parallel runways that measure 10,000 feet (Runway 10L-28R) and 9,763 feet (Runway 10R-28L) long and 150 feet wide and are oriented northwest to southeast. The airport is served by eight passenger airlines, including Delta, Southwest, U.S. Airways, Alaska, and United, that carried over 3 million passengers in 2008. In addition to the eight mainline and regional passenger airlines, there are charter and major cargo carriers including United Parcel Service (UPS), DHL, and Federal Express.

Over the past several years, BOI has experienced notable improvements and renovations that include a terminal expansion project that opened in 2003. The project brought many new additions to the airport, including a new elevated roadway system, expanded concessions and food court, Concourse C, a conference center, lobby, and a new security checkpoint. These types of improvements allow for expanded use and growth of the airport, which could be a factor to promote economic development and tourism in the area. Estimates for aircraft operations at the airport are forecast to increase from 171,897 arrivals and departures in 2005 to 352,696 in 2030.

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Some of the primary development projects outlined in the 2009 Airport Master Plan update include runway and taxiway extensions, a new consolidated cargo facility, expansion of the general aviation area, main terminal expansion, and new support facilities. These improvements are set for four phases, between 2008 to 2012, 2013 to 2017, 2018 to 2022, and 2023 to 2027. A third runway is also proposed, which will improve the current assault landing strip south of Gowen Field from 5,000 feet to 10,000 feet. Its pavement will also be improved and it will also support commercial flights.

Source: http://www.cityofboise.org/Departments/Airport/and Boise Airport Master Plan update executive summary 2009

Elmore County has the Mountain Home Municipal Airport, located to the west of the City of Mountain Home. It has a single runway, measuring 5,000 feet long by 75 feet wide. As of December 2006, 67 percent of aircraft operations at this airport were generated by local general aviation, 27 percent by transient general aviation, and 7 percent by military aircraft. Source: AirNav.com, 2006. There is a formal agreement between the Idaho National Guard and the airport that allows for instrument approach practice, including limited touch and go operations.

WATER AND SEWER

Formed in August 2007, the Elmore-Ada Water Project has recently completed a feasibility study for providing sustainable water resources to the area between the City of Boise and the City of Mountain Home, which is predominately undeveloped due to lack of water resources and infrastructure to support growth. The goal of this project is to provide a new and sustainable source of water for eastern Ada and western Elmore Counties. The study area includes Mountain Home AFB and areas surrounding the Orchard Training Area. This area has historically experienced water supply problems due to low recharge rates and highly uncertain capacity of local groundwater and aquifers. The water sources to support the new areas would be supplied by surface water from the Snake River and to a lesser extent, from local groundwater and aquifer storage. The project is slated for five phases, with an estimated completion timeline of 8-12 years.

The project at the currently planned facility build out could supply water to approximately 30-40,000 acres of development depending on land uses, densities, existing groundwater availability, and conservation measures. EAWP would be a wholesale water provider and other water providers (including the MHAFB) would deliver water to end users.

As a result of the feasibility study, three alternative alignments have been chosen for new pipelines to transport water supplies. The next phase is to conduct an EIS. Source: www.eawaterproject.com, Elmore-Ada Water Project PowerPoint presentation to the City of Mountain Home dated January 26, 2009, Elmore-Ada Regional Water Supply Project Brochure by SPF Water Engineering, LLC

POWER

Idaho Power is the agency responsible for providing power to the areas within the JLUS study area. Electricity and power that is supplied to the cities and counties is primarily generated from hydroelectric, coal-fired, diesel-fired, and natural gas-fired power plants. The majority of these plants lie outside of the study area, some of which are located in neighboring states. There are several power plants within the study area that supply residents with electricity. The Danskin Mountain Power Plant, a 261-megawatt natural gas plant was dedicated as the Evander Andrews Complex in honor of the first military casualty in the U.S. War on Terror, OPERATION ENDURING FREEDOM, MSGT Evander Andrews. The Bennett Mountain Power Plant, located in the City of Mountain Home, is a 164-megawatt natural gas plant completed in 2005. These facilities were built to help support the increasing need for power supplies in the area for the present and future. There are also a series of 17 hydroelectric power plants along the Snake River and its tributaries, two of which are located within the study area. Although these plants do not provide as much power as the other types of plants, they are helpful in augmenting the other sources and providing sustainable energy.

Electricity is transported from the various power plants to users throughout Idaho Power's service area through power lines and substations. There are over 4,600 miles of power lines used by Idaho Power that generally transmit energy at 138 or 230 kilovolts (kV). The increased population growth in the area has resulted in many of these power supplies and lines operating at maximum capacity.

There are several power transmission improvements taking place within Idaho Power's service area. Several substations are either underway or have been built throughout the study area (mostly in Ada and Elmore Counties) to tie in power sources to areas that are in need of them. In addition, the Gateway West transmission line project is a joint proposal between Idaho Power Company and Rocky Mountain Power to construct and maintain approximately 1,150 miles of new 230 and 500 kV transmission lines from the planned Windstar substation in Glenrock, Wyoming to the planned Hemmingway substation near Melba, Idaho. This substation would be located to the west of the Orchard Training Area. The current status of this project is the study phase, in which lands are identified and surveyed to assess the best routes for placing the lines with the least impact to environmental, cultural, and other aspects. Slightly more than 110 miles of the proposed transmission lines are located within the study area, extending from the eastern edge of the Jarbidge MOA, a few miles directly north of Saylor Creek Range, and then winding northwest through Owyhee County to their termination at the Hemmingway substation.

 $Source: \ www.idahopower.com and \ http://www.gatewaywestproject.com/project_info.aspx$

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Environmental Resources

THE MORLEY NELSON SNAKE RIVER BIRDS OF PREY NATIONAL CONSERVATION AREA (NCA)

The Morley Nelson Snake River Birds of Prey NCA was established in 1993 and is located about 20 miles south of Boise. It covers approximately 483,700 acres of public land along 81 miles of the Snake River. The area encompasses the Orchard Training Area as shown on Figure 2-13. It also encompasses approximately 41,200 acres of state land, 4,800 acres of private land, 1,600 acres of military land, and 9,300 acres of surface water. This NCA was established to conserve, protect, and enhance the habitat, environmental resources, and populations of local raptor species, including falcons, eagles, hawks, and owls.

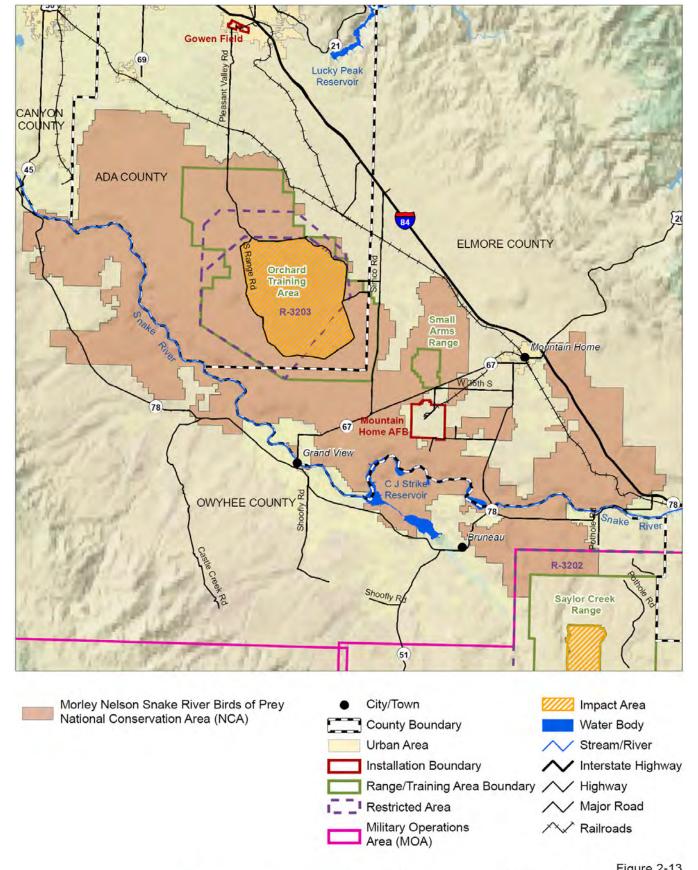
There are a total of 24 raptor species that inhabit the area, 16 of which nest in the area and eight of which use the area during winter or migration. This makes the Morley Nelson Snake River Birds of Prey NCA the most highly concentrated location of nesting birds of prey in North America, as well as the world.

The geography that supports bird of prey habitat and nesting sites includes steep canyon walls that rise to more than 600 feet above the River, shrub and grass-covered plateaus, and rich soils that support burrowing areas for prey. Prey species for the various birds include Piute ground squirrels, black-tailed jackrabbits, pocket gophers, kangaroo rats, and deer mice. There is an abundance of other wildlife that inhabit the area as well, including 55 species of mammals, 257 birds, 7 amphibians, 18 reptiles, and 27 fish.

Source: http://www.blm.gov/id/st/en/fo/four_rivers/special_areas/snake_river_birds.html, Snake River Birds of Prey National Conservation Area Resource Management Plan and Record of Decision, September 2008

IDAHO BIRDING TRAIL

The Idaho Department of Fish and Game (IDFG) has recognized the premier environmental resources of southwestern Idaho and is charged with preserving, protecting, perpetuating, and managing the state's fish and wildlife resources. As part of the Idaho Fish and Game's Nongame Program, the Idaho Birding Trail is a network of sites that provides the best opportunities to see birds. With the study area counties, there are a number of sites listed on the Birding Trail including, but not limited to: the World Center for Birds of Prey, the Boise River, Indian Creek Reservoir, Mountain Home Reservoir, C.J. Strike Reservoir Wildlife Management Area, Ted Trueblood Wildlife Area, and Bruneau Dunes State Park.



0 2 4 8 Miles



Figure 2-13
MORLEY NELSON SNAKE RIVER BIRDS OF
PREY NATIONAL CONSERVATION AREA

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BRUNEAU DUNES STATE PARK AND OBSERVATORY

Exhibiting the tallest single-structured sand dune in North America, this state park in Owyhee County includes desert, dune, prairie, land, and marsh habitat with opportunities to view nocturnal species. The Observatory's collection of telescopes is open to the public.

THREE ISLAND CROSSING STATE PARK

The Three Island Crossing State Park in Elmore County marks one of the most famous river crossings on the historic Oregon Trail. Located on the Snake River at Glenns Ferry, the park is home to the Oregon Trail History and Education Center.

LUCKY PEAK STATE PARK

The park, located in Ada County, offers five distinct areas and is popular for picnics, fishing, swimming, boating, mountain biking, and cross country skiing. Three of the areas are located near Lucky Peak Reservoir, which is just 8 miles east of Boise.

Threatened and Endangered Species

Slickspot peppergrass (*Lepidium papilliferum*) was listed as a candidate species to the endangered species list by the United States Fish and Wildlife Service (USFWS) in October 1999. In 2002, the species was proposed for listing on the endangered species list. Following a public comment period and peer review, it was determined that available data did not sufficiently indicate a continued trend of decline towards extinction. In January 2007, the USFWS announced that this species would not be included on the endangered species list. This decision was reversed on June 4, 2008 by the U.S. District Court for the District of Idaho.

The USFWS was provided with a court-ordered deadline of October 1, 2009 to reach a decision on whether slickspot peppergrass would be listed as endangered. It was reinstated as proposed endangered in September 2008.

Slickspot peppergrass is an herbaceous annual or biennial plant that typically ranges between four to twelve inches tall, with tiny white flowers. It is located throughout southwestern Idaho in sagebrush steppe habitats at elevations between 2,200 feet and 5,400 feet. Slickspot peppergrass tends to grow in groups of three to more than 20 and is restricted to small areas, similar to vernal pools, known as slickspots (also called mini-playas or natric sites). Slickspots range from less than 1 square meter to about 10 square meters within communities dominated by other plants. These sparsely vegetated microsites are very distinct from the surrounding shrubland vegetation and are characterized by relatively high concentrations of clay and salt. A large portion of this plant's habitat is located on and around the

military installations that are a part of this JLUS. Measures have been taken by the Air Force and Idaho National Guard, in conjunction with the BLM and State of Idaho to protect and preserve slickspot peppergrass habitats in military-managed areas. Threats to slickspot peppergrass include invasive weed and plant species, livestock grazing, fire, and ground disturbances.

The Idaho Department of Fish and Game has identified seven species for inclusion on Ada, Elmore, and Owyhee Counties' list of Threatened and Endangered Species and Candidate Species. These are listed below with both their federal and state listing status. Although all of these species are identified within the three counties, the presence of theses species may not exist within the JLUS study area.

Vertebrate

- Ada County
 - Yellow-billed Cuckoo (C)
- Elmore County
 - o Lynx (LT)
 - o Bull Trout (LT)
- Owyhee County
 - o Yellow-billed Cuckoo (C)
 - o Columbia Spotted Frog Great Basin (C)
 - o Bull Trout (LT)

Invertebrate

- Ada County
 - o None
- Elmore County
 - o Snake River Physa (LE)
 - o Bliss Rapids Snail (LT)
- Owyhee County
 - Snake River Physa (LE)
 - Bliss Rapids Snail (LT)
 - o Bruneau Hot Springs Snail (LE)

Plants (None)

LE = Listed Endangered, Federal

LT = Listed Threatened, Federal

C = Candidate, Federal

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Water Resources

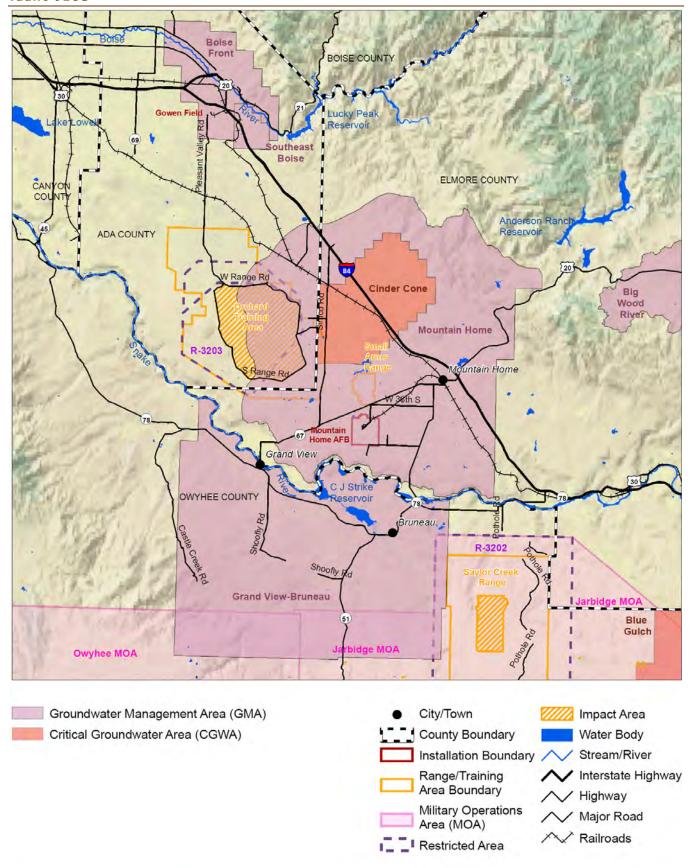
The water resource management agency in Idaho is the Idaho Department of Water Resources (IDWR). The purpose of this agency is to actively guide, control, and plan for the use and conservation of water resources within the State of Idaho. The director of the IDWR has the authority under Idaho Code Title 42, Chapters 233a and 233b to designate Critical Groundwater Areas (CGWAs) and Groundwater Management Areas (GWMAs). This is allowable through amendments in 1953 to the Idaho Groundwater Act. The purpose of these areas is to provide regulation and conservation measures for groundwater and aquifer areas that are experiencing strains on water levels or productivity that could harm their future sustainability.

A CGMA is all or part of a groundwater basin that is experiencing insufficient water resources to provide adequate supplies for irrigation or other uses at current or projected rates of withdrawal. The director can deny certain water uses or require diversion reports or other information from uses within the designated area. A GWMA is all or part of a groundwater basin in which conditions may be approaching that of a CGMA. Applications for new water user will only be approved if it is determined that they will not detract from existing supplies, and that sufficient resources are available. There are seven CGMAs and GWMAs in the study area. They are shown on Figure 2-14 and include:

- Boise Front GWMA in northern Ada County, designated on June 15, 1987
- Southeast Boise GWMA in northern Ada County, designated on October 14, 1994
- Big Wood River GWMA partially in eastern Elmore County, designated on June 28, 1991
- Cinder Cone Butte CGWA in western Elmore County, designated on May 7, 1981
- Mountain Home GWMA in Elmore and Ada County, designated on November 9, 1982
- Grand View-Bruneau GWMA in north-central Owyhee County, designated on October 29, 1982
- Blue Gulch CGWA partially in eastern Owyhee County, designated on December 9, 1970

Source: www.idwr.idaho.gov

There are several other bodies of water in the JLUS study area that provides valuable habitat for local fauna, as well as recreational activities for residents. The Boise River originates in the Sawtooth Mountains east of the City of Boise at elevations of over 10,000 feet and flows in a westerly direction for 200 miles where it empties into the Snake River at an elevation of 2,100 feet. Its major tributaries include the North Fork, the South Fork, and Mores Creek.



0 2.5 5 10 Miles



Figure 2-14

GROUNDWATER AREAS OF CONCERN

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Its three major in-stream impoundments are Lucky Peak Reservoir, Arrowrock Reservoir, and Anderson Ranch Reservoir. These areas are used for recreation and energy generation, as well as supporting various cold and warm water fisheries. The types of fish that can be found in the Boise River and its reservoirs include rainbow and cutthroat trout, whitefish, bull trout (endangered), bass, and channel catfish.

Source: http://imnh.isu.edu/digitalatlas/geog/fishery/drainage/drain20.htm)

Cultural resources related to Native American tribes may be found in Section 5. The Snake River is a 1,040-mile long river that flows through Washington, Oregon, Idaho, and Wyoming. It originates in Yellowstone National Park and flows from east to west, and forms the boundary for Owyhee, Elmore, Ada and Canyon Counties. The area surrounding the Snake River within the JLUS study area provides valuable habitat for hundreds of wildlife species and also has many recreational activities such as rafting and wildlife watching. Sections of the River have been dammed and their resulting reservoirs (in the JLUS) study area include Swan Falls Reservoir and C.J. Strike Reservoir. The major tributary within the study area is the Bruneau-Jarbidge River system.

Source: www.visitidaho.org/thingstodo/lakes-rivers, www.wikipedia.org

Please see the next page.

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In t	his section	
#	Title	Page
3.1	Methodology and Evaluation	3-2
3.2	Man-Made Compatibility Factors	3-11
3.3	Natural Resource Compatibility Factors	3-97
3.4	Competition for Scarce Resources	3-107

Compatibility, in relationship to military readiness, can be defined as the balance or compromise between community needs and interests and military needs and interests. The goal of compatibility planning is to promote an environment where both entities can coexist successfully.

A number of factors influence whether community and military plans, programs, and activities are compatible or in conflict. For this Joint Land Use Study (JLUS), a list of 24 compatibility factors was used to characterize local issues (see text box at the top of the next page). In the following discussion, these compatibility factors have been divided into three broad categories: man-made, natural resource, and competition for scarce resources.

In addition to describing existing and potential compatibility factors currently identified, this list can be used in the future to assist in reviewing plans, programs, or development proposals and related applications.

Man-Made

- Land Use
- Safety Zones
- **Vertical Obstruction**
- Local Housing Availability
- Infrastructure Extensions
- Antiterrorism / Force Protection Noise
- Vibration
- Dust

- 10 Light and Glare
- Alternative Energy Development
- Air Quality
- Frequency Spectrum Impedance and Interference
- 14 Public Trespassing
- **Cultural Sites**
- Legislative Initiatives
- **Interagency Coordination**

Natural Resources

- 18) Water Quality / Quantity
- Threatened and Endangered Species
- 20 Marine Environments

Competition for Scarce Resources

- 21 Scarce Natural Resources
- 22 Land, Air, and Sea Spaces
- 23 Frequency Spectrum Capacity
- **Ground Transportation Capacity**

3.1 Methodology and Evaluation

For the compatibility issues noted, several projects were called out by name due to their currency in the development review process. These should be viewed as examples of a general concern.

> When reviewing this information, it is important to note the following: This section provides a general technical background on the issues discussed based on the availability of secondary source information. The intent is to provide an adequate context for awareness, education, and input by all stakeholder interests. As such, it is not

team based on evaluation of existing information.

The purpose of this section is to detail the genesis of developing the compatibility factors associated with the Idaho JLUS. The JLUS evaluation

approach consisted of a comprehensive and inclusive discovery process

identifying the key stakeholder issues which could directly or indirectly affect

the compatibility strategies proposed in Section 5 of this JLUS. During

preparation of the Idaho JLUS, the public, the JLUS Policy Committee (JPC),

and the Technical Working Group (TWG) assisted in working through all 24 compatibility factors to identify, describe, and prioritize the extent of

existing and potential future compatibility factors that could impact lands within or nearby the study area. At various workshops, these groups identified the location and type of compatibility issues they thought existed today or could occur in the future. Other issues were added by the project

The number for each issue matches the number of the corresponding compatibility factor. The letters were added to distinguish each issue. The numbers and letters used to identify each issue are not meant to convey priorities or ranking of issues.

evaluation of existing or future conditions within the study area.

designed or intended to be utilized as an exhaustive technical

Of the 24 standard compatibility factors, two factors were determined to not be an issue for this JLUS (#20, Marine

All input was valued and considered, however the study did not quantify, validate, or measure the degree to which these potential conflicts and concerns may or may not have an adverse impact upon the military mission, local communities, or private property owners.

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- Environments; and #23, Frequency Spectrum Capacity) and two factors were items that could not be specifically mapped (#16, Legislative Initiatives; and #17, Interagency Coordination).
- The compatibility issues identified were consolidated into groups of similar issues. For example, a number of development project locations were identified under Compatibility Factor 1, Land Use. These items were further grouped into a single issue called "Urban Growth Potential." These grouped items (shown in Table 3-1 and Table 3-2) were then reviewed and evaluated by the JLUS committees.

The three criteria utilized to evaluate the identified issues included current impact, potential impact, and presence of existing mitigation tools (policies, programs, procedures, work-arounds, etc.). Each criterion was assessed to determine the overall compatibility concern for each of the identified issues. Utilizing a scale ranging from "1" most critical to "3" least critical, each criterion was assessed. The three criteria where then averaged to determine the overall compatibility concern for each of the identified issues.

The criteria utilized for this assessment included the following:

- Current Impact. Each issue was rated based on its current impact to sustainability of either the installation or a local jurisdiction. Issues posing the most extensive operational constraints or community concerns were identified as the highest priority (1). Issues resulting in a moderate operational impacts or community concerns were identified as important (2). Issues that present very little impact or do not currently impact the installation or local jurisdictions were identified as the lowest priority (3).
- Potential Impact. Although an issue may not present a current threat to the installation or the community, it may possess the ability to become an issue. Should conditions change, adjacent or proximate development increase, or other factors become apparent, new conflicts with the existing or future missions and operational activities at any of the military installations included in this JLUS could arise. Issues were rated based on their future potential using the same criteria as established for current impact.
- Existing Tools. In order to determine and focus finite resources, this criterion was intended to measure the effectiveness of existing tools designed to mitigate or address compatibility concerns. Issues with no existing tools were rated as a highest priority (1) meaning that they are in the most need of an effective implementation action in order to ensure compatibility concerns are addressed. Issues that currently do have an existing tool designed to address the concern, but does not fully address the impacts of the issue were identified as important (2) and identified as a moderate priority. Issues that currently have effective existing tools in place were identified as the lowest priority (3).

On the issue tables in this section (for example, Table 3-1), colors were used to represent the level of concern expressed. Red () items are considered of critical importance, Yellow () items are moderately critical, and Green () items are considered least critical.

Table 3-1. MHAFB/MHRC Focus Area Compatibility Issue Summary

Table 3-1. IMITATE/IMITA	e i ocas i ii ca	Compatibi	ney issue su	illillai y
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
General coordination between all entities (military, local, state, federal, Native American)	17A, 17B, 17C, 17D, 17E	•	•	•
Nuclear power plant	1M	-		•
Height of new/existing development creating obstructions or hazards to air navigation	3C	•	•	
Water and sewer availability (Elmore Critical Groundwater Management Area)	5B, 5C	-	•	•
Wind and solar energy development	11A, 11C, 11D, 11G			
Nuclear energy development	11B, 11F			•
Urban growth (New development proposals, speculation, existing development)	1A, 1B, 1C, 1D, 1K, 1O, 1P	•	•	•
Low height of airspace floor (100 feet)	1l	_	•	
Vertical obstructions (towers and wind generation)	3A, 3B			
Urban light sources impacting the "dark sky" environment	10B, 10C	-	•	
Recreational trespass (hunters) on Saylor Creek Range	14C			
Water availability/groundwater depletion	18A, 18B, 18C			

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Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Competition for land for multiple uses (military operations, recreation, natural habitat)	22A, 22B, 22C, 22D	•	•	•
Potential development on endowment trust lands	1E			
Private property rights	1G			
Owyhee Initiative	1H, 16A			
Potential for development within the Army Noise Buffer Area	1J	•	•	
Recreational Development (approved race track)	1L	_	-	-
Private airports	1N			
Industrial Development	1F			
Potential for incompatible uses within Mountain Home AFB accident potential zones	2A	-	-	-
Safety issues associated with waste (toxic) areas	2C			
Potential for incompatible development near Ordnance Safety Zones (Mountain Home AFB ranges)	2D			
Development of the Western Energy Corridor	5A, 5D		-	
Noise from military operations impacting urban development, noise from overflight	7A, 7B, 7E			•
Noise from military operations occurring within the Orchard Training Area	7C, 7D			
Vibration associated with operations within the OTA	8A			

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Dust associated with military operations and movement corridors	9A	-	-	
Dust/PM-10 levels within the region	9D			
Transmission lines associated with alternative energy development	11E	-	-	
Simplot feed lot dust and odor	12A			
Trespass within the Orchard Training Area	14B		-	
Cultural sites within active military operation areas	15A			
Water quality	18D		-	
Protection of Threatened and Endangered species/unique natural formations	19A, 19B, 19C, 19D, 19E, 19F, 19G	•	•	•
Competition for habitat and use of unique natural formations	21A, 21B, 21C, 21D, 21E, 21F	-	-	
Competition for air space with private airports	22E			
Regional traffic/Level-of- service (LOS)	24A, 24C	-	-	
Maintaining National Guard lines of communication/logistics needed for mission sustainment	24B	•	-	•
Availability of housing	4A			
General security concerns with expansive ranges and open space	6A, 6B	•	•	

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Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Vibration associated with operations within Mountain Home ranges	8B	-	_	-
Dust associated with urban uses	9B, 9C			
Light and glare from operations within the Orchard Training Area	10A	•	-	-
Frequency spectrum interference associated with operation of the raceway	13A	•		•
Frequency interference associated with Mountain Home AFB antennas	13B	•	-	-
Impedance associated with need for microwave line-of-sight to Mountain Home AFB	13C			
Trespass onto Mountain Home AFB	14A	•	_	
Gateway West Corridor transmission lines	N/A	N/A	N/A	N/A

Table 3-2. Gowen Field/OTA Focus Area Compatibility Issue Summary

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Urban growth (New development proposals, speculation, existing development)	1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1O, 1P, 1W, 1Y	•	•	•
Development along military movement corridors	1Z			
Recreational use on Orchard Training Area/Open Space	1X			
Southern Crossroads/Kuna- Mora Extension/Kuna-Mora Corridor Study	5A	•	•	•

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Noise from military operations impacting urban development along Pleasant Valley Road	7C, 7D		•	
Noise in proximity to established noise contours for operational areas	7G	-	•	•
Urban light sources impacting "dark sky" environment	10B		•	•
Trespass within the Orchard Training Area	14A		•	
Competition for land area	22A			
Industrial land	1M, 1N, 1S, 1T		-	-
Potential for incompatible uses within OTA Safety Zones	2A			
Lake Hazel Extension	5B			-
Creation of security concerns from Orchard Road stacking	6A			
Noise from military operations impacting urban development around Gowen Field	7A, 7B	-	-	-
Vibration in Pleasant Valley along military operations corridors	8A			
Dust along military operations corridors	9A			
Dust/PM-10 for Ada County	9B			
Trespass onto Gowen Field	14B			
Trespass at MATES/Railroad	14C			

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Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
General coordination between all entities (military, local, state, federal, Native American)	17A		•	•
Coordination between IDL/BLM on land exchanges	17B			
Protection of Threatened and Endangered species/unique natural formations	19A, 19B, 19C, 19D	_	-	•
Natural resource extraction	21A, 21B, 21C			
Rail spur to the MATES area	22B	-		-
Competition for third runway	22C			
Regional traffic/Level-of- service (LOS)	24B, 24C	_		
Endowment trust land development	1AA, 1U, 1V			
Waste Sites (US Ecology, landfill, shredding plants)	1J, 1K	•		
Recreational Development (War Eagle Race Track)	1L			
Existing residential development with airstrip	1Q, 1R	-		
Potential for incompatible uses adjacent to munitions storage bunkers	2B		-	-
Vertical obstructions (towers)	3A, 3B, 3C, 3D	-		
Height of new/existing development creating obstructions or hazards to air navigation	3E			
Infrastructure along Pleasant Valley	5C			
Infrastructure on Gowen Road	5D			

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Noise in proximity to assault strip/3rd runway	7E	•		-
Noise complaints	7F			
Vibration on Gowen Road	8B	•		
Light and glare from Mountain Home AFB	10A			
Light and glare from ASP	10C	•		
Light and glare from MATES	10D			
Light and glare from Speedway	10F	•		-
Wind and solar energy development	11A, 11B			
Withdrawal of impact area	12A			
General frequency spectrum issues	13A			
Frequency spectrum interference associated with operation of the raceway	13B	•	-	-
Withdrawal of impact area	16A			
Orchard Road extension	24A			
Light and glare from the airport	10E			
Proximity of dog pound to Gowen Field	6B			

As previously noted, the three criteria presented above were averaged to the nearest whole integer to determine the overall threat level for each issue. Challenges ranking "1" are considered the most critical (designated in red), "2" are moderately critical (designated in yellow), and "3" are least critical (designated in green). Additional compatibility issues not identified by the JLUS committees are not ranked and have an "N/R" for each criterion.

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For the purposes of this JLUS, two separate compatibility issue summary tables have been constructed in order to show the different issues identified for each of the two focus areas: 1) Mountain Home Air Force Base (MHAFB)/Mountain Home Range Complex (MHRC), and 2) Gowen Field/Orchard Training Area (OTA). Table 3-1 and Table 3-2 each present a prioritized summary of the consolidated issues and their corresponding threat evaluation. For these summaries, the issues have been presented from most critical to those found to not have a high potential for impacting military operations within the focus areas. Each issue is identified alpha-numerically in Table 3-1 and Table 3-2 and on the issues maps later in this section (i.e., 1A, 2C, etc.). The number corresponds to the compatibility factor as shown in the JLUS Compatibility Factors graphic (top of page 3-2) while the letters are used to differentiate issues within each factor. The descriptions of the compatibility factors will either be based on the two focus areas or the study area as a whole depending on the geographical nature of the compatibility factor.

3.2 Man-Made Compatibility Factors

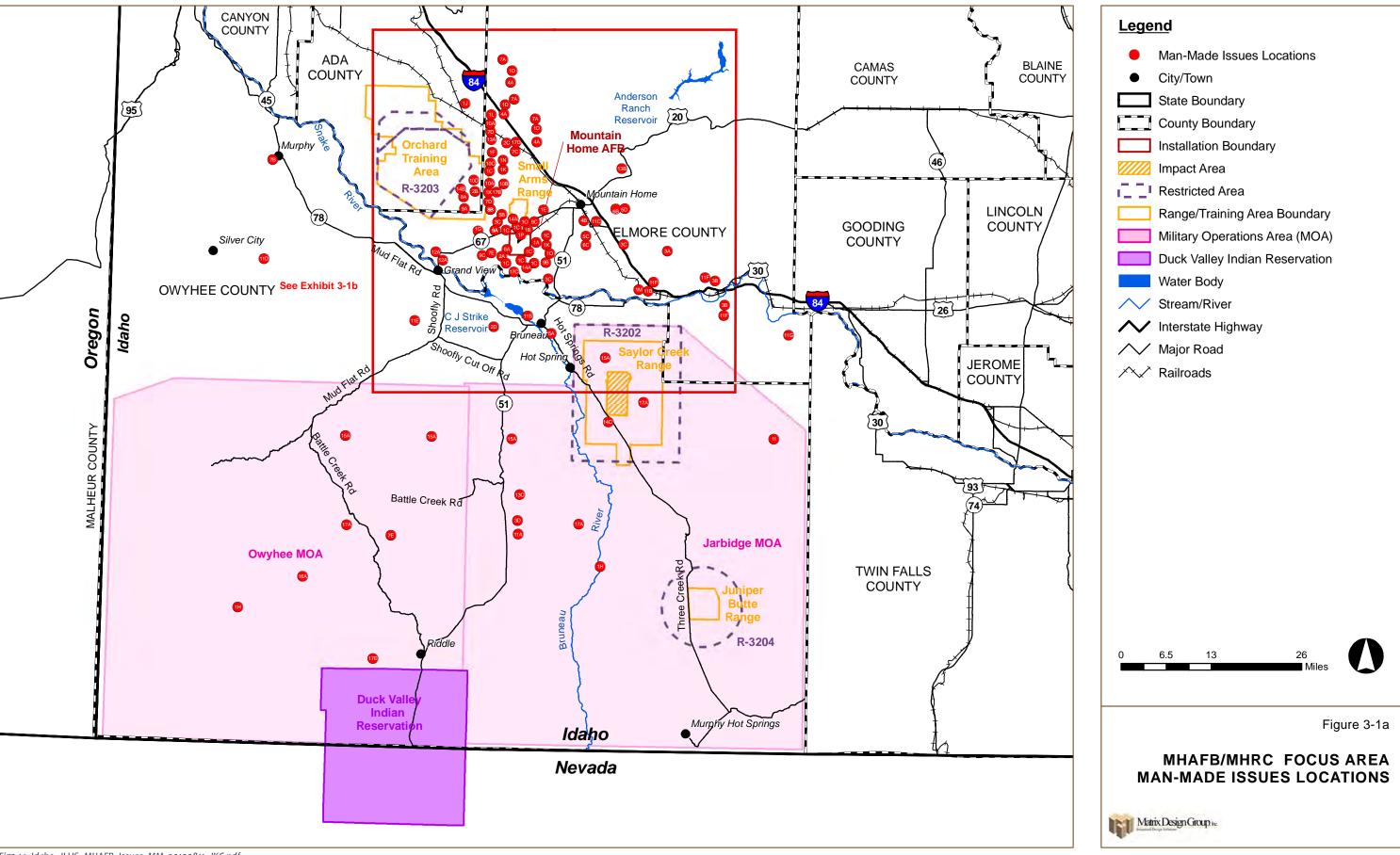
For the Idaho JLUS, most of the issues recorded fell under the man-made compatibility factors. Man-made factors can be generated by community development which conflicts with military activities, or can be generated by the military and encroach upon nearby communities. Either way, these factors can impact military readiness or a community's quality of life.

For the Idaho JLUS, all of the 17 man-made compatibility factors were identified as producing issues in the MHAFB/MHRC Focus Area, and 16 were identified for the Gowen Field/OTA Focus Area. Man-made compatibility issues that apply to specific locations are shown on Figures 3-1a and 3-1b and Figure 3-2. In some cases, issues were found to apply to the whole study area or were not geographically specific. These issues are not shown on Figures 3-1a, 3-1b, and 3-2.

The locations shown on Figures 3-1a and 3-1b and Figure 3-2 (and other similar figures in this section) indicate known or existing issue locations and are shown to indicate the general distribution of this issue today. In order to help the reader get a closer look at certain issue locations that are clustered together in Figure 3-1a, an inset of the area was created and is shown on Figure 3-1b. It is important that the JLUS consider not only where current issues were identified, but it is critical to evaluate the potential for existing issues to occur in other locations sometime in the future. The strategies presented in Section 5 were designed to address the significant compatibility factors and issues identified in this section.

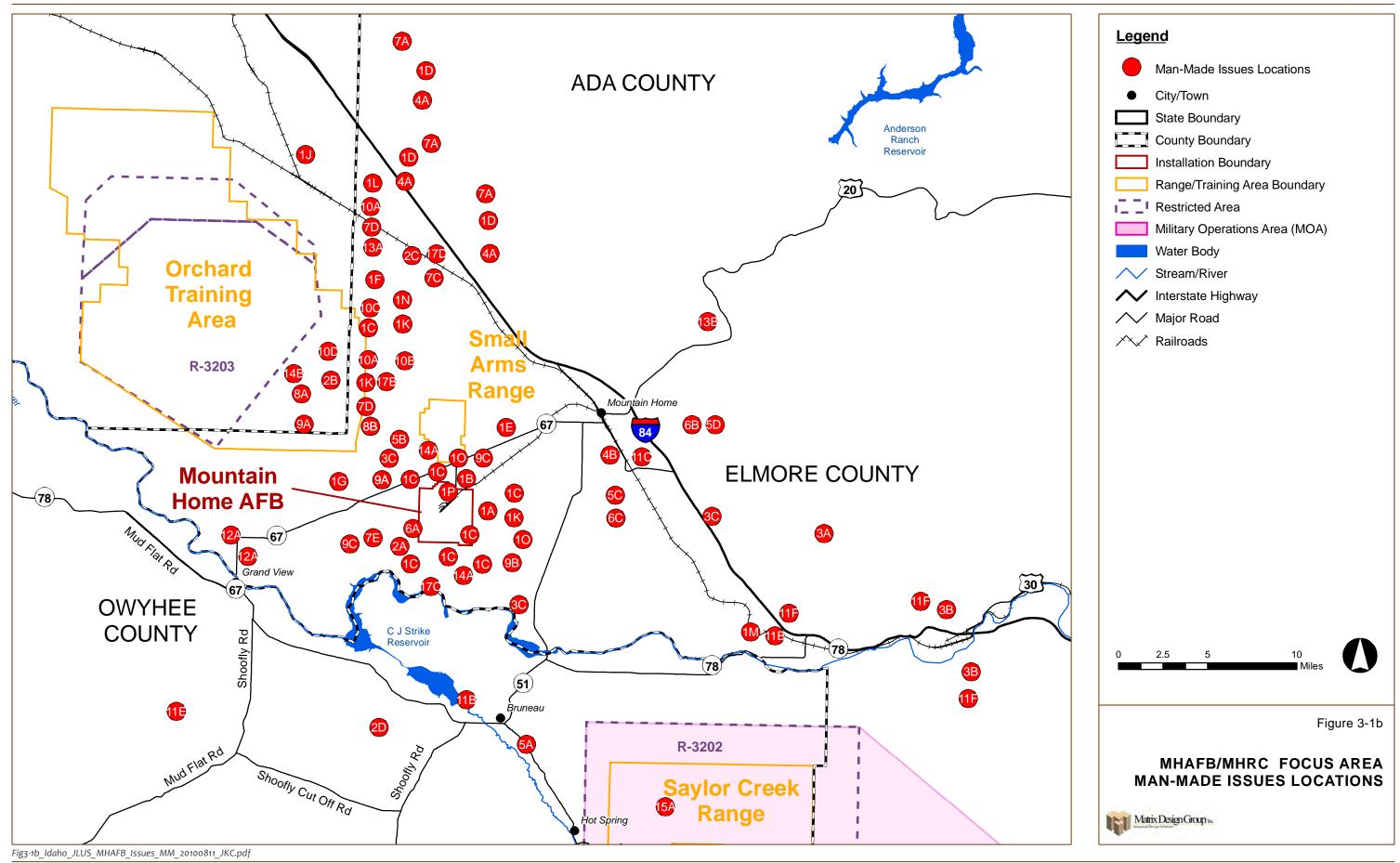
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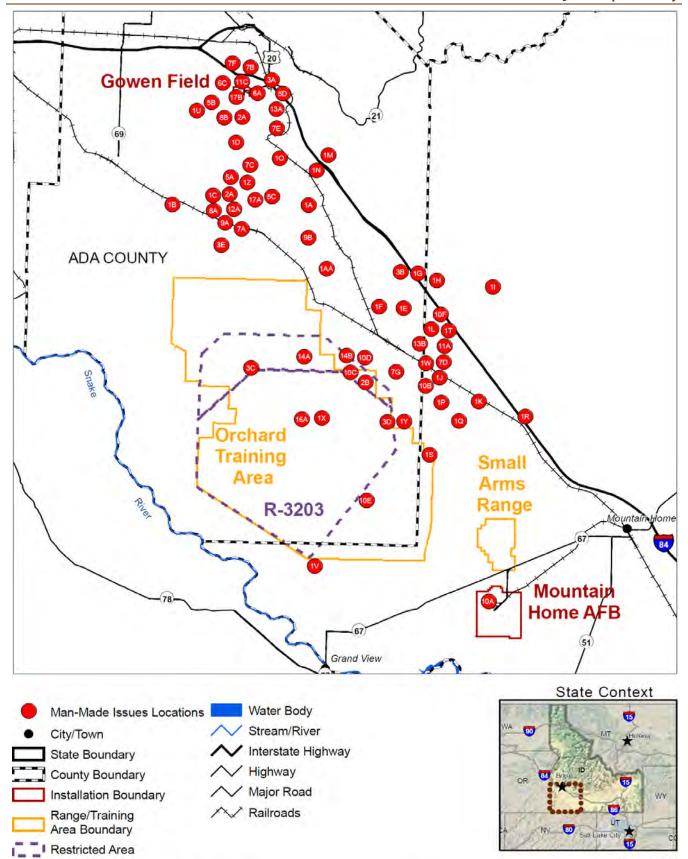


Figure 3-2

GOWEN FIELD/OTA FOCUS AREA MAN-MADE ISSUES LOCATIONS







Definition:

The basis of land use planning relates to the government's role in protecting the public's health, safety, and welfare. Local jurisdictions' general plans and zoning ordinances can be the most effective tools for avoiding or resolving land use compatibility issues. These tools ensure the separation of land uses that differ significantly in character. Land use separation also applies to properties where the use of one property may impact the use of another. For instance, industrial uses are often separated from residential uses to avoid impacts related to noise, odors, lighting, and so forth.

Land Uses issues identified for both focus areas, such as industrial development, are discussed prior to the focus area specific issues.

Land use planning around military installations is similar to the process used to evaluate other types of land uses. For instance, local jurisdictions already consider compatibility issues such as noise when locating residential developments near commercial or industrial areas. As the land between local municipalities is sold or developed, many facets of both entities are affected. New residents, tenants, or building owners are typically not fully aware of the implications of locating in close proximity to an active military installation or training area.

Evaluating land use compatibility can be seen as the act of integrating all of the compatibility issues described in this section in relation to the range of land uses possible in an area. The issues identified for this compatibility factor by the JPC, TWG, or public input are listed for the MHAFB/MHRC Focus Area on Table 3-3 and for the Gowen Field/OTA Focus Area on Table 3-4 and further described in the following discussion.

Table 3-3. MHAFR/MHRC Focus Area Land Use Issues

Table 5-5. Miliki b/Milike Focus Area Land Ose issues				
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Urban growth (New development proposals, speculation, existing development)	1A, 1B, 1C, 1D, 1K, 1O, 1P	•	•	
Nuclear power plant	1M		•	
Low height of airspace floor (100 feet)	1l			
Potential development on endowment trust lands	1E		-	
Private property rights	1G			

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Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Owyhee Initiative	1H	_		
Potential for development within the Army Noise Buffer Area	1J			
Recreational Development (approved race track)	1L	<u> </u>	-	
Private airports	1N			
Industrial Development	1F		•	

Table 3-4. Gowen Field/OTA Focus Area Land Use Issues

Table 3-4. Gowell Fleid	<u> </u>	· ca zama os		
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Urban growth (New development proposals, speculation, existing development)	1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1O, 1P, 1W, 1Y	•	•	-
Development along military movement corridors	1Z	-		
Recreational use on Orchard Training Area/open space	1X			
Industrial land	1M, 1N, 1S, 1T	-	-	
Endowment trust land development	1AA, 1U, 1V		•	
Waste Sites (US Ecology, landfill, shredding plants)	1J , 1K	•	•	
Recreational Development (War Eagle Race Track)	1L			
Existing residential development with airstrip	1Q , 1R		-	

Land uses may be considered incompatible with military installations and their operations for a number of reasons. The most common factors causing

incompatibility with air based installations are the high levels of noise created by aircraft, heights of civilian structures near the installation, force protection/security concerns, and factors that negatively impact pilot performance during flight (l.e., dust, light and glare). Potential land use compatibility issues could exist with residential and commercial development adjacent to the study area installations. It is also important to consider the rights of private property owners and to avoid potential takings on private property nearby the military installations.

The location of new uses, specifically schools and public gathering places, is frequently noted as a compatibility factor around many military installations. In many instances, military representatives are not aware of new uses in areas of high military activity until they are built. Mitigating the effects of locating near a military installation after the fact can be very expensive and may force changes in military operations.

Complicating land use planning within the study area is the number of entities responsible for land use management. The study area includes land managed by county (Ada, Elmore, Owyhee), city (Boise, Grand View, Mountain Home), state (Department of Lands), and federal (Bureau of Land Management, Department of Defense) entities. Additionally, the cities play a role in land use decisions in the areas known as areas of city impact (ACIs) as discussed further in Section 4. Figures 4-4 and 4-6 in Section 4 present the comprehensive plan future land use designations for land in and adjacent to the study area.

This issue in part stimulated the need for the Owyhee Initiative in 2008. Also known as the Public Land Management Act of 2008, the Owyhee Initiative sought to address land use conflicts that have endured in Idaho dealing with lands specified for conservation. As will be discussed further in Section 4, wilderness areas attract a variety of users including the military. Conflicts between these users and the specified use of conservation land have been an issue in Idaho and specifically in the study areas where a large percentage of the land is designated conservation area or habitat.

PRIVATE AIRPORTS

An additional land use concern facing the entire study area is the development of residential communities around private airstrips. These communities are an asset to the region, offering an additional amenity not found in other areas, however, compatibility between airspace use and locating these communities in areas where either the resident's use of the airspace or the military's use of airspace might be impacted needs to be rectified.

AIRCRAFT SAFETY

In-flight collisions with birds are dangerous for pilots, people on the ground, and aircraft operations in general. The Bird / Wildlife Aircraft Strike Hazard (BASH) can be increased by incompatible land uses adjacent to the installation and within approach and departure flight tracks. Mining and

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landfill operations are considered to pose compatibility issues to aircraft operations as well. These uses significantly increase the presence of birds. In the study areas, birds of prey pose a BASH concern as well. Portions of the Snake River Birds of Prey National Conservation Area (NCA) are in the study area, most notable is 138,500 acres of the Orchard Training Area. Idaho Army National Guard (IDARNG) operating procedures in the OTA have been modified to accommodate the management actions in the NCA's resource management plan (as discussed further in Section 4). The goal of the plan is to conserve, protect and enhance raptor populations and habitat. The increase in raptors near operation areas could increase BASH concerns. Additionally, areas that are graded for construction and some agricultural land uses can cause BASH concerns.

INDUSTRIAL DEVELOPMENT

In the JLUS study area, industrial land development has been taking place along Interstate 84 (I-84). Further expansions of infrastructure, detailed later in the chapter, could encourage additional industrial growth south and southeast of Boise. Given I-84's position as a major east west transit corridor through the region, locations with access to utilities, transportation infrastructure, and away from incompatible land uses such as residential, will attract additional industrial development.

Industrial development can favorably position the region for additional military investment given the industry is complementary to the military activities taking place in the study area. Industrial development provides skilled, well paid jobs, which are attractive to military dependants and retirees. New industrial development will need to be planned and sited carefully to mitigate potential interference with military operations such as creating dust, smoke, glare, or light problems which could have a negative impact on military operations.

APPROVED RACETRACK

A conditional use permit was granted for a new raceway to be created by Northwest Motorsports on September 21, 2007. The proposed War Eagle Raceway would not only include a racetrack, but also several other amenities, such as an expo center. The proposed location of the raceway is along Simco Road, to the east of Orchard Training Area. If completed, this project has the potential for many incompatible uses, including increased traffic along Simco Road, night time lighting affecting night vision training at OTA, frequency interference with military operations, and the proximity of the new facilities to areas subject to noise caused by training operations at OTA. The permit for the raceway is conditioned to expire on September 21, 2011 if the raceway is not fully operational, and the applicant cannot show just cause as to why the permit should be extended. As of June 2009, the raceway is not operational. Other sites are being considered for a raceway and if approved the Simco Road project would likely fall through.

MHAFB/MHRC Focus Area

The issues specifically identified in the MHAFB/MHRC Focus Area for this compatibility factor by the JPC, TWG, or public input are listed in Table 3-3 and further described in the following discussion.

URBAN GROWTH

Urban growth pressure is a growing concern as proposed infrastructure expansion (detailed later in the section) and property owner interests have resulted in new planned communities east of OTA. The potential for conflict is more prominent between OTA and I-84; however if development continues in the areas of the proposed utility expansions along Simco Road, compatibility issues between existing military operations and land use will increase significantly. One method that can be used to protect military operations is to limit land use types and densities in proximity to military installations and training areas to prevent future conflict. Potential development around OTA and in the vicinity of any military installation brings the topic of private property rights to the table.

As will be outlined in detail in Section 4 of this JLUS, the Idaho Local Land Use Planning Act requires local jurisdictions comprehensive plans to include an analysis of provisions which may be necessary to insure that land use actions do not violate the constitutional protection establishing that property shall not be taken without just compensation. Furthermore, the Idaho Regulatory Takings Act requires a review process for evaluating whether proposed land use actions result in a taking. The act provides private property owners with a checklist developed by the Idaho Attorney General which can be used to undertake a regulatory takings analysis.

NUCLEAR POWER PLANT

The Idaho Energy Complex Corporation is proposing a nuclear/biofuels generation complex in Elmore County southwest of I-84 near the town of Hammett. The 1,600 megawatt reactor will produce enough energy to power all the homes in Idaho three times over. In addition, the proposed biofuels generator will provide additional energy. The plant could begin generating power as soon as 2016 and will cost approximately \$4.5 billion to construct.

In August of 2008, Alternative Energy Holdings, Inc. (AEHI), the developer of the Idaho Energy Complex, submitted an application to Elmore County to rezone the 1,400 acre site where the plant will be built. If approved, the site would be rezoned from Agriculture to Heavy Industrial, allowing the applicant to apply for a conditional use permit. If the conditional use permit is approved, the land would be entitled for use as a Nuclear Power Plant. As of July 2010, the rezoning request had been remanded back to the Elmore County Board of County Commissioners. The board is currently reviewing the county's comprehensive plan to determine if this request is allowable per the plan. At this time, the final decision is still to be determined.

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POTENTIAL DEVELOPMENT ON ENDOWMENT TRUST LANDS

Because endowment trust lands are located immediately adjacent to MHAFB, the potential for new development is uncertain. The State Board of Land Commissioners maintains an asset management plan for the endowment land; however, that document does not indicate which lands are likely to be sold or when lands are likely to be sold.

Gowen Field/OTA Focus Area

The issues specifically identified in the Gowen OTA Focus area for this compatibility factor by the JPC, TWG, or public input are listed in Table 3-3 and further described in the following discussion.

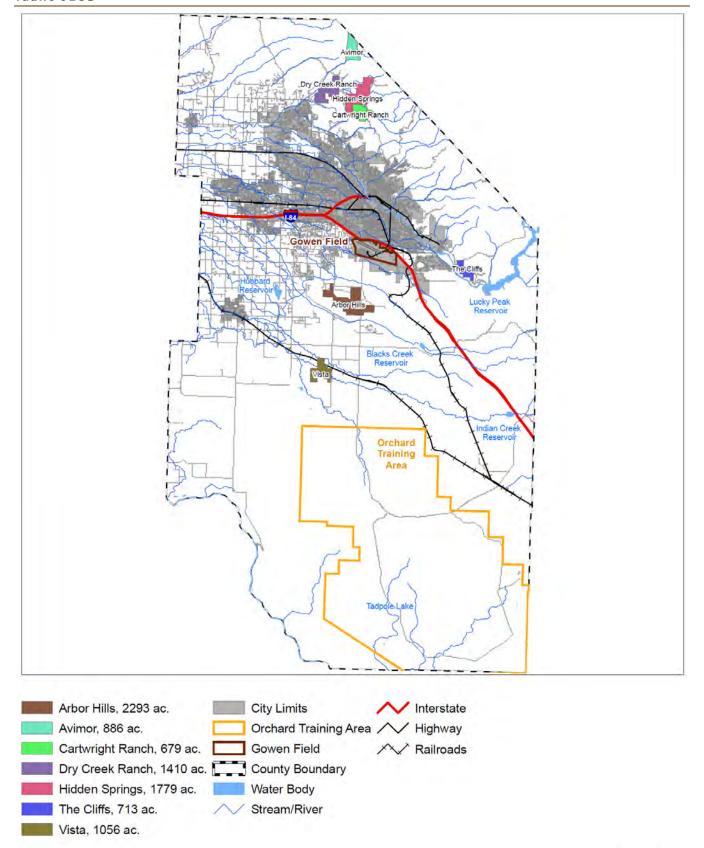
For definition of noise measurement terms, see Factor 7, Noise later in this section.

Operational noise from OTA carries beyond the boundary of the training area in several locations; however the zones where the loudest noise levels occur are contained within the boundaries of OTA. Levels measuring 87dB PK15(met) occurring beyond the boundaries of OTA, are predominately located over land owned by either the federal or state government. (Also see Factor 7, Noise for specific details about military operational noise) Large Caliber Noise measuring 115 PK15(met) also extends beyond the boundaries of OTA. Like small caliber noise, areas affected are predominately owned by the federal or state government; however a number of sizable privately owned tracts of land can within this noise contour are located along the eastern boundary of OTA.

Noise from these operations can impact land use by detracting residential development. Although, the existing rural nature of these areas is more likely due to the lack of urban services and other amenities which would attract residential development. This could change due to infrastructure expansion in the future (see Factor 5, Infrastructure Extensions).

URBAN GROWTH AND DEVELOPMENT ALONG MILITARY MOVEMENT CORRIDORS

Large planned residential communities were identified as a potential compatibility issue in the Gowen Field/OTA Focus Area. Four such developments are located along Pleasant Valley Road between Gowen Field and OTA. Alone, these four developments total 5,334 new residential units. Traffic generated from these communities and their associated commercial development, will have primary road access to the area via Pleasant Valley Road. As discussed in Section 2, this road will be shared by military operations, mainly tank traffic, traveling between the Idaho Army National Guard facilities at Gowen Field and the OTA. Additionally, five other planned residential communities are developing in the area along the I-84 corridor; three southwest of the interstate, two northeast of the interstate. These new communities total 7,369 new residential units. Notably, the 2,841 unit Orchard Ranch Community is located adjacent to the northeast boundary of OTA. Figure 3-3 illustrates the location of residential development communities that are in the process of being developed in proximity to OTA.



0 3.25 6.5 Miles Matrix Design Group to:

Figure 3-3
Proposed Planned Communities in Ada County

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RECREATIONAL USE ON ORCHARD TRAINING AREA/OPEN SPACE

OTA is located in a well known wilderness area, near the Snake River, yet in proximity to the cities of Boise and Mountain Home. Given the region's outdoor amenities such as fishing, hunting, and hiking, as well as the proximity to the interstate highway, conflicts can arise between the military use of the land and recreational users of the area. As will be further outlined later in this section, the opportunity for trespassing onto OTA as well as the other training areas is probable. Balancing the many uses of the land in this study area has added to the compatibility factor of land use.

ENDOWMENT TRUST LAND DEVELOPMENT

As discussed earlier in the context of the MHAFB/MHRC Focus Area, development on endowment trust lands is also an issue in the Gowen Field/OTA Focus Area. Notably, there is a large expanse of state-owned endowment trust land both north and west of the Orchard Ranch Community adjacent to the northeast of OTA. If development becomes a trend in this area, the value of the endowment trust land will increase. This could increase the potential for the sale and subsequent development of these lands. It will be of critical importance to monitor these lands and have policies in place to insure development thereon will be compatible with the military operations at OTA.

WASTE SITES

Waste sites and landfills have the potential to attract birds that could pose safety hazards for pilots flying over or nearby the site. The Simco Road Regional Landfill has been in operation since 1999 and is one of the largest landfills in the State of Idaho. The landfill is located near to OTA and MHAFB and so has been identified as a possible compatibility issue due to its proximity to aircraft flight. The possible safety risks of bird attractants and pilot safety must be addressed if additional landfills are considered for the area in the future.



Definition:

Safety zones are areas in which development should be more restrictive in terms of use and concentrations of people due to the higher risks to public safety. Issues to consider include aircraft accident potential zones, weapons firing range safety zones, and explosive safety zones.

Military installations often have activities or facilities that require special consideration by local jurisdictions when evaluating compatibility due to public safety concerns. The issue locations described under this factor are listed in Table 3-5 for the MHAFB/MHRC Focus Area and Table 3-6 for the Gowen Field/OTA Focus Area and are discussed on the following pages.

Table 3-5. MHAFB/MHRC Focus Area Safety Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Potential for incompatible uses within Mountain Home AFB accident potential zones	2A			
Safety issues associated with waste (toxic) areas	2C	_	_	
Potential for incompatible development near Ordnance Safety Zones (Mountain Home AFB ranges)	2D	•	•	

Table 3-6. Gowen Field/OTA Focus Area Safety Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Potential for incompatible uses within OTA Safety Zones	2A			
Potential for incompatible uses adjacent to munitions storage bunkers	2В	•	-	-

Aircraft Safety Areas / Zones

The following discussion details the safety areas or zones associated with civilian airports and military air operations with emphasis on the unique aspects of aircraft operations safety within the study area. The Department of Defense (DOD) established the Air Installation Compatible Use Zone (AICUZ) program in response to the Noise Control Act of 1972. This

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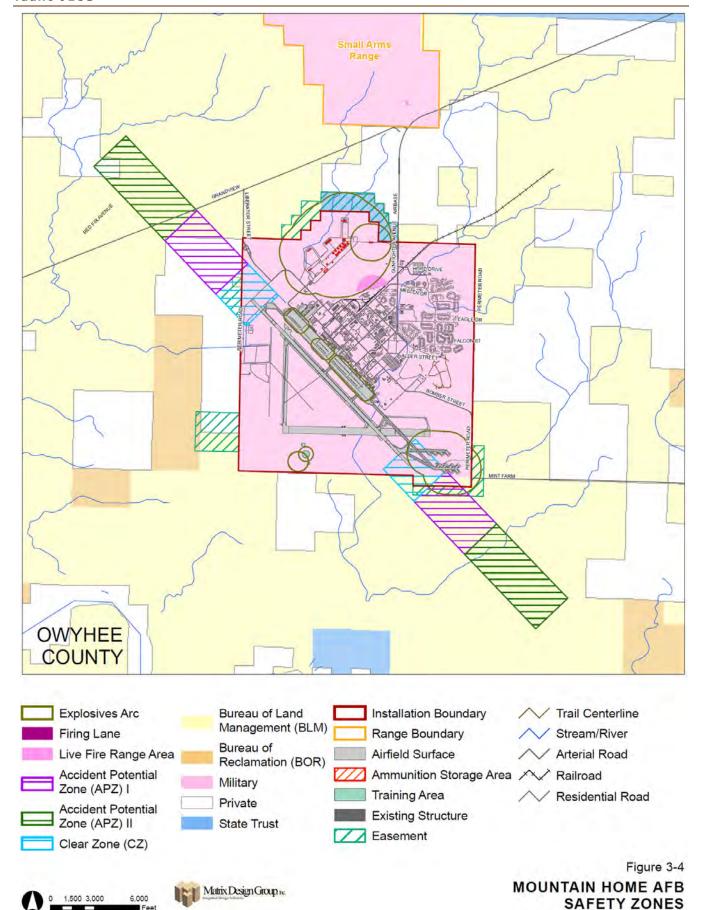
program was designed to analyze airfield operations at military bases to promote an environment that protected the health, safety, and welfare of the public in terms of noise and safety issues derived from aircraft operations. DOD analysis determined that the areas immediately beyond the ends of the runways and along the extended centerlines (approach and departure flight paths) have the highest potential for aircraft mishaps. Based on this analysis, the DOD developed three zones that have a relative potential for accidents. These zones are rectangular in shape and are designated as the Clear Zone (CZ), Accident Potential Zone I (APZ I), and Accident Potential Zone II (APZ II). Historically, the majority of aircraft accidents (62 percent) occurred either on or adjacent to the airfield or within the CZ, while about 8 percent occurred in APZ I and 5 percent in APZ II. It was concluded that the CZ warranted special attention due to the high incidence of accident potential that severely limited acceptable land uses. The percentages of accidents within the two APZs are such that land use controls are essential. The Air Force recommendation for the APZs is to limit the concentration of people exposed to safety hazards through appropriate land use planning.

MOUNTAIN HOME AFB

Mountain Home AFB has one active runway (Runway 12/30) that measures 13,500 feet long and 200 feet wide. It is oriented in a northwest-southeast direction. While MHAFB consists of about 6,850 acres of land, the runway is located near the western and southern edges of the installation. The close proximity of the runway to these boundaries raises some off-installation compatibility issues relative to designated safety zones.

As published in the 1998 MHAFB AICUZ Study, the runway has a 3,000-foot long by 3,000-foot wide CZ on each end of the runway that extends outward along an imaginary extension of the runway's centerline (see Figure 3-4). A little over a half of the CZs are contained within the boundaries of the base, but each of them extends off-base to the west and south off each end of the runway. DOD analysis has determined that the land within the CZ has the highest probability of an accident occurring due to aircraft operations at a runway. As a result of the potential for aircraft accidents in these zones, the Air Force has adopted a stance of trying to acquire lands (land purchase, easement purchase, or other legal protection) that are within the CZ. The only type of land use recommended within the CZ is agricultural. No structures are recommended in the CZs.

APZ I is the area determined to contain the second highest accident potential around a runway. The runway at MHAFB has an APZ I that begins at the end of each CZ and extends 5,000 feet long and 3,000 feet wide along the same imaginary centerline as the CZ. Several types of land uses are considered compatible in APZ I, including light industrial, manufacturing, agricultural, transportation, recreation, and wholesale trade. Residential uses are not recommended for this area.



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APZ II has the lowest accident potential for the three zones. It extends an additional 7,000 feet in length and 3,000 feet in width past the ends of APZ I on each side. The recommended land uses for APZ II include those listed for APZ I, as well as retail trade and low-density residential. Although APZ I and APZ II do not warrant acquisition by the Air Force, land use planning controls and restrictions are strongly encouraged in these areas to protect public health, safety, and welfare. A more detailed description of the types of land uses recommended for each zone can be found in Appendix XX (to be developed for public draft); however, the basic guidelines aim at prevention of land uses that:

- Have high residential density characteristics;
- Have high labor intensity;
- Involve above-ground explosive, fire, toxic, corrosive, or other hazardous characteristics;
- Promote population concentrations;
- Involve utilities and services required for area-wide population, where disruption would have an adverse impact (i.e., telephone, gas, etc.);
- Concentrate people who are unable to respond to emergency situations, such as children, elderly, handicapped, etc.; and
- Pose hazards to aircraft operations.

As stated in the 2008 MHAFB AICUZ Study, the risk of an aircraft accident outside of the CZ, APZ I, and APZ II, but within a 10-nautical mile radius of the airfield, is still significant; however, it is considered acceptable if sound engineering and planning practices are followed. Source: Mountain Home AFB AICUZ Report, 1998

For MHAFB, the CZ and APZs associated with the southeast end of the runway encompass land owned by the Bureau of Land Management (BLM). Similarly, the CZ and APZs for the northwest end of the MHAFB runway extend onto lands owned by BLM, but a portion of the CZ and APZ I on the north end are owned by private entities. To ensure the viability of MHAFB and its mission, it is important that any development or uses allowed in the designated aircraft safety zones be compatible with the installation's aircraft operations.

Section 6-36 of the Elmore County Zoning and Development Ordinance establishes an Airport Hazard Zone with sub-zones for land around MHAFB, the City of Mountain Home Airport, and the Glenns Ferry Airport. The sub-zones include all land within the instrument approach zone, non-instrument approach zone, visual approach zone, horizontal zone, and AICUZ zones. The ordinance limits land uses and activities in these zones as a safety measure. (See Section 4 of this report for additional information on the Elmore County Zoning and Development Ordinance.)

GOWEN FIELD

Located south of and adjacent to the Boise Airport, Gowen Field has one dedicated assault landing strip (ALS) south of the airport and military facilities that supports active duty Air Force and Air National Guard C-130 training, as well as civilian and military helicopter autorotation training. Additionally, the ALS is periodically used to airlift soldiers to the OTA for training. This allows the Air Force to support the Army's mission while simultaneously conducting required assault landing strip takeoffs and departures. Although constructed with DOD funds, this airstrip is the property of Boise Airport. The primary runways used by the Idaho Air National Guard's (IDANG) A-10 fleet are Boise Airport's two primary runways. Figure 3-5 illustrates the Boise Airport / Gowen Field runway safety zone.

The ALS is paved and measures 5,000 feet long and 90 feet wide. Boise's Runway 10L/28R measures 10,000 feet long and 150 feet wide, and Runway 10R/28L measures 9,763 feet long and 150 feet wide. According to Unified Facilities Criteria (UFC) 3-260-01 Airfield and Heliport Planning and Design dated November 2008, assault landing strips have two accident potential zones compared with three zones of prepared runways. The two zones applied to each end of the ALS are the CZ (500 feet wide and 500 feet long) and the Accident Potential Zone (APZ)-Landing Zone (LZ) (2,500 feet long and 500 feet wide). Like MHAFB's runway, the ALS CZ extends from each end of the runway surface along an extended imaginary runway centerline, and the APZ-LZ extends outward from each end of the respective CZ along the same extended imaginary runway centerline.

Additional potential issues associated with the future expansion of the Gowen Field Assault Landing Strip are addressed under Compatibility Factor 22, Competition for Land, Air, and Sea Spaces.

Although the ALS accident potential zones measure only 3,000 feet long at each end of the landing strip, care must be taken to avoid incompatible uses being located in these areas. This is not considered to pose a significant issue as the parcels are the property of Boise Airport. Should the desire to expand the ALS to a 10,000-foot runway become a reality, the accident potential zones would grow to the sizes described for the MHAFB runway. This would increase the total length of the CZ and APZs to 15,000 feet, which is five times greater than the existing CZ and APZ-LZ. Locating incompatible uses between the 3,000 and 15,000 feet from the ALS ends could negatively impact the mission of Gowen Field, as well as future expansion and operations at the Boise Airport. According to Idaho National Guard representatives, should the ALS be expanded to a functional runway, the ALS mission would no longer be supported.

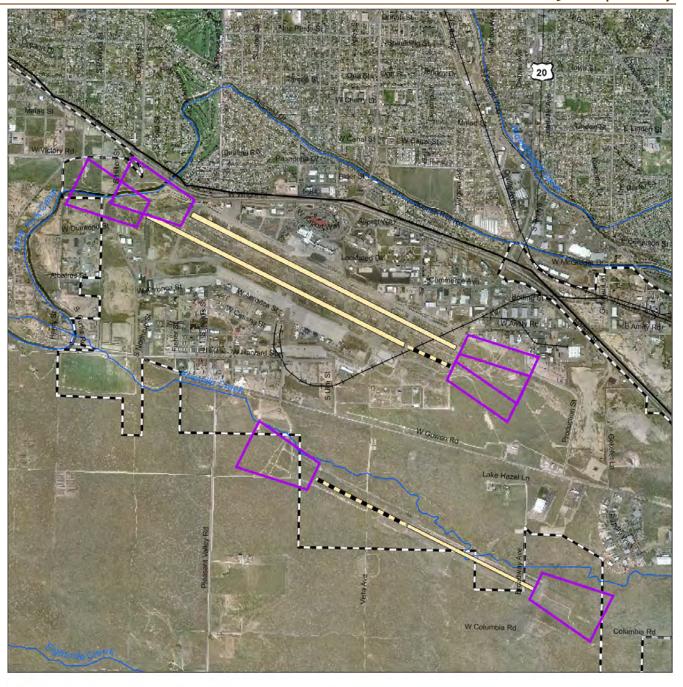
Firing Range Usage

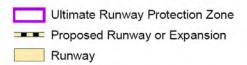
MOUNTAIN HOME AFB

MHAFB has several auxiliary facilities, including the Small Arms Range Complex, measuring almost 3,200 acres, which is located one mile north of

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3. Compatibility





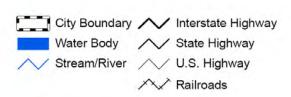






Figure 3-5

GOWEN FIELD SAFETY ZONES

MHAFB main installation. Firing ranges can sometimes be a noise or safety concern; however, this range complex is bordered by undeveloped BLM lands to the east and west and by undeveloped State land to the north. Consequently, the potential for encroachment by incompatible uses is very low. The limited number of weapons firing points and use of earthen berms enhances the containment of fired rounds within the range itself.

ORCHARD TRAINING AREA

A wide range of live fire training takes place at Orchard Training Area. There are 16 various designated ranges that are used for tank and helicopter gunnery, grenade launching, field artillery and mortar, rifle, and small arms firing. The different ranges are located along the perimeter of an inner impact area, into which all weapons firing is directed. The Impact Area is large enough to allow mortar and field artillery training at maximum range so that it does not interfere with other ranges and operations. Near the center of the Impact Area is a smaller Artillery Impact Area , into which explosive weapons are fired. Due to the size and direction that weapons are fired into, there are minimal safety concerns associated with firing ranges at OTA impacting the lands surrounding it. Figure 3-6 illustrates OTA's safety zones.

Storage, Assembly, and Disposal of Explosives

MOUNTAIN HOME AFB

Mountain Home AFB has several locations that are used to store, assemble, or dispose of explosive materials. Air Force regulations provide specifics on how to define a buffer area around these locations based on the type of explosive, the maximum amount of explosive material on site, and the type of structure used to work on or store the materials. This buffer area is described as an explosive safety quantity distance (ESQD).

The installation's Munitions Storage Area (MSA) is located along the northern boundary. The munitions and explosives used for missions are stored in bunkers and assembled in nearby facilities. The ESQD arc associated with the MSA is primarily contained within the base boundary; however, a small portion extends beyond the northern boundary onto endowment trust land.

In addition to the MSA, MHAFB has alert pads and a hot cargo pad located in the far southeast corner of the installation. The 11 alert pads are between 1,600 and 2,400 feet southeast of the southern end of the runway. Used originally to stage alert aircraft, the pads are now used as a live load area, as well as a location to safely remedy hung guns or ordinance (munitions that did not release or fire).

The ESQD arc associated with the alert pads extends minimally beyond the installation boundary to the east and south onto BLM land. The hot cargo pad is approximately 2,500 feet north of the alert pads and is used to temporarily hold aircraft containing explosive or hazardous cargo. The explosive arc for this area is completely contained within the MHAFB boundaries.

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3. Compatibility

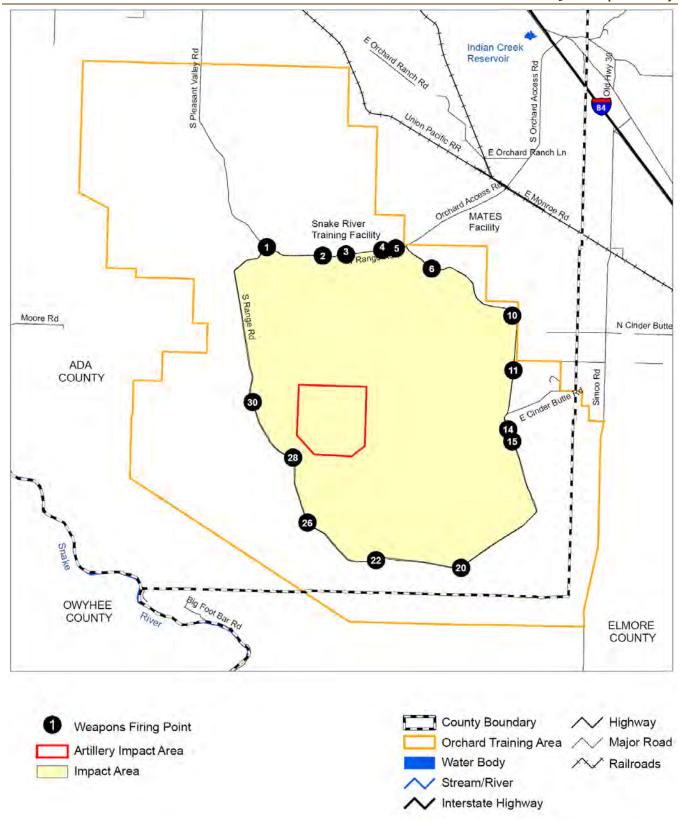






Figure 3-6
ORCHARD TRAINING AREA
SAFETY ZONES

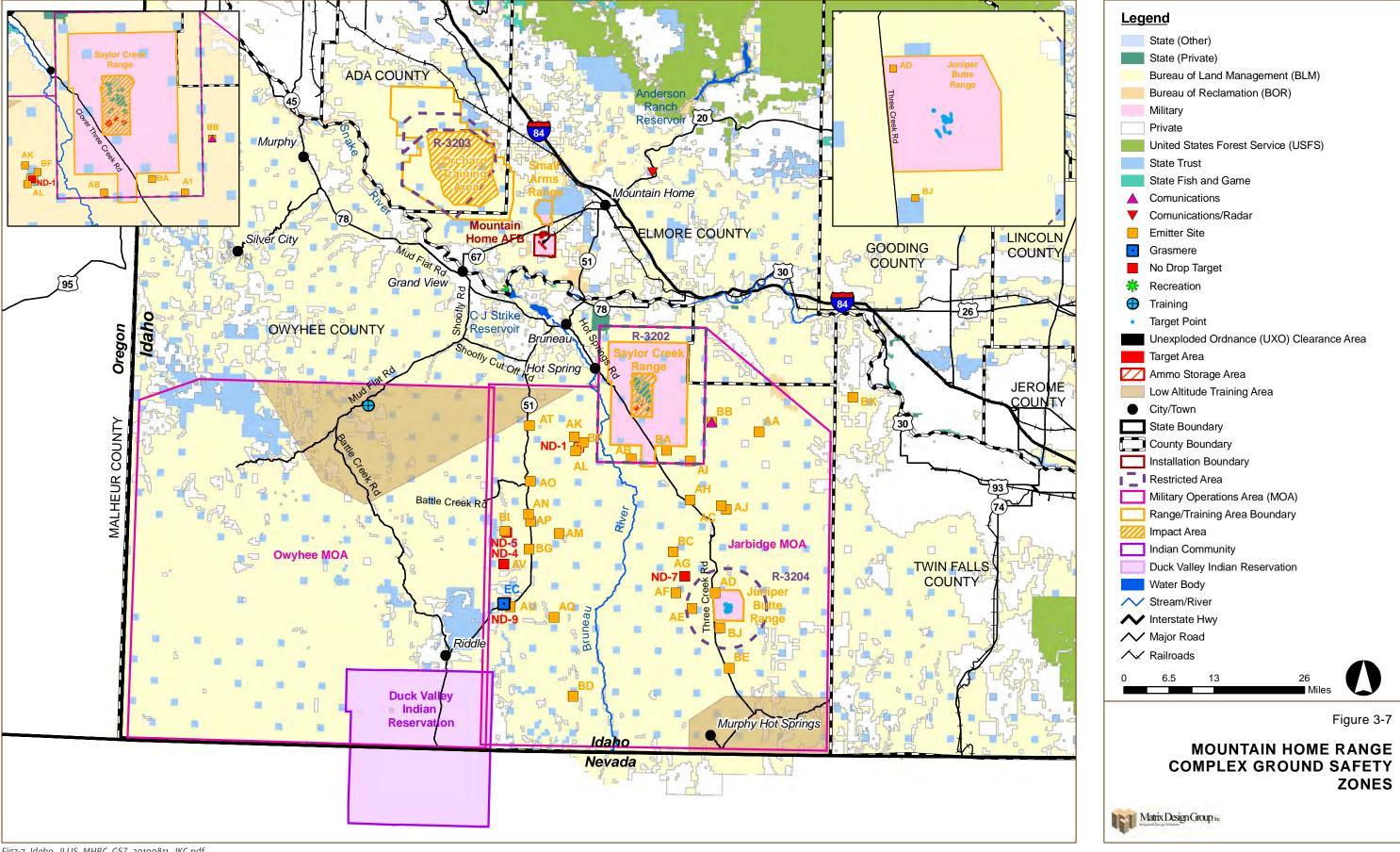
Cleanup of formerly used defense sites are the responsibility of the U.S. Army Corps of Engineers. Located in close proximity to the installation's southern boundary, the base has and uses a small explosives ordnance disposal (EOD) range for periodic ordinance training. The explosives arcs for this area are completely contained on MHAFB property and do not pose a safety issue to off-base land. Approximately 190 acres in the southeast portion of the MHAFB small arms range have also been used for EOD.

Although the noted munitions related explosives arcs are not considered to be current issues, attention must be paid to any land uses planned for those areas impacted by the ESQD arcs.

Safety issues also exist in the Mountain Home Range Complex mainly due to the training operations taking place. Because of the rural nature of the range complex, safety concerns are minimal yet still present. The Saylor Creek Range, used for air to ground target training, could cause a potential safety issue should civilians trespass into the range. On a smaller scale, the Juniper Butte Range has a similar safety concern. Outside the Saylor Creek and Juniper Butte Range, no other drop zones are located on MHRC.

Tampering with emitter equipment could also pose a safety concern; however as previously stated, these areas are very rural. Figure 3-7 illustrates areas where safety concerns may exist in relation to air operations within MHRC.

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3 Vertical Obstruction

Definition:

Vertical obstructions are created by buildings, structures, or other features that may encroach into the navigable airspace used by military operations (aircraft approach, transitional, inner horizontal, outer horizontal, and conical areas, as well as military training routes), presenting a safety hazard to both the public and military personnel and potentially impacting military readiness.

The issues identified for this compatibility factor are listed on Table 3-7 for the MHAFB/MHRC Focus Area and on Table 3-8 for the Gowen Field / OTA Focus Area, and further described in the following discussion.

Table 3-7. MHAFB/MHRC Focus Area Vertical Obstruction Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Height of new/existing development creating obstructions or hazards to air navigation	3C		•	
Vertical obstructions (towers and wind generation)	3A, 3B	-	•	

Table 3-8. Gowen Field/OTA Focus Area Vertical Obstruction Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Vertical obstructions (towers)	3A, 3B, 3C, 3D			
Height of new/existing development creating obstructions or hazards to air navigation	3E	•	=	•

More on Part 77

More information on Part 77 can be found at the following website:

http://www.faa.gov/airports_ airtraffic/airports/regional_g uidance/central/construction/ part77

Evaluating Vertical Obstruction

Vertical obstruction in relation to flight operations from an airport (military or civilian) are addressed through compliance with Federal Regulation Title 14 Part 77, which establishes standards and notification requirements for objects affecting navigable airspace. Commonly referred to as Part 77 compliance, this regulation provides details on how to evaluate the potential for a vertical obstruction based on the elevation of the airfield, the height and resulting

elevation of the new structure or facility, and the location of the structure or facility in relation to the airfield in question. Figure 3-8 illustrates common terms used in the Part 77 regulation, and Figure 3-9 provides graphic representations of the airspace controls of imaginary surfaces around the runway at MHAFB. These are how structures and facilities are evaluated to determine if they pose a vertical obstruction in relation to the airspace around MHAFB. The various imaginary surfaces build upon one another and are designed to eliminate obstructions to air navigation and operations, either natural or man-made. The key terms related to imaginary surfaces and as illustrated in Figures 3-8 and 3-9 are described below.

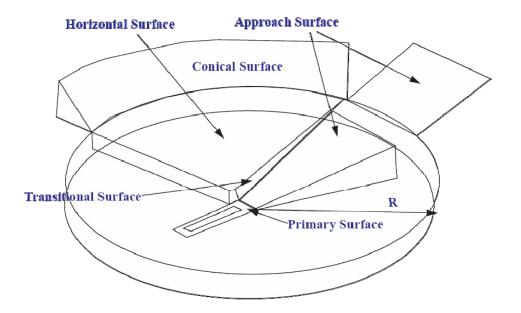
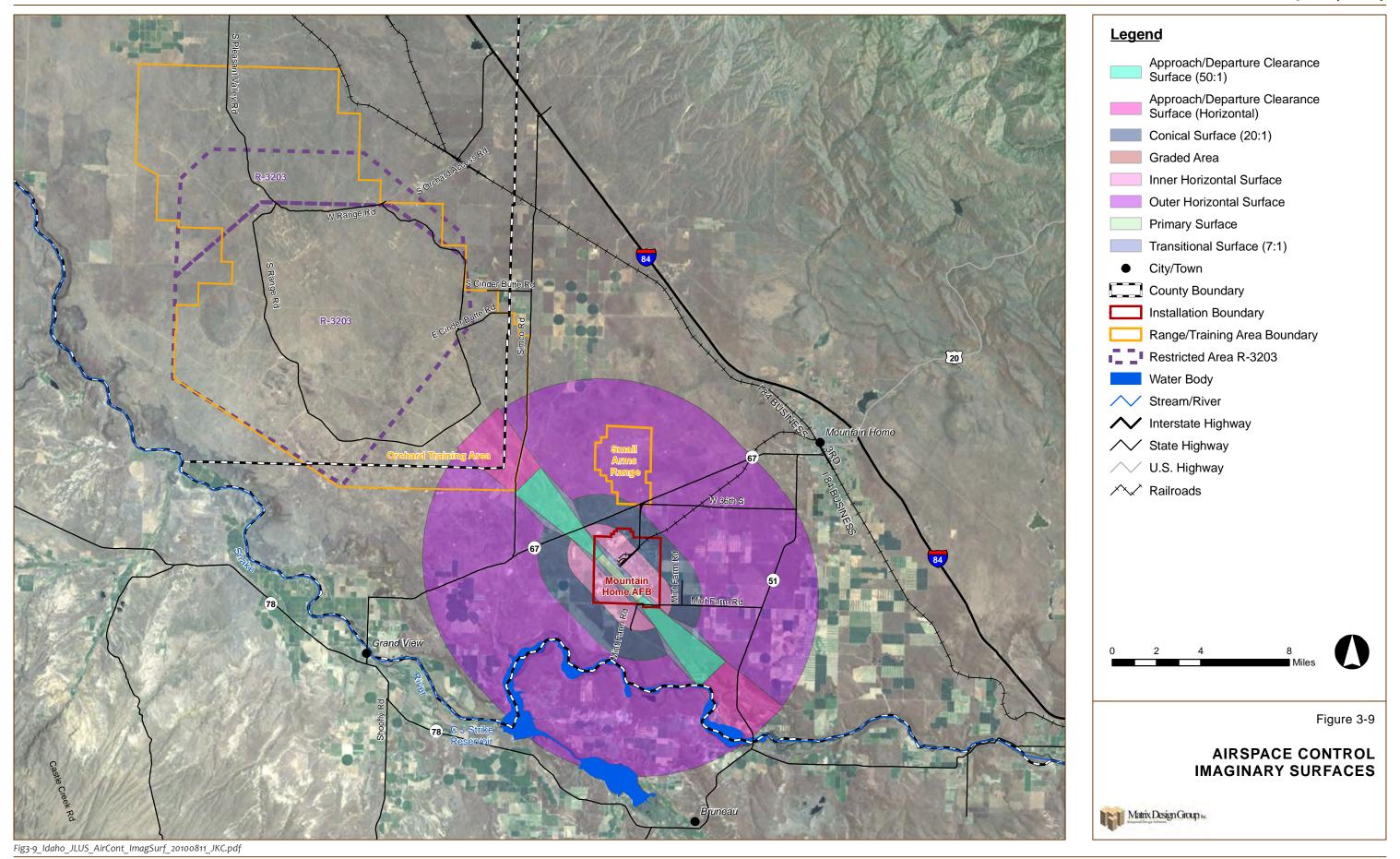


Figure 3-8. Part 77 Terminology

- The Primary Surface defines the limits of the obstruction clearance requirements in the immediate vicinity of the landing area. It comprises surfaces of the runway, runway shoulders, and lateral safety zones and extends 200 feet beyond the runway end. For a single class "B" runway, this surface is 2,000 feet wide, or 1,000 feet on each side of the runway centerline.
- The Clear Zone defines the limits of the obstruction clearance requirements in the vicinity contiguous to the end of the primary surface. For a single runway end at MHAFB, it measures 3,000 feet by 3,000 feet. This area has the highest accident potential of all zones.
- The Approach-Departure Clearance Surface is symmetrical about the runway centerline extended, begins as an inclined plane (glide angle) 200 feet beyond each end of the primary surface of the centerline elevation of the runway end, and extends for 50,000 feet.

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The slope of the approach-departure clearance surface is 50:1 along the extended runway (glide angle) centerline until it reaches an elevation of 500 feet above the established airfield elevation. It then continues horizontally at this elevation to a point 50,000 feet from the start of the glide angle. The width of this surface at the runway end is 2,000 feet; it flares uniformly, and the width at 50,000 feet is 16,000 feet.

- The Inner Horizontal Surface is a plane, oval in shape at a height of 150 feet above the established airfield elevation. This surface is constructed by scribing an arc with a radius of 7,500 feet above the centerline at the end of the runway and interconnecting these arcs with tangents.
- The Conical Surface is an inclined surface extending outward and upward from the outer periphery of the inner horizontal surface for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation. The slope of the conical surface is 20:1.
- The Outer Horizontal Surface is a plane located 500 feet above the established airfield elevation. It extends for a horizontal distance of 30,000 feet from the outer periphery of the conical surface.
- The Transitional Surfaces connect the primary surfaces, Clear Zone surfaces, and approach-departure clearance surfaces to the outer horizontal surface, conical surface, other horizontal surface, or other transitional surfaces. The slope of the transitional surface is 7:1 outward and upward at right angles to the runway centerline. To determine the elevation for the beginning of the transitional surface slope at any point along the lateral boundary of the primary surface, including the Clear Zone, draw a line from this point to the runway centerline. The elevation at the runway centerline is the elevation for the beginning of the 7:1 slope.

Source: Mountain Home AFB AICUZ Report, 1998

Federal Aviation Administration (FAA) Part 77 (§ 77.13) states the following requirements used to determine when the FAA must be notified of proposed structures or facilities.

§ 77.13 - Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA (paraphrased):

- (1) Any construction or alteration of more than 200 feet in height above the ground level at its site.
- (2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:
 - o within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each

airport with at least one runway more than 3,200 ft.

- o within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft.
- o within 5,000 ft of a public use heliport which exceeds a 25:1 surface
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards
- When requested by the FAA
- Any construction or alteration located on a public use airport or heliport regardless of height or location

Further, Part 77 identifies the height at which an object may be considered an obstruction at a designated distance. An excerpt from Section 77.23 follows:

§ 77.23 – Standards for determining obstructions

- (a) An existing object, including a mobile object, is, and a future object would be, an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:
 - (1) A height of 500 feet above ground level at the site of the object.
 - (2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within three nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

Figures 3-10 and 3-11 depict how Part 77 requirements impact allowable vertical structures over distance at MHAFB and Gowen Field, respectively.

MHAFB/MHRC Focus Area

As described in Compatibility Factor 2, Safety, Elmore County incorporated Airport Hazard Zones into its zoning and development ordinance to reduce the potential for airport hazards at MHAFB, Mountain Home Municipal Airport, and Glenns Ferry Airport. It was originally implemented and became effective as of July 22, 1974. Uses in place before this ordinance were grandfathered (allowed to continue) The Airport Hazard Zone is designed to regulate and restrict the height of man-made structures and natural growth and land uses within the vicinity of the runways associated with each facility.

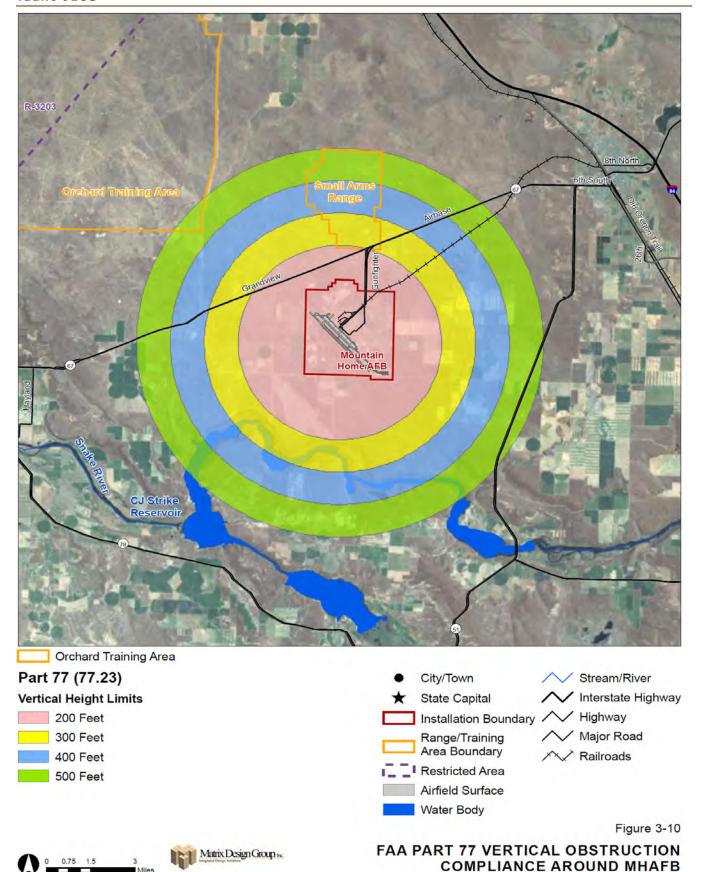
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Several sub-zones were established as a part of the Airport Hazard Zone. Section 6-36-2 of the Zoning and Development Ordinance describes the various sub-zones. The sub-zones include all land located within the instrument approach zone, the non-instrument approach zone, the visual approach zone, the horizontal zone, the conical zone and the AICUZ, described as surfaces earlier under this compatibility factor. The heights in each zone adhere to those established by FAA standards as described above, as well as their associated surface discussions above. Structures or vegetation may not be constructed, altered, maintained, or allowed to grow in any airspace area as described hereinabove so as to project above the conical surface.

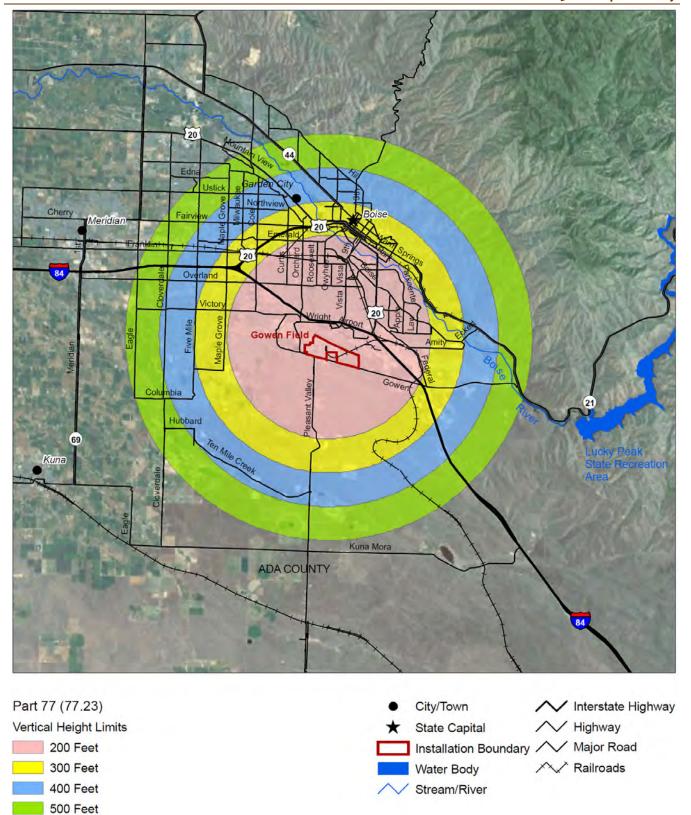
The Airport Hazard Zone ordinance includes provisions to notify MHAFB of any conditional use permits that are submitted for land use or heights that are not in accordance with a specified sub-zone. In the event of a conditional use submittal, the MHAFB Commander will receive written notification of the public hearing for the case as well as a copy of the application. All adjoining property owners are also notified. The written notification will be mailed at least ten days before the public hearing. Approval of conditional use permits is contingent upon it not being in conflict with the general plan, health safety and welfare of nearby residents, and not detrimental to the military mission.

Gowen Field/OTA Focus Area

Included in the Boise Municipal Code is the establishment of the Boise Air Terminal (Gowen Field) District. The original Boise Air Terminal District was jointly drafted and adopted by both Ada County and the City of Boise as part of the Boise Air Terminal Ordinance on May 10, 1960 and May 13, 1960, respectively. Similar to the Elmore County Airport Hazard Zone, the Boise Air Terminal (Gowen Field) District includes several zones based on certain parameters around the runways. The heights for each zone are congruent with standards established by the FAA.



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0 0.75 1.5 3 Miles



Figure 3-11
FAA PART 77 VERTICAL OBSTRUCTION
COMPLIANCE AROUND GOWEN FIELD



Definition:

Local housing availability addresses the supply and demand for housing in the region, the competition for housing that may result from changes in the number of military personnel, and the supply of military family housing provided by the base.

Given personal choice and the limited availability of installation housing, military personnel assigned to MHAFB and Gowen Field often seek housing in nearby communities. The issues identified for this compatibility factor are listed on Table 3-9 for the MHAFB/MHRC Focus Area and on Table 3-10 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-9. MHAFB/MHRC Focus Areas Housing Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Availability of housing	4A			

Table 3-10. Gowen Field/OTA Housing Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
No Housing Issues Identified	N/A	N/A	N/A	N/A

MHAFB/MHRC Focus Area

In reviewing local housing availability, no specific areas or concerns were identified other than the need to ensure quality housing is available both on and off MHAFB. Although many military installations throughout the U.S. have recently undergone housing privatization, MHAFB has not. It could potentially be an option in the future, and if so, the issue of housing availability could change, depending on how the current housing units on the base would be handled or modified. Congressionally authorized since 1996, the Military Housing Privatization Initiative allows the military to work with the private sector to design, construct and/or renovate, operate, manage, and maintain family housing assets located on installation property, both on and off of the primary installation (i.e., remote housing locations).

As of April 2009 there are a total of 1,155 housing units available at MHAFB for enlisted personnel, officers, and their families. Approximately 36 percent of the military personnel stationed at MHAFB live on base with their families.

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Military families are not required to live in military family housing and can obtain housing anywhere within the local communities.

Changes in missions at the installation could increase or decrease the number of MHAFB personnel and students, which translates to a requirement for more or less housing. In the case of an increase in personnel, the increased demand would likely be handled by the local communities, at least in a short-term situation. Depending on the size of the increase, this could impact housing supply in the local region. It has been noted that the City of Mountain Home has an inadequate supply of housing rental units to accommodate MHAFB personnel who do not reside on base. As a result, some of them and their families have resorted to living in Boise, approximately 50 miles north. This leads to increased commute times for these personnel.

Gowen Field Focus Area

Local housing availability was not found to be an issue in the Gowen Field/OTA Focus Area.

5 Infrastructure Extensions

Definition:

This factor covers the extension or provision of infrastructure (roads, sewer, water, etc.). Infrastructure plays an interesting role in compatibility. On the positive side, infrastructure can enhance the operations of the installation by providing needed services, such as sanitary sewer treatment capacity and transportation systems. Infrastructure can also be an encroachment issue if enhanced or expanded infrastructure could encourage growth into areas near the installation that would not be compatible with current or future missions.

Infrastructure plays an interesting role in compatibility planning. Historical development has shown that the old adage "if you build it, they will come" is particularly true when it comes to infrastructure extensions. On the positive side, infrastructure can enhance the operations of an installation by providing needed services, such as transportation systems. It can also be a compatibility concern if enhanced infrastructure encourages growth into areas near an installation where it would not be compatible with current or future missions. The issues identified for this compatibility factor are listed on Table 3-11 for the MHAFB/MHRC Focus Area and on Table 3-12 for the Gowen Field/OTA Focus Area, and further described in the following discussion.

Table 3-11. MHAFB/MHRC Focus Area Infrastructure Extension Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Water and sewer availability (Elmore Critical Groundwater Management Area)	5B, 5C		•	•
Development of the Western Energy Corridor	5A, 5D	_	_	

Table 3-12. Gowen Field/OTA Focus Area Infrastructure Extension Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Water and sewer availability (Elmore Critical Groundwater Management Area)	5B, 5C		•	
Development of the Western Energy Corridor	5A, 5D	_	_	

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Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Gateway West Transmission Line Project	N/A	N/A	N/A	N/A
Southern Crossroads/Kuna- Mora Extension/Kuna-Mora Corridor Study	5A	-	•	-
Lake Hazel Extension	5B			
Infrastructure along Pleasant Valley	5C	•	-	
Infrastructure on Gowen Road	5D			

Utility extensions or expansion of infrastructure in proximity to military installations promotes the desirability and capability of the area for growth, increasing the potential for incompatible development. One of the major factors that has hindered residential growth in the more rural areas of Ada and Elmore counties (in this case the areas nearby MHAFB and OTA) has been a lack of infrastructure, such as water and electricity, to support growth. Through careful planning, the extension of infrastructure can serve as a means to guide development into appropriate areas while providing the community opportunities for new development potential.

ELMORE-ADA WATER PROJECT

As discussed in Section 2 of this JLUS, the Elmore-Ada Water Project was formed in August 2007 and is underway to construct new water lines to provide water for undeveloped areas north of MHAFB and east of OTA as well as the Critical Groundwater Areas (CGWA), groundwater management areas (GMA) and outside those designated areas. Much of this land currently lies within critical groundwater management areas, as designated by the Idaho Department of Water. As such, withdrawal of groundwater is limited and is not enough to support large community growth. This has had positive effects for military installations nearby as they do not experience much incompatibility between their operations and local communities due to limited development potential (due to water shortage). However, extension of water lines to the area will promote growth, which could impact military operations.

The project has five phases, the first of which is already complete and took one year. Phase two is planning and permitting, and is scheduled for three years; phase three, the design phase, is scheduled for two years; phase four, construction, is scheduled for four years; and phase five is the operations phase. The next step in the project is going to be an environmental impact study, which will narrow down the alternative with the least impact on the environment.

The first phase of this project, a feasibility study, was completed in November 2008 to determine the possibility of bringing a sustainable water supply into certain undeveloped areas of Ada and Elmore counties between Boise and Mountain Home and along the Interstate 84 corridor. The study stated that the project is feasible in terms of water rights and technical and financial factors.

The majority of the water for this project will come from the Snake River. The feasibility study narrowed down three alternative selections for withdrawing and distributing water to its final destination. The three alternative locations for withdrawing water and constructing pipelines are: 1) an area near Swan Falls that would go west of OTA and then to the east near Kuna-Mora Road; 2) the C.J. Strike Reservoir and then north along Simco Road, as well as split to the east along Grand View Road and bring water to MHAFB and continue to the City of Mountain Home; or 3) an area south of the City of Mountain Home that would carry water north to the city, to MHAFB and then northeast along Interstate 84. Each alternative included a pump station and a water treatment plant. Water storage tanks would be located along Interstate 84. EAWP storage would be aquifer storage and recovery (ASR) underground. Source: Elmore-Ada Water Project 01-26-2009 .ppt presentation

WEST WIDE ENERGY CORRIDOR

The Energy Policy Act of 2005 directs the secretaries of the Department of Agriculture (DOA), DOD, Department of Energy (DOE), and Department of the Interior (DOI) to designate transportation corridors to be used for oil, gas, and hydrogen pipelines, as well as electricity transmission lines and distribution facilities. These corridors are to be located on federal lands within the 11 western states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

A final Programmatic Environmental Impact Statement (PEIS) for the West Wide Energy Corridor was published by the four agencies listed above in November 2008. This document proposed the designation of over 6,000 miles of energy transportation corridors in the 11 states. 82 percent of the corridors analyzed are BLM lands, 16 percent are U.S. Forest Service lands, and the remaining lands are managed by the Bureau of Reclamation and the National Parks Service. Individual projects will require further environmental analysis before being granted a right-of-way.

As a result of the final PEIS, several hundred miles of multi-modal transmission lines have been designated within southern Idaho. Multi-modal transmission can include pipelines and electricity transmission lines. These proposed energy corridors do not necessarily mean that they will be developed as such; they are just the areas that have been designated should such development be needed.

There are two proposed corridors that are a concern for this JLUS. One corridor follows a little to the north of Interstate 84, originating east of the study area and ending around eight miles northeast of OTA. The other corridor comes from east of the study area and follows State Highway 78

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north of Saylor Creek Range and south of MHAFB and OTA. It curves in a northwestern direction where it splits near the Oregon border and goes into Oregon (see Figure 3-12a). Source: http://corridoreis.anl.gov/index.cfm

GATEWAY WEST TRANSMISSION LINE PROJECT

Many of the areas serviced by Idaho Power transmission lines are at or near capacity during peak hours. As communities continue to grow and expand, the need for additional power supplies and distribution will be needed. However, this can also lead to additional development outside the major cities as new transmission lines are built through or to unincorporated areas.

As mentioned in Section 2, Idaho Power and Rocky Mountain Power are working on a joint venture to establish new transmission lines that will bring additional electricity to areas in Wyoming and southern Idaho. The Gateway West Transmission Line Project, or Gateway West for short, will result in the construction of 1,150 miles of new 230 kilovolt (kV) and 500 kV transmission lines that will transport electricity from the planned Windstar substation outside Glenrock, Wyoming to the planned Hemmingway substation outside Melba, Idaho (see Figure 3-12a). The energy that will be transmitted along these lines will come from many sources, including coal, natural gas, geothermal, wind, and hydroelectric.

In March 2009, Idaho Power and Rocky Mountain Power began conducting environmental studies such as land surveys, soil borings, and cultural and natural resource evaluations to determine the best route to construct the new transmission lines. The results of the studies will help the BLM to assess alternatives and compose a draft environmental impact statement (EIS).

Certain considerations were taken into account when planning out the proposed transmission line corridors, such as Saylor Creek Range, municipal airports, and other areas that would be restrictive of power lines. Although no new power generating facilities will be constructed within the JLUS study area, there are transmission lines planned that will bisect the study area. These corridors follow fairly closely to those established through the Western Energy corridor discussed above; with some additional routes. The main areas of concern are north and south of MHAFB and OTA, where new power lines could promote new residential growth close to the installations that could be incompatible with military operations. Additionally, new power line construction could pose hazards for military aircraft flying to and from training areas and ranges.

According to the timeline for this project, depending on approval or setbacks that arise from the EIS, construction on new transmission lines could begin in 2011, with new service being provided by the end of 2014. Source: http://www.gatewaywestproject.com/project_info.aspx

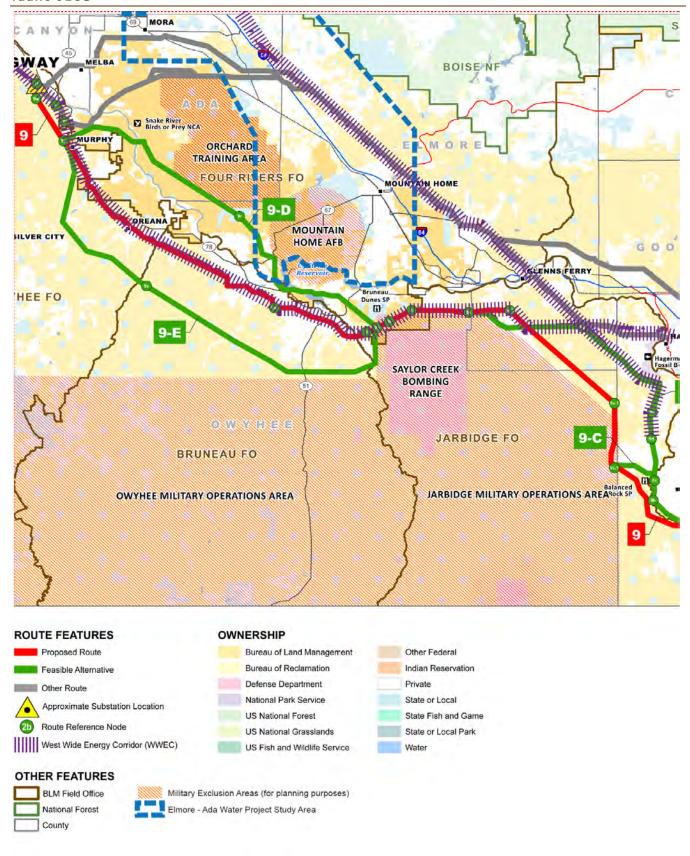






Figure 3-12a Infrastructure Proposals

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Gowen Field / OTA Focus Area

Although not mentioned by the committees, other issues from MHAFB/MHRC also apply to this focus area.

Refer to the descriptions under MHAFB/MHRC.

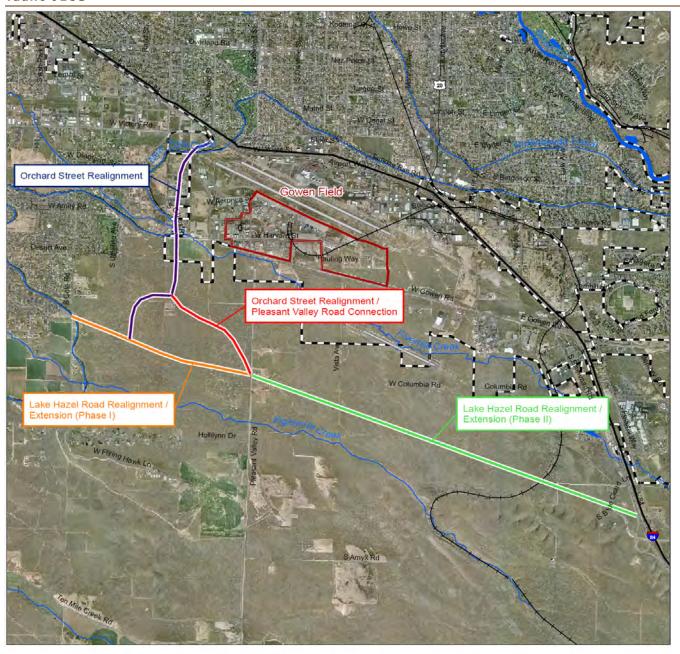
KUNA-MORA ROAD CORRIDOR STUDY

The Kuna-Mora Road Corridor Study is a multi-phase project being conducted by the Ada County Highway District (ACHD). The Community Planning Association of Southwest Idaho (COMPASS) Communities in Motion (CIM) plan determined that Kuna-Mora Road is a potential alternate to I-84; therefore, it is important to the area's transportation needs. CIM recommended that this road be preserved as an expressway from McDermott Road to where it intersects with I-84.

Phase I of the project evaluated the Kuna-Mora Road corridor, which stretches 21 miles from the Ada / Canyon county line to I-84. The study evaluated potential traffic volumes and land use conditions around the corridor and determined what the road might look like once the project is complete. Phase I recommendations were adopted in November 2008, but the study did not recommend any specific alignments for the road.

Phase II was placed on hold in the summer of 2009 due to budget constraints. This phase would analyze a 7-mile stretch of Kuna-Mora Road, from the county line east to Eagle Road. The focus of this phase will be to determine a preferred alignment for the road through this segment. ACHD indicated that it will preserve right-of-way for the future road, but it does not have specific plans to construct the road in the next 20 years. Even though no construction plans currently exist, the final alignment of the future Kuna-Mora Road could impact military operations at the OTA. There are two final phases to this corridor study (Phase 3 and Phase 4), which will determine alignments for the remaining stretches of Kuna-Mora Road. This road is approximately six miles north of the OTA, almost directly at the midpoint between OTA and Gowen Field. Pleasant Valley Road intersects Kuna-Mora Road as it runs between Gowen Field to the OTA. Based on the final alignments of the roadway sections, additional community growth around this travel route could result. Figure 3-12b shows roadway projects proposed in the 2009 ACHD CIP for the Gowen Field / OTA Focus Area.

As of May 2010, there were seven planned communities already in the application process in Ada County. Two of those are within than four miles of the intersection of Pleasant Valley Road and Kuna-Mora Road. These are the 2,293-acre Arbor Hills and the 1,056-acre Vista. ACHD's current plan is to construct Kuna-Mora Road as an expressway in response to development, not in advance of it. However, care must be taken to ensure that additional community development did not take place that could be incompatible with military vehicle movements along the Pleasant Valley Road tank trail, or further south, in close proximity to the OTA.





City Boundary / Interstate Highway

Runway / State Highway

Water Body / U.S. Highway

Stream/River / Railroads

0 0.25 0.5 1 Miles



Figure 3-12b Road Improvements – Ada County Highway District, 2009

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LAKE HAZEL EXTENSION / GOWEN ROAD RELOCATION STUDY

Lake Hazel Road Realignment / Extension

Although not mentioned by the committees, other issues from MHAFB / MHRC also apply to this focus area.

As detailed in their 2009 Capital Improvements Plan (CIP), ACHD plans for the two-phase project to widen and extend Lake Hazel Road. This project is a result of the Lake Hazel Extension / Gowen Road Relocation Study conducted by ACHD in partnership with Boise City and the Boise Airport. Currently, Lake Hazel Road terminates at Cole Road and does not traverse south of the airport. Phase 1 of this project, widening 2 miles of Lake Hazel Road between Cole Road and Pleasant Valley Road from two lanes to five lanes, is scheduled to occur between 2014 and 2018. Phase 2 of this alignment project is scheduled for between 2019 and 2027. This phase would purchase rights-of-way to preserve a corridor for the future construction of approximately 5 miles of roadway linking Pleasant Valley Road with Interstate 84. To be fully effective, road improvements and connectors are proposed to coincide with development, preferably industrial. Extending Lake Hazel Road to I-84 would be to allow it to be used as an arterial from I-84 to support potential new development occurring south of the airport and Gowen Field.

Gowen Road Relocation

The Lake Hazel Extension / Gowen Road Relocation Study also identified options for relocating Gowen Road to the south, allowing for Boise Airport expansion per the airport's master plan. The Boise Airport's current Master Plan includes relocation of the air traffic control tower and development of the third runway south of Gowen Road to accommodate commercial air service. The plan includes an option to relocate Gowen Road south of the third runway to eliminate conflict with the proposed taxiway to the third runway, which would improve the existing assault landing strip to a commercial runway. Additionally, new taxiways would be constructed along with related commercial development in the adjacent area.



Extension of Lake Hazel Road, as well as relocation of Gowen Road south of the planned third runway expansion, would not promote additional only development in the area, but it would also increase traffic and remove a connector street used to access Gowen Field, which could negatively impact access to Gowen Field. The proposed location of third runway also disrupts access to the Pleasant Valley Road tank trail from Gowen Field.

Parametrix

Lake Hazel Road / Gowen Road Relocation Study



Definition:

Antiterrorism/Force Protection (AT/FP) relates to the safety of personnel, facilities, and information on an installation from outside threats.

The issues identified for this compatibility factor are listed on Table 3-13 for the MHAFB/MHRC Focus Area and on Table 3-14 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-13. MHAFB/MHRC Focus Area AT/FP Issues

		•		
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
General security concerns with expansive ranges and open space	6A, 6B			

Table 3-14. Gowen Field/OTA Focus Area AT/FP Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Creation of security concerns from Orchard Road stacking	6A			
Proximity of dog pound to Gowen Field	6B	•	•	•

Security concerns and trespassing can present immediate compatibility concerns to installations. Due to current world conditions and recent events, military installations are required to meet more restrictive standards for antiterrorism and force protection. These standards include increased security checks at installation gates. Additional emphasis on credential and vehicle checks can create capacity and queuing issues with entrance gates that are inadequate to support the high volume of vehicles requiring access to the installation on a daily basis. The reduced processing throughput at the gates can create circulation issues and general safety concerns external to the installation within local communities. In addition, concentrations of stopped or parked vehicles outside of DOD installations also pose force protection issues as potential targets for terrorist attacks.

Antiterrorism/Force Protection is a compatibility factor for many military installations. The AT/FP situation for both focus areas is compounded in Idaho due to the size of the training and operating areas. Although the military intentionally trains in remote areas to minimize the AT/FP threat, as

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development increases in areas close to training areas such as OTA, AT/FP issues arise.

The Gowen Field / OTA Focus Area has additional AT/FP pressure due to the urban nature of the location. Stacking of traffic entering the installation along Orchard Road, as well as the location of uses such as the Idaho Humane Society's animal shelter facility located adjacent and south of Gowen Field can cause security concerns. These uses, among others, draw a wide range of visitors from all over the region and are close enough to the installation that people could unknowingly or wrongfully enter. Air Force representatives have been proactive by participating in City of Boise efforts to manage terrorism concerns.



Definition:

Defining noise from a technical perspective, sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. More simply stated, sound is what we hear. As sounds reach unwanted levels, this is referred to as noise.

The issues identified for this compatibility factor are listed on Table 3-15 for the MHAFB/MHRC Focus Area and on Table 3-16 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-15. MHAFB/MHRC Focus Area Noise Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Noise from military operations impacting urban development, noise from overflight and small arms range	7A, 7B, 7E	-		-
Noise from military operations occurring within the Orchard Training Area	7C, 7D	•	-	-

Table 3-16. Gowen Field/OTA Focus Area Noise Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Noise from military operations impacting urban development along Pleasant Valley Road	7C, 7D, 7E		•	
Noise in proximity to established noise contours for operational areas	7G	-	•	_
Noise from military operations impacting urban development around Gowen Field	7A, 7B			
Noise complaints	7F			

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UNDERSTANDING NOISE

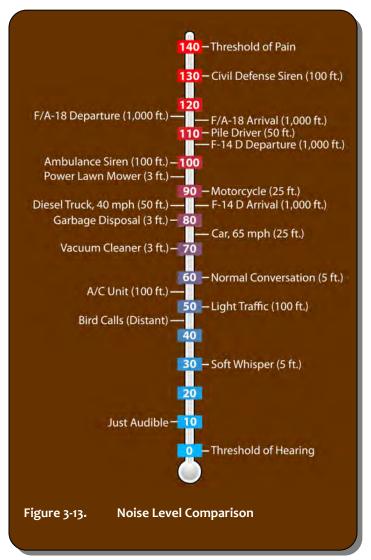
Due to the technical nature of this resource topic and its importance to the JLUS process, this section provides a discussion of the characteristics of sound and the modeling process used to evaluate noise impacts.

The following key terms are used to describe noise.

- Ambient Noise. The total noise associated with an existing environment and usually comprising sounds from many sources, both near and far.
- Attenuation. Reduction in the level of sound resulting from absorption by the surrounding topography, the atmosphere, distance from the source, barriers, construction techniques and materials, and other factors.
- A-Weighted Decibel (dBA). A unit of measurement for noise having a logarithmic scale and measured using the A-weighted sensory network on a noise-measuring device. An increase or decrease of 10 decibels corresponds to a tenfold increase or decrease in sound energy. A doubling or halving of sound energy corresponds to a 3-dBA increase or decrease.
- Day-Night Average Sound Level (DNL). DNL represents an average sound exposure over a 24-hour period. During the nighttime period (10:00 p.m. to 7:00 a.m.), averages are artificially increased by 10 dB. This weighting reflects the added intrusiveness and the greater disturbance potential of nighttime noise events attributable to the fact that community background noise typically decreases by 10 dB at night. For National Guard activities, the DNL may be A-weighted (ADNL) when used to measure aviation noise, or C-weighted (CDNL) when used to measure large caliber weapons noise.
- **Noise Contours.** Connecting points of equal noise exposure. Typically expressed in 5 dBA increments (60, 65, 70, 75, etc.).
- PK15(met). The peak sound level, factoring in the statistical variations caused by weather, that is likely to be exceeded only 15 percent of the time (i.e., 85 percent certainty that sound will be within this range). This exists only in modeling (one cannot take a PK15(met) reading on the ground) and it is used for land use planning with small arms and as additional information for large arms and other impulsive sounds.
- Sensitive Receptors. Sensitive receptors are defined as locations and uses typically more sensitive to noise, including residential areas, hospitals, convalescent homes and facilities, schools, and other similar land uses.

• Unweighted Peak (dBP). The peak, single event sound level without weighting, on the ground. This measurement takes into account everything from berms, to weather, to the length of the grass, but it is only good for that moment in time under those exact conditions. Consequently, there is no particular confidence built in that the number is reliable in other situations, such as with the 85 percent certainty built into the PK15(met).

CHARACTERISTICS OF SOUND



It is important to understand that there is no single perfect way of measuring sound, due to variations used by different entities when conducting sound studies or sound modeling. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). The sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary by over one trillion times within the range of human hearing, a logarithmic loudness scale (i.e., dB scale) is used to present sound intensity levels in a convenient format.

Since the human ear is not equally sensitive to all frequencies within the entire spectrum, noise measurements are weighted more heavily within those frequencies of maximum human sensitivity in a process called "A-weighting" written as dBA. The human ear can detect changes in sound levels of approximately 3 dBA under normal conditions. Changes of 1 to 3 dBA are typically noticeable under controlled conditions, while changes of less than 1 dBA are only discernable under controlled, extremely quiet conditions. A change of 5 dBA is typically noticeable to the general public in an outdoor environment. Figure 3-13 summarizes typical A-weighted sound levels for a range of indoor and outdoor activities.

Environmental noise fluctuates over time. While some noise fluctuations are minor, others can be substantial. These fluctuations include regular and random patterns, how fast the noise fluctuates, and the amount of variation. When describing noise impacts, it is common to look at the average noise over an average day.

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AIRCRAFT NOISE

The Air Force adopted the NOISEMAP computer model to analyze and describe noise impacts created by aircraft operations. NOISEMAP is one of two Environmental Protection Agency (EPA) approved models. The other is the Integrated Noise Model (INM), which is used by the FAA for civilian airports.

In 1974, EPA designated the noise descriptor DNL as the standard measurement for noise impacts. DNL is an average sound level exposure, measured in decibels, over a 24-hour period (see the definition earlier in this section for details). On a national level, DNL measurements are projected down to 65 decibels.

Further Information on AICUZ Scenarios

Section 4.1 provides a description of the AICUZ scenarios and Appendix C contains a summary of the AICUZ study.

MHAFB/MHRC FOCUS AREA

Noise from Air Operations/Overflight

The main areas of noise generation associated with MHAFB are along the runway where aircraft take off and land, along the military training routes and throughout the MHRC but more concentrated near Sailor Creek and Juniper Butte Training ranges and the various emitter and no drop sites in MHRC. The land surrounding Saylor Creek and Juniper Butte ranges is undeveloped and is not a major concern for noise generation. The various emitter sites and no drop sites are typically in unpopulated areas as well, and are not considered an issue. During aircraft operations, all of these areas experience higher than normal noise levels. Although rural and isolated, there are noise sensitive areas within MHRC. Within MHRC airspace, MHAFB has designated six noise sensitive/avoidance areas. The major area is the Duck Valley Indian Reservation, which is located in the southern portion of the Owyhee Military Operating Area on the border of Idaho and Nevada. Other noise sensitive areas include bighorn sheep habitat and natural areas.

All supersonic flight in Idaho Is restricted to greater than 10,000 feet above ground level, and is further restricted in noise sensitive areas.

The DOD established the AICUZ program in response to the Noise Control Act of 1972 in order to manage noise impacts that extend past the boundaries of an installation. The AICUZ programs strives to work with local governments to establish planning and zoning controls to prevent incompatible uses from being developed within certain level noise contours. AICUZ documents use DNL as its level of noise measurement to create noise contours around Air Force and Navy runways.

An AICUZ report for MHAFB was completed and released to the public in 1998. Updates were made to the AICUZ in 2003, however a new report has not been completed since 1998. This is somewhat problematic because of the change in missions and aircraft stationed at MHAFB. At the time of the AICUZ report, there were F-16 Fighting Falcons, F-15 Eagles, KC-135 Stratotankers, and B-1 Lancers. Since 2003 an environmental assessment was conducted for the beddown of the Republic of Singapore Air Force (RSAF) indicating the

noise contours have not change substantially. Future wing missions will not reduce the noise contours and may in fact increase the noise levels. Currently, the primary aircraft flown out of MHAFB include only the F-15 C/E and SG aircraft.

Based on current available noise contours for AFB, each of the noise contours from 65 DNL to greater than 80 DNL all extend beyond the boundaries of MHAFB. There is a mix of both private and BLM owned land to the west of the base that falls within each noise contour and a small amount of private land to the south that falls within the 65 DNL contour. The remaining land to the south of the base is public land owned by the BLM. During aircraft operations, all of these areas experience slightly increased noise levels. However the 2003 AICUZ it was determined that "indigenous noise sources [i.e., non-aircraft] generally controlled sound levels about 90-95% of the time." As a means of mitigating noise the Air Force has imposed flight restrictions over Duck Valley Indian Reservation and seasonal flight restrictions over key recreation and natural resource areas.

Figure 3-14 illustrates land ownership within the various noise contours from MHAFB Small Arms Range.

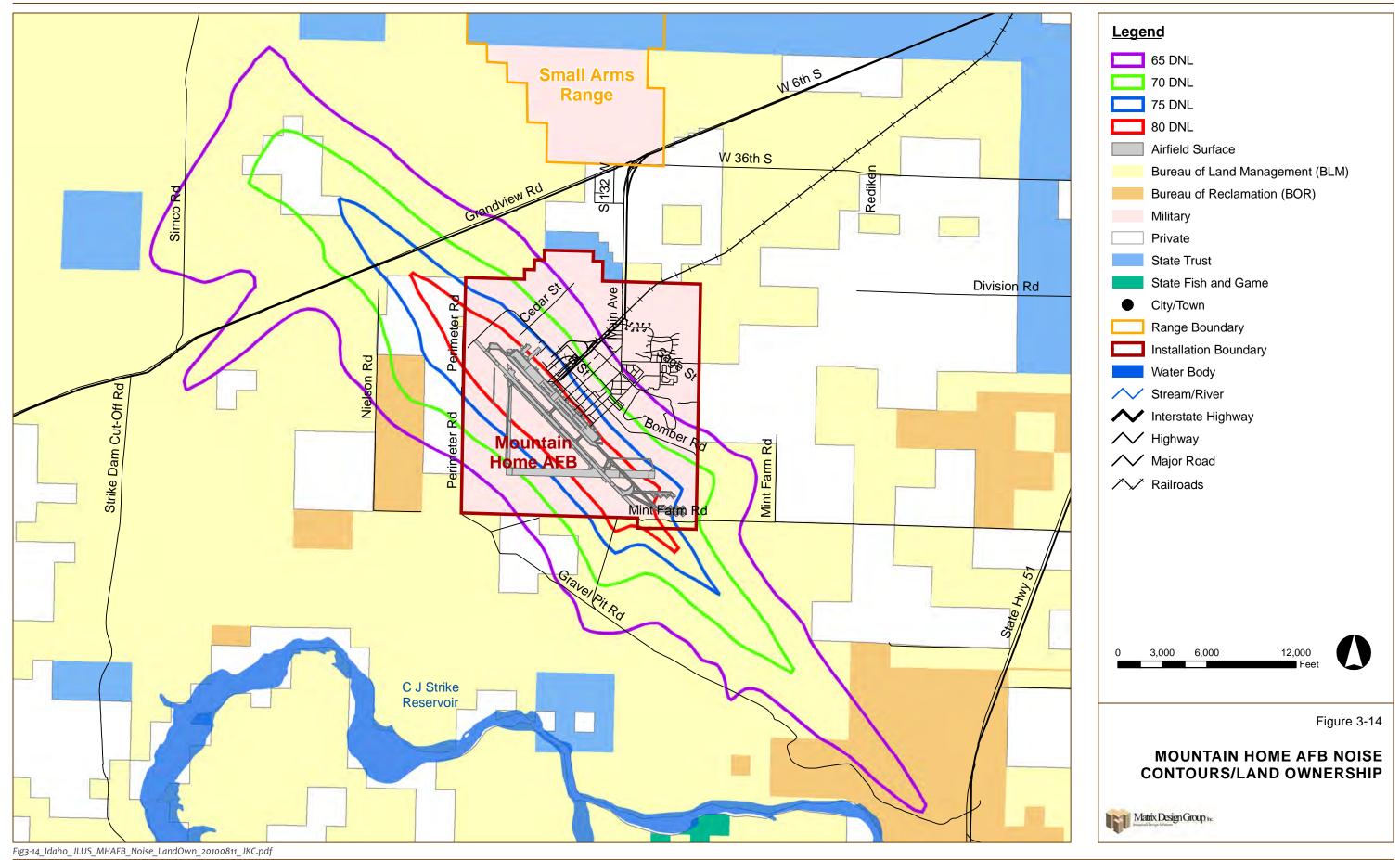
The Small Arms Range located just north of MHAFB also poses some noise concerns. This range is used for weapons firing training, including M240 machine guns, M249 automatic rifles, M203 grenade launchers, M16/M4 rifles, and M9 pistols. The range is utilized approximately 10 days per month, sometimes more. Hours of operations are generally Monday through Friday from 8:00 am to 5:00 pm, but are subject to change depending on training requirements.

For example, the M203 course includes some night firing operations, which typically end at 10:00 pm. Since the grenades that are fired at this range are training grenades, they are non-explosive. Instead they emit an orange talcum powder on impact to show the location. Therefore, noise is typically low with these weapons, making only a low "thump". Currently, noise complaints from the Small Arms Range are a non-issue to surrounding lands, however, depending on the uses, could change in the future.



A training grenade being loaded into an M203 grenade launcher attached to an M16 rifle

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GOWEN FIELD/OTA FOCUS AREA

Pleasant Valley Road

For more information on issues associated with the Gowen Field / OTA tank trail, see Compatibility Factor 8, Vibration, and Compatibility Factor 9, Dust, Smoke, and Steam.

As stated previously in Chapter 2, the Idaho Army National Guard utilizes a tank trail which runs parallel to Pleasant Valley Road. The trail is used to connect OTA with Gowen Field where the tanks are stored. Additionally, IDARNG utilizes the trail for tank operation training. As discussed earlier in this chapter, new residential development has been occurring along Pleasant Valley Road. New development in proximity to the tank trail will be affected by the noise associated with operating the tanks. This noise should be isolated to the areas closest to the trail. Strategies for implementing the JLUS will need to insure new property owners are aware of the noise associated with the tank trail.

OTA Firing Ranges

The Army's response to the 1972 Noise Control Act was the establishment of the Operational Noise Management Program. This program was designed to analyze noise impacts from Army operations upon surrounding lands and develop ways to minimize the adverse impacts of such noise. The Army has devised a system that partitions noise into three zones, which each represent an increase in noise levels. Each zone dictates the types of uses that should occur or not occur in them, based on sensitivity to noise. The three zones are:

- Noise Zone I is the furthermost noise zone and includes all areas in which the PK15(met) decibels are less than 87 (for small arms), the ADNL is less than 65 (for aircraft), and/or the CDNL is less than 62 (for large arms and explosions). This area is suitable for all types of land use.
- Noise Zone II is the next furthest out area and includes areas where the PK15(met) decibels are between 87 and 104, the ADNL is between 65 and 75, and/or the CDNL is between 62 and 70. Land uses for this zone should typically be limited to manufacturing, warehousing, transportation, and resource protection.
- Noise Zone III is the zone closest to the source of noise. It includes PK15(met) decibels greater than 104, ADNL greater than 75, and/or CDNL greater than 70. No noise sensitive uses should occur within this area due to the severity of noise.
- There is also a Land Use Planning Zone located at the upper and of Noise Zone I. this zone is defined by an ADNL of 60 to 65 or a CDNL of 57 to 62, and accounts for variability in seasonal operations where certain times of the year may include a greater amount of operations than normal.

Historical records as of 2006 indicate that OTA accommodates training for approximately 300,000 soldier man-days per year. According to the November 2006 Idaho Army National Guard Statewide Operational Noise Management Plan, between 2,500 to 4,000 troops are supported at OTA during a single training cycle.

This equates to four to six battalion-sized units that can train at the OTA. The primary areas of noise generation at OTA come from the various ranges encircling the impact area (see Figure 2-8). These ranges are used for a variety of types of training activities, from small arms (20mm caliber or smaller), grenade launchers, rockets and missiles, artillery and mortar, detonations of mines, helicopter mounted weapons, and vehicle mounted weapons and tanks. Noise contours are illustrated on Figure 3-15a and Figure 3-15b.

The types of small arms fired at OTA include M16 rifles, M249 and M60 machine guns, 9mm and .45 caliber pistols, 12-gauge shotguns, and M2.50 caliber machine guns. Small arms ranges are located around the perimeter of the impact area. The Noise Zone II for small arms weapons extends slightly past the boundary of OTA to the east of the installation. The majority of the land within Noise Zone II is owned by the State or BLM, while a small portion of it is privately owned. This land is primarily undeveloped or agriculturally used. Noise Zone III does not extend past the boundary of OTA.

The types of large caliber weapons that are fired at OTA include M1A1 Abrams tank mounted 120mm tank gun, Bradley fighting vehicle 25mm chain gun, self-propelled 15mm artillery, 120mm, 81mm, and 60mm mortars, MK-19 guns, M-203 grenade launcher, demolitions charges up to 40 pounds, and helicopter mounted weapons including 30mm chain gun, 2.75 inch rockets, and Hellfire missiles. The majority of the tank ranges are located near the northeast perimeter of the impact area. This is the closest area to privately owned lands that could be used for future residential development. A small amount of Noise Zone III extends beyond the eastern boundary of OTA over state and privately owned land. The Noise Zone II and the Land Use Planning Zone both extend past the OTA boundaries to the east and west, including lands owned privately, by the state, and by the BLM. Currently this land is undeveloped, agriculture, or includes scattered residential.

PK15(met) contours were also modeled for large caliber weapons operations at OTA to provide an idea with 85 percent certainty how loud a single event is likely to be at any given location. The 115 to 130 PK15(met), which is at moderate risk for complaints, extends a little over 3.5 miles to the east and south of OTA's boundaries, as well as a little over a mile to the west. The majority of this land is federally owned, with pockets of state and private land. A small amount of the 130 to 140 PK15(met) contour, which is at high risk for complaint, extends past the eastern and western boundaries, including BLM, state, and private land. Physiological damage to human ears and hearing has a threshold at approximately 140 dBP.



A certain amount of helicopter operations are also conducted at OTA, including landing zone training, aerial gunnery training, terrain flight, and nap of the earth flight. Nap of the earth (NOE) flight is a low level flight used to evade detection by visual sources and radar, and to avoid enemy gunfire. This training is typically conducted at altitudes of approximately 200 feet above ground level. The aerial gunnery operations take place primarily at the

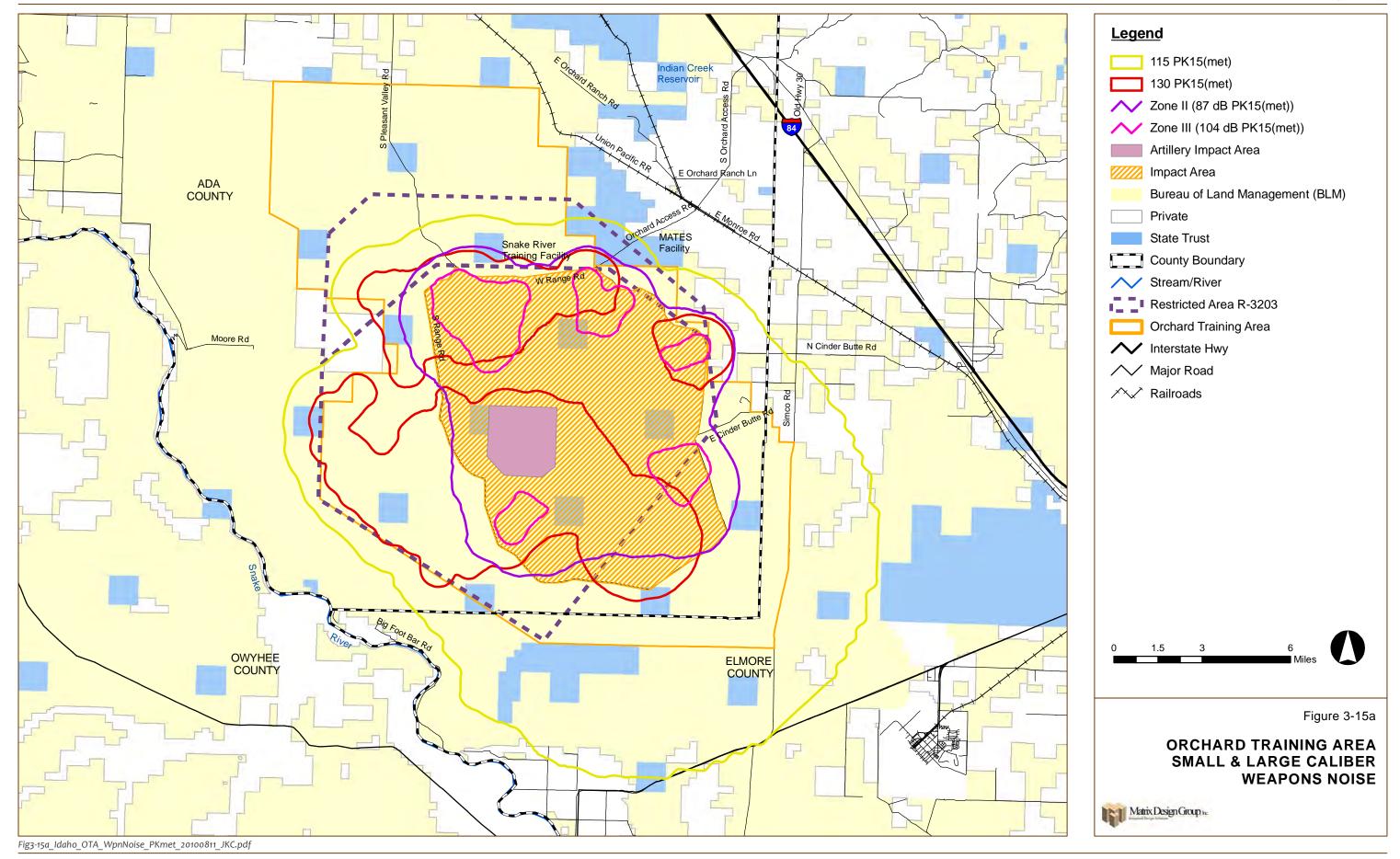


The M1A1 series main battle tank fires a 120mm smooth bore main gun and has three smaller caliber machine guns

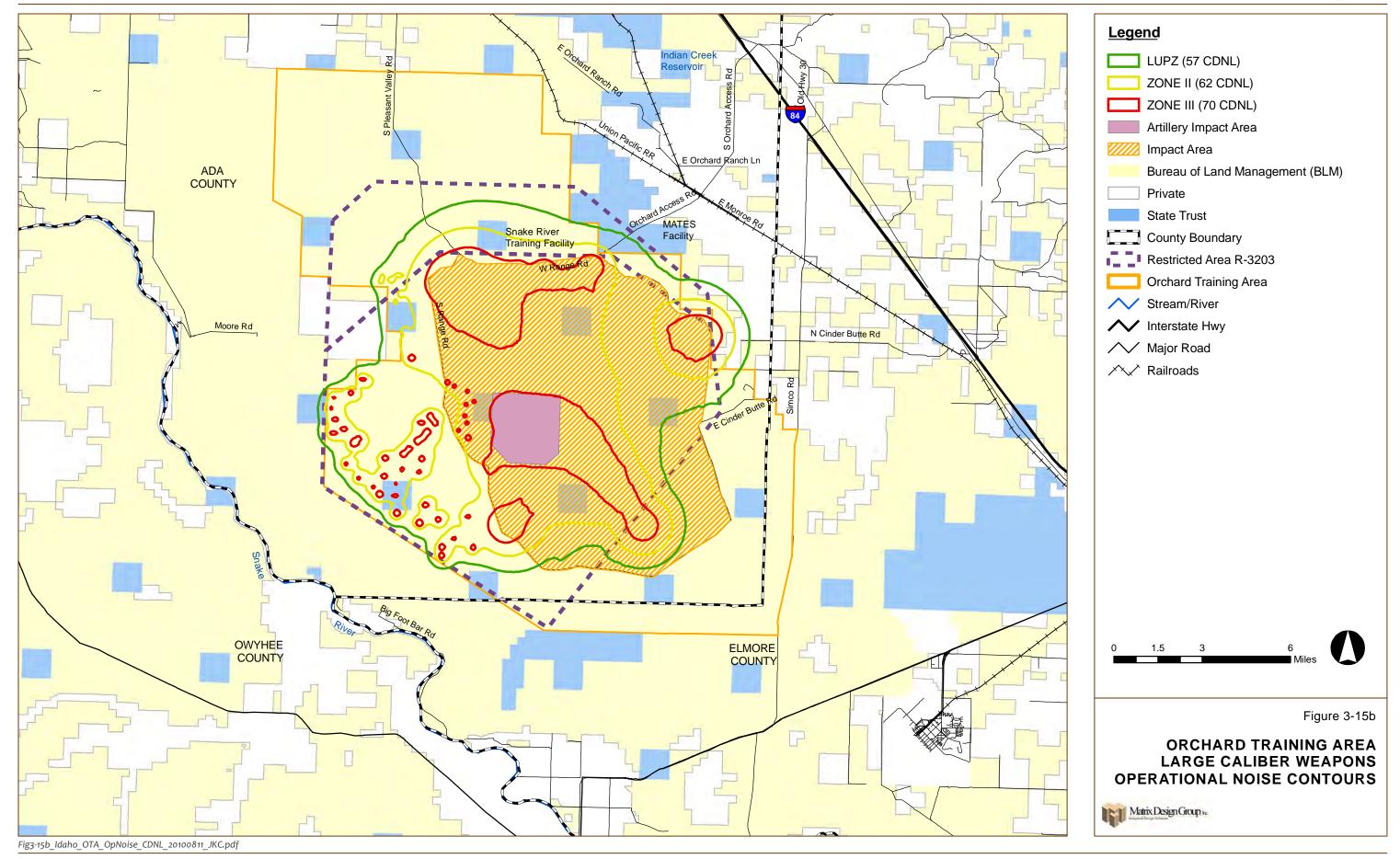


An M3A2 Cavalry Fighting Vehicle fires its 25 mm chain gun at OTA

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Multipurpose Range Heavy Complex at the northwestern edge of the impact area and at Range 3 on the northern border of the impact area. Due to the small number of daily and annual aircraft activities, there are no Noise Zone II or Noise Zone III designations at OTA. U.S. Army helicopters abide by flight restrictions based on FAR Title 14 Part 91 that delineate minimum safe altitudes and reduce noise impacts over populated areas.

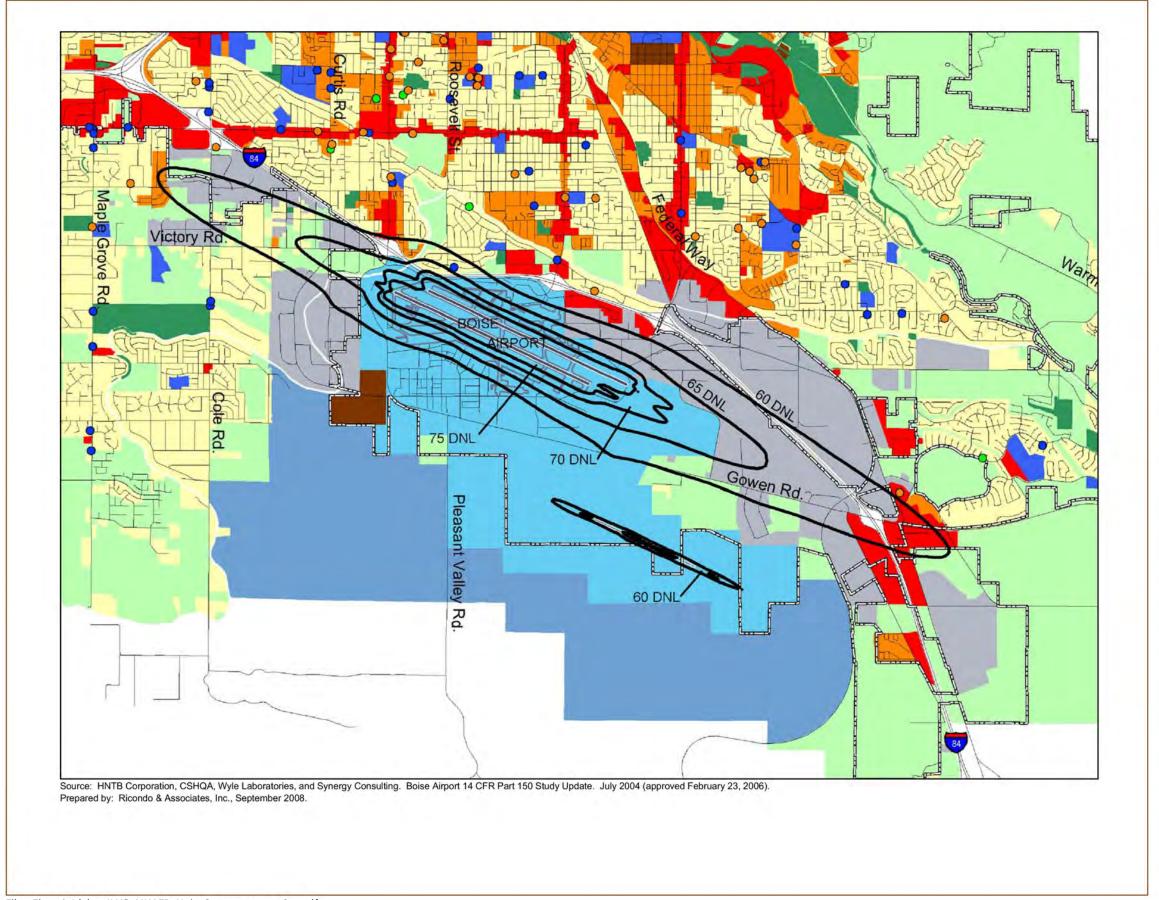
Gowen Field

Located at Boise Airport, noise levels at Gowen Field are also associated with noise levels from the airport. As with any airport, it is common to have some level of noise complaints from the public who live within close proximity to the airport. The City of Boise, in partnership with Ada County, has developed an Airport Influence Area, in which certain land uses are permitted due to operations at the airport resulting in safety and noise concerns. More information on the Airport Influence Area can be found in Section 4.2, Local Jurisdiction Planning Tools, under the heading City of Boise.

The September 2008 Boise Airport Master Plan Update Final Draft includes noise contours for the current runways at the airport. The 60 DNL noise contour extends southeast of the runway approximately 3.5 miles and falls mostly on airport property, industrial land, and a small amount of commercial and open space (see Figure 3-16). It extends to the northwest approximately 2.2 miles and falls on varied amounts of airport land, open space, low density residential, and high/medium density residential. 60 DNL do not typically generate many noise complaints. The 65 DNL contour extends southeast approximately 1.3 miles and covers airport and industrial land. It extends to the northwest approximately 0.8 miles and includes airport, industrial, open space, and a small amount of low density residential. The 70 and 75 DNL contours fall almost entirely on airport land, but also include a small amount of industrial land.

Please see the next page.

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Definition:

Vibration is an oscillation or motion that alternates in opposite directions and may occur as a result of an impact, explosion, noise, mechanical operation, or other change in the environment. In the study area, vibration may be caused by military and civilian activities.

Vibration from Noise

Further information on noise from installation operations are described under Compatibility Factor 7, Noise,

Vibrations can be caused both by military activities such as explosive detonation or vehicle/tank maneuvers, or off-base such as industrial or quarry areas. The issues identified for this compatibility factor are listed on Table 3-17 for the MHAFB/MHRC Focus Area and on Table 3-18 for the Gowen Field/OTA Focus Area and further described in the following discussion. It is important to note that, although vibrations may be a nuisance to residents, actual structural damage as a result of vibrations is not likely to occur at decibel levels lower than 150 dBP, which is larger than the typical levels experienced outside of the various training areas and installations.

Table 3-17. MHAFB/MHRC Focus Area Vibration Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Vibration associated with operations within the OTA	8A			
Vibration associated with operations within Mountain Home ranges	8B	•	-	-

Table 3-18. Gowen Field/OTA Focus Area Vibration Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Vibration in Pleasant Valley along military operations corridors	8A			
Vibration on Gowen Road	8B	•		
Vibration associated with operations within the OTA	N/A	N/A	N/A	N/A

MHAFB/MHRC FOCUS AREA

The primary vibration concerns associated with MHAFB and its ranges arise from aircraft flight and ordnance training at Saylor Creek and Juniper Buttes ranges. The majority of the area within the MHRC is undeveloped, and the areas that are developed are very low density. Land in these areas is primarily owned by the BLM and the State of Idaho. Currently, the issue of vibrations from flights and training operations are not considered a significant issue. They could potentially be an issue if areas around the training ranges are developed in the future, but given land ownership and location, this is unlikely. Certain areas, such as bighorn sheep habitat and the Duck Valley Indian Reservation have stricter flight restrictions placed on them to reduce the nuisance or startle effect on these areas from aircraft operations.

Some of the land adjacent to MHAFB is privately owned, and so takeoff and landing operations at the runway on MHAFB could pose small vibration issues. Elmore County has implemented certain planning and zoning considerations to help protect lands around MHAFB.

GOWEN FIELD/OTA FOCUS AREA

The vibration issues associated with Gowen Field and OTA are similar to those for MHAFB; however, they also include heavier explosive detonation and training loads, as well as tank and vehicle travel.

For more information on issues associated with the Gowen Field / OTA tank trail, see Compatibility Factor 9, Dust, Smoke, and Steam

The primary issue for concern at Gowen Field is vibrations felt along Gowen Road, south of the runway. Vibrations felt here are caused by airport operations due to the proximity to the two runways just north of Gowen Road. This issue is not currently expected to increase the amount of vibrations felt in the future due to military aircraft operations. However, if plans go forth to relocate Gowen Road and promote additional commercial development in the areas, minor vibrations could have an impact on these areas.

Orchard Training Area is the primary training site for the Idaho National Guard, as it provides hundreds of thousands of acres of training and maneuver area. Some of the vehicles and tanks used by the IDARNG and other entities are either housed at or transported to Gowen Field and must travel back and forth between OTA and Gowen Field. Part of this travel is associated with the Armor Bradley training school located at Gowen Field. The first week in this course is classroom education, followed by driving vehicles to OTA.

The current route that is taken is a tank trail that runs north-south adjacent to Pleasant Valley Road. Due to their size and the type of tread used to maneuver, tanks (such as the M1A1 Abrams) and smaller tracked vehicles (such as the M2A3 Bradley) produce a certain amount of vibration when they travel. There are several houses and structures located along Pleasant Valley Road that experience annoyance due to these vibrations. Although a railroad spur is under construction connecting to the Mobilization and Training Equipment Site (MATES) facility north of OTA that will be capable of transporting tanks and tracked vehicles, the tank trail will still be used in the future to provide students with drive training.

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The majority of usage along the tank trail occurs from May through August, when OTA is in its prime season for training operations. During these months, an average of 20 to 25 round trip convoys of tracked vehicles use the trail per month. Convoys consist of more than 5 vehicles, and typically include M1A1 Abrams, M2A3 Bradleys, M113 Armored Personnel Carriers, and M577

Armored Personnel Command Vehicles. During the months of September to April, there is an average of three round trip convoys per month. The yellow line in Figure 3-17 illustrates the location of the tank trail in relation to Pleasant Valley Road.

The Artillery Impact Area at OTA is almost in the center of the training area. This 3,400-acre impact area is where all types of explosive ordnance are targeted, so as to provide more space outside this area for other activities. Due to its central location, vibrations associated with explosive detonations within this area have somewhat of a buffer as they expand outwards and beyond the boundaries of OTA. This is not to say that they have no impact outside of the boundaries. The lower frequency vibrations cause by gunfire and explosive detonation noise travels further than the higher frequency vibrations associated with aircraft noise. Similarly, the mechanisms used to fire the explosives are typically located around the border of the larger 65,300-acre Impact Area. Many of the tank ranges, which often produce the most vibration when firing weapons, are located near the northeast corner of OTA. Much of the land adjacent to this is privately owned and some of it has the potential for future development. This would most likely lead to annoyance by current and future residents from vibrations cause by military operations.



Figure 3-17. Gowen Field to Orchard Training Area Tank Trail

9 Dust, Smoke, and Steam

Definition:

Dust is the common term used to describe the suspension of partiulate mater in the air. Dust can be created by fire (controlled burns, agricultural burning), ground disturbance (agricultural operations, grading), industrial activities, or other similar processes. Dust becomes a compatibility issue if sufficient in quantity to impact flight operations (such as reduced visibility or equipment damage).

Civilian and military activities can produce dust, smoke, and steam from a variety of activities, including grading, agriculture, industrial practices, vehicle movement, or weapons training. Suspended particulate matter becomes a compatibility factor if sufficient in quantity to impact flight operations (such as reduced visibility or equipment damage) or substantially impacting the quality of life of local residents. Sources of dust, smoke, and steam in the airfield vicinity or air training ranges could obstruct the pilot's vision during takeoff, landing, or other periods of low altitude flight. The issues identified for this compatibility factor are listed on Table 3-19 for the MHAFB/MHRC Focus Area and on Table 3-20 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-19. MHAFB/MHRC Focus Area Dust, Smoke and Steam Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Dust associated with military operations and movement corridors	9A	•	•	
Dust associated with urban uses	9B, 9C	-		
Dust/PM-10 levels within the region	9D			

Table 3-20. Gowen Field/OTA Focus Area Dust, Smoke, and Steam Issues

133063				
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Dust along military operations corridors	9A			
Dust/PM-10 for Ada County	9B			

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COMMON TO BOTH FOCUS AREAS

There are several concerns regarding dust in the two focus areas that arise from both military and community activities. Particles of dust and other materials that are found in the air are referred to as particulate matter. The term PM-10 refers to particulate matter that is less than ten microns in size. At certain concentrations, this particulate matter can be harmful to humans and other animals if it is inhaled, as it can cause strain on the heart and lungs to provide more oxygen for the body as a result of increased buildup of dust. The harm can be more severe in the elderly, children, and people with preexisting respiratory problems. PM-10 can be caused by many activities, including driving on unpaved roads and surfaces, wind erosion from vacant lots, disruption of land from explosions, and other earth-moving activities such as construction, demolition, and grading. Its primary source, in many areas, is vehicles (engine exhaust), wood burning, and industrial processes. Due to its climate and location in a valley between mountain ranges, the Treasure Valley area, which covers portions of the focus areas for this JLUS, has experienced PM10 issues in the past. PM-10 tends to be more prominent in winter months, when less training occurs at OTA, however activities throughout the year that disturb and emit dust into the air can affect the air quality levels.

For more information on issues associated with the Gowen Field OTA tank trail, see Compatibility Factor 7, Noise, and Compatibility Factor 8, Vibration.

GOWEN FIELD / OTA FOCUS AREA

The main areas of concern for military activities creating dust are the tank trail from Gowen Field to OTA, the maneuver and impact areas at OTA, and the training ranges that are part of Mountain Home Range Complex. The tank trail from Gowen Field to OTA is unpaved and so vehicles and tanks using this route can stir up a lot of dust as they drive down the road. This could impact future residential development quality of life if houses are built adjacent to the tank route. Similarly, a large amount of the training that occurs on OTA is on unpaved surfaces. Oftentimes, training includes battalion sized forces that include infantry and vehicles. This type of activity could, under the right conditions, stir up large amounts of dust, and depending on the wind speed and directions, could carry it to adjacent developments.

Concerns for dust upon military operations occur from development of land outside of military training areas. New construction often causes dust to rise, which could affect the vision of aircraft pilots traveling over or nearby the area to get to the various training ranges. Smoke and steam from industrial facilities can also impact pilot visibility. Increases in industrial land around Gowen Field, OTA, and MHAFB have the potential for incompatible development depending on the type of use going in, such as plants that produce large amounts of steam or smoke.

Light and Glare

Definition:

This factor refers to man-made lighting (street lights, airfield lighting, building lights) and glare (direct or reflected light that is harsh and disrupts normal vision).

Light sources from commercial, industrial, and residential uses at night can cause excessive glare and illumination, which impacts the use of military night vision devices and air operations. Conversely, high intensity light sources generated from a military area (such as ramp lighting) may have a negative impact on the adjacent community.

Light and glare can cause problems for military operations and nearby communities during the day and at night. During the daytime, glare from ground-based activities such as solar panels or reflective surfaces can interfere with aircraft pilots' vision, which can lead to safety concerns. At night, excess lighting from nearby communities or activities outside the military boundaries can interfere with night vision device training by the military. On the other hand, military activities that use bright lights at night can also infringe upon nearby residents if there is no buffer area. This can impact quality of life or disturb residents at night. The issues identified for this compatibility factor are listed on Table 3-21 for the MHAFB/MHRC Focus Area and on Table 3-22 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-21. MHAFB/MHRC Focus Area Light and Glare Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Light and glare from Operations at OTA	10A			
Urban light sources impacting "dark sky" environment	10B, 10C	•	•	-

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Table 3-22. Gowen Field/OTA Focus Area Light and Glare Issues

Table 3-22. Gowen Field/OTA Focus Area Light and Glare issues					
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools	
Light and glare from Mountain Home AFB	10A				
Urban light sources impacting "dark sky" environment	10B	-	-	•	
Light and glare from ASP	10C				
Light and glare from MATES	10D		•		
Light and glare from the airport	10E				
Light and glare from Speedway	10F		-		



An example of the effects of glare on a cockpit canopy

There are many types of activities that can interfere with a pilot's ability to see clearly out of his or her cockpit. Land uses or activities that produce upwards glare can be dangerous for pilots who can either be distracted or temporarily blinded by such glare during flight operations. Uses such as solar panels for alternative energy or heavily reflected surfaces such as parking lots containing many vehicles can potentially cause glare. Glare has not been a very significant issue to date, but as lands around MHAFB/MHRC and Gowen Field / OTA are developed, or new alternative energy sources are sought, these could pose potential issues in the future.

Over the years, military combat tactics have evolved and require new methods of training to properly prepare personnel for their intended missions. To gain the advantage over enemies, a substantial number of combat operations are conducted under the cover of darkness.

Orchard Training Area includes both day and night training activities. Its maneuver areas allow for large scale night-time training, and its ranges also provide night-fire training. An important instrument used to supplement night training is the use of night vision devices (NVD). Electronic night vision tools allow near-daylight operations in complete darkness. Night vision capabilities currently make it possible for U.S. forces to operate with less risk at night when the enemy is visually impaired. To remain proficient in using NVDs during combat operations, the U.S. military (aviators and ground-based personnel) must train with the devices in situations that closely resemble the combat environment so that they can be prepared for ever changing war-time conditions.

Aircraft pilots supporting nighttime training missions use light-amplifying night vision goggles, which are electro-optical devices that intensify (or amplify) existing light instead of relying on an internal light source. The devices are sensitive to a broad spectrum of light, from visible through infrared. Thus, any amount of on or off-installation light pollution degrades NVD effectiveness and can blind the NVD user. Troops operating on the ground also use light-amplifying monocular or binocular NVDs that may be worn on the head/helmet, held in the hands, or mounted on a weapon. Tanks and other vehicles also use vehicle mounted NVD that allow them to see from within the vehicle.

Under dark sky conditions, night vision goggles can allow military personnel to view objects up to a distance of 300 meters (984 feet): however, lighting located outside of an installation can decrease the night vision goggle effectiveness to a distance of 50 meters (164 feet). This off-installation lighting also produces a halo effect around objects, which further reduces visibility and resolution for air and ground personnel. The amount of ambient light experienced on the ground is a function of:

- intensity of nearby light sources (up to 20 miles away),
- distance from the sources,
- spectra of the light sources (blue light decays faster in the atmosphere),
- density of the cloud deck,
- height of the cloud, and
- relative humidity.

As discussed under Compatibility Factor 1, Land Use, current and planned residential development projects are being proposed and permitted around the outskirts of OTA. New development near the installation could create light pollution that can interfere with the military's use of night-vision equipment. Increased development also increases lighting intensity, through the development of roadways, public places, commercial and employment sites, and residential neighborhoods, as well as their supportive signage. According to the U.S. Army Corps of Engineers, Engineer Research and Development Center, lights from cities 10 or more miles away on cloudy nights can generate ambient light levels too high for night training; however.

It is not just surrounding communities that can impact military operations. The reverse is also commonly observed around military installations. Runways and ramp areas are just one example of the types of areas that require sufficient lighting at night for safety and operational reasons. MHAFB acts like its own community, and so includes housing and other light source which can spill off the installation at night. The MATES facility, just north of OTA, also produces light concerns at night that could impact quality of life at future residential communities nearby.

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Alternative Energy Development

Definition:

Alternative energy refers to sources, such as solar, wind, or biofuels that can be used to replace or supplement traditional fossil-fuel sources, such as coal, oil, and natural gas. Alternative energy development could pose compatibility issues related to glare (solar energy) or vertical obstruction (wind generation). Other alternative energy developments, such as biofuels, have no typical compatibility issues, and would be judged for compatibility on a case-by-case basis.

The issues identified for this compatibility factor are listed on Table 3-23 for the MHAFB/MHRC Focus Area and on Table 3-24 for the Gowen Field/OTA Focus Area and are further described in the following discussion.

Table 3-23. MHAFB/MHRC Focus Area Alternative Energy Development Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Wind and solar energy development	11A, 11C, 11D, 11G			
Nuclear energy development	11B, 11F			
Transmission lines associated with alternative energy development	11E			

Table 3-24. Gowen Field/OTA Focus Area Alternative Energy Development Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Wind and solar energy development	11A, 11B			

Similar to the issues identified under Compatibility Factor 10, Light and Glare, solar energy facilities in the region could cause substantial amounts of glare depending on their type, location, angle, and direction, resulting in a reduction of the pilot's view. These effects can affect a pilot's performance even at high altitudes. New technologies involving non-reflective solar collection materials should prove to mitigate impacts of the factor; however, existing solar collection equipment using older technologies of reflective collection materials are still a concern.

Wind turbines have two potential compatibility issues. The most prominent is the vertical obstruction aspect of the systems, which can be several hundred feet in height for a commercial structure. In the MHAFB/MHRC Focus Area, the Fossil Gulch Wind Park near Hagerman Idaho was constructed in 2005. This facility is the state's first utility scale wind farm. The farm utilizes seven wind turbines. In addition to this commercial scale operation, local applications are being encouraged in rural areas.

Funding through Section 9006 of the U.S. Department of Agriculture Farm Bill, also known as the Rural Energy for America Program, has been encouraged throughout the rural areas of Idaho. Future placement of both private and commercial wind turbines would need to be coordinated with the Idaho Army National Guard and Mountain Home AFB to avoid height issues (i.e., vertical obstruction to fixed and rotary wing operations). Measures need to be taken to ensure wind turbines are sufficiently marked so that pilots can see them at night (i.e., have adequate lighting / markings). The Department of the Air Force is in the process of developing new coordination procedures with respect to alternative energy structures / facilities and potential compatibility issues with military operations.

Transmission lines serving alternative energy installations can create an additional compatibility issue. Although the State of Idaho is encouraging alternative energy as a new way to maximize the state's energy independence, preferred sites for alternative energy plants are typically located in rural areas. This requires transmission lines from the power generation facilities to the urbanized areas within the state. Transmission lines can cause an additional vertical obstruction issue.

The development of the nuclear power plant outlined previously in this section could contribute to the transmission line issue. The nuclear power plant could draw additional residential and commercial development in the rural areas near the military training facilities and Mountain Home AFB, and OTA. Future spin-off development will need to be evaluated so as not to create additional compatibility conflict with the study area military installations.

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Definition:

Air quality is defined by a number of components that are regulated at the federal and state level. For compatibility, the primary concerns are pollutants that limit visibility, such as particulates, ozone, and potential non-attainment of air quality standards that may limit future changes in operations at the installation.

For more information on issues associated with air quality, see Compatibility Factor 9, Dust, Smoke, and Steam.

As discussed with Compatibility Factor 9, Dust, Smoke, and Steam, urbanized land uses and military operations can produce dust and air quality issues creating both localized and regional issues. Poor air quality can reduce the visibility needed for military testing and training events. This could cause the cancellation of test and training activities, reduced usage days, reduce the ability to use sensitive optical equipment, and degraded data quality and utility. The issues identified for this compatibility factor are listed on Table 3-25 for the MHAFB/MHRC Focus Area and on Table 3-26 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-25. MHAFB/MHRC Focus Area Air Quality Issues

			•	
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Simplot feed lot dust and odor	12A			

Table 3-26. Gowen Field/OTA Focus Area Air Quality Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Withdrawal of impact area	12A			

Currently, the Impact Area at OTA is owned partly by the BLM and partly by the State of Idaho, but operated by the military. This area has been known to produce dust and other particulates as a result of munitions firing and explosive ordnance detonation. These particulates can lead to increased air pollution or PM10 levels in the region. Due to the ownership of these lands by the State and the BLM, these entities are involved if complaints are filed about dust and air quality levels. If the land were transferred to the ownership of the military, then the military would be able to handle complaints or air quality issues without having to involve the State or BLM.

Frequency Spectrum Impedance and Interference

Definition:

Frequency spectrum impedance and interference refers to the interruption of electronic signals by a structure (impedance) or the inability to distribute/receive a particular frequency because of similar frequency competition (interference).

The issues identified for this compatibility factor are listed on Table 3-27 for the MHAFB/MHRC Focus Area and on Table 3-28 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-27. MHAFB/MHRC Focus Area Frequency Spectrum Impedance and Interference Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Frequency spectrum interference associated with operation of the raceway	13A	•	•	•
Frequency interference associated with Mountain Home AFB antennas	13B	•	-	-
Impedance associated with need for microwave line-of-sight to Mountain Home AFB	13C			

Table 3-28. Gowen Field/OTA Focus Area Frequency Spectrum Impedance and Interference Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
General frequency spectrum issues	13A			
Frequency spectrum interference associated with operation of the raceway	13B	•	•	•

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Frequency interference is related to other transmission sources. Interference can result from a number of factors, including:

- Using a new transmission frequency that is near an existing frequency;
- Reducing the distance between two antenna transmitting on a similar frequency;
- Increasing the power of a similar transmission signal;
- Using poorly adjusted transmission devices that transmit outside their assigned frequency or produce an electromagnetic signal that interferes with a signal transmission;
- Exploding existing electronic sources and uses created by portable systems affect entire communities utilizing Wi-Fi broadband systems and industrial sources that produce electronic noise by-product.

In order to successfully complete its operational activities within the installation and its training areas, military users rely on a range of frequencies for communications and support systems. Since 1993, Congress has been selling federal spectrum bands for reallocation to the private sector, promoting the development of new telecommunications technologies, products and services. The expanding public and commercial use of the frequency spectrum from Wi-Fi wireless transmitters to consumer electronics can encroach on the military's use of the frequency spectrum. Increasing community and DOD demands for this important resource can create conflict for all users. Key issues to consider relative to frequency spectrum impedance include the construction of buildings or other structures that block or impede the transmission of signals from antennas, satellite dishes or other transmission/reception devices affected by line-of-site requirements.

The ability to utilize capacity within the electromagnetic spectrum is important for the training and training missions at both MHAFB/MHRC and Gowen Field / OTA. A reduction in access or availability to the spectrum could potentially limit the effectiveness of training exercises by restricting the number of systems available to participate by the participating military personnel. Spectrum limitations restrict the use of state-of-the art instrumentation systems and could potentially limit the development and testing of new technologies at the installation or between the installation and its supportive training areas.

Frequency Interference Associated with Operation of the Raceway

Automobile racetracks have shown to interfere with the military's use of the frequency spectrum. Although the War Eagle Speedway complex has not been built, coordination of the use of the spectrum will be paramount between the military and the users of the racetrack so as not to cause safety issues for either user. Additional coordination measures should also be in place should this project require additional public hearings to allow the military to comment on the compatibility of such project on military operations.

MHAFB/MHRC FOCUS AREA

Mountain Home AFB Antennas

Another area of concern is frequency impedance. Key factors to consider relative to frequency spectrum impedance include the construction of buildings or other facilities that block or impede the transmission of signals from antennas, satellite dishes, or other transmission/reception devices affected by line-of-sight requirements. As development continues around Mountain Home AFB and the transmitting/receiving equipment for the microwave transmissions from Mountain Home AFB, care must be taken to avoid impedance by construction outside the installation.

GOWEN FIELD/OTA FOCUS AREA

Because the frequency issue pertaining to the Gowen Filed/OTA focus area applies to both focus areas, they were detailed in the previous discussion.

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Definition:

This factor addresses public trespassing, either purposeful or unintentional, onto MHAFB/MHRC Focus Area. This issue is related to Compatibility Factor 6, AT/FP.

The issues identified for this compatibility factor are listed on Table 3-29 for the MHAFB/MHRC Focus Area and on Table 3-30 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-29. MHAFB/MHRC Focus Area Public Trespassing Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Recreational Trespass (Hunters) on Saylor Creek Range	14C			•
Trespass within the Orchard Training Area	14B		-	
Trespass onto Mountain Home AFB	14A			

Table 3-30. Gowen Field/OTA Focus Area Public Trespassing Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Trespass within the Orchard Training Area	14A			
Trespass onto Gowen Field	14B			
Trespass at MATES/Railroad	14C			

To varying degrees, OTA and Mountain Home AFB are predominantly bounded by unpopulated BLM or endowment trust lands that are used for a range of purposes, including recreation. The remoteness of some areas and the proximity of public uses adjacent to military boundaries provide opportunities for trespassing onto DOD property. Trespassing on military reservations by unauthorized persons poses a threat to public safety, as well as military security and mission performance. As residential development is proposed in proximity to OTA, the military will need to be involved to asses whether or not additional measures need to be taken to avoid additional public trespassing. Specifically, access to the MATES facility and associated railroad equipment will need to be evaluated.

Identified for both focus areas is the issue of trespass within the OTA. Because the OTA's size, proximity to wilderness areas along the snake river which attract recreational users, and proximity to the interstate highway, accidental public trespass is a public safety issue. The Saylor Creek Range additionally faces the same issue but specifically from hunters.

Because of the shared use situation between the airport tenants, accidental and intentional trespass onto Gowen Field and the Idaho Air National Guard facilities will need to be monitored as the facility expands or in the event of new tenants at the airport complex.

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Definition:

Cultural resources may prevent development on the base, apply development constraints, or require special access by Native American tribal governments or other authorities.

Special considerations must be made for any development or expansion of military missions considered for areas with cultural significance. The issues identified for this compatibility factor are listed on Table 3-31 for the MHAFB/MHRC Focus Area and on Table 3-32 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-31. MHAFB/MHRC Focus Area Cultural Resources Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Cultural sites within active military operation areas	15A			

Table 3-32. Gowen Field/OTA Focus Area Cultural Resources Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
No Issues Identified	N/A	N/A	N/A	N/A

Indian Tribal habitation dates back at least 12,000 years for the focus areas examined in this JLUS. Five Indian Tribes have been identified to have historic ties to the MHAFB area. These tribes are: the Burns Paiute Colony, the Shoshone-Bannock Tribes of Fort Hall Reservation in southeastern Idaho, the Paiute Tribe of Fort McDermitt Reservation in Nevada, the Northwestern Band of Shoshone, and the Shoshone-Paiute Tribes of the Duck Valley Reservation. Tribes identified to have ties to the Gowen Field/OTA training area also include the Coeur d'Alene Tribe, the Kootenai Tribe of Idaho, and the Nez Perce Tribe.

Cultural resources typically consist of three types of sites: archaeological, architectural, and traditional cultural. Archaeological resources are considered material remains of past human life or activities that provide scientific or humanistic insight into past human cultures. Architectural resources are structures including standing buildings, bridges, dams, canals, etc. of historical or aesthetic significance. Traditional cultural resources include properties that can be eligible for inclusion on the National Register of Historic Places due to their association with cultural practices or beliefs of a living community. They can also include areas that are not eligible for registry, but still hold the same value to the community.

The installations in both focus areas maintain Cultural Resources Management Plans that are designed to protect existing resources. According to these resource plans, most cultural resource sites are located outside of the development areas, and the presence of historic and archaeological resources does not significantly constrain development. The plans dictate the types of action to be taken in order to preserve known cultural resources, as well as those that are discovered during training or construction activities. In order to protect these resources, their specific locations have not been divulged in the plans. Surveys have been conducted at all of the installations and facilities associated with MHAFB, MHRC (including Saylor Creek and Juniper Butte ranges, emitter sites, and satellite facilities), Gowen Field, and OTA. Areas that have been identified on the installations as having cultural significance have been classified as restricted from training and operational use.

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Definition:

Legislative initiatives are federal, state, or local law and regulations that may have a direct or indirect effect on a military installation to conduct its current or future mission or a community's ability to direct growth.

The issues identified for this compatibility factor are listed on Table 3-33 for the MHAFB/MHRC Focus Area and on Table 3-34 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-33. MHAFB/MHRC Focus Area Legislative Initiative Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Owyhee County Initiative	16A			

Table 3-34. Gowen Field/OTA Focus Area Legislative Initiative Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Withdrawal of impact area	16A			

Congress may enact legislation that directly or indirectly limits DOD's flexibility to conduct planned operations, training or testing. Federal, state and local jurisdictions may be directly or indirectly affected. The DOD must continue to work closely with federal and state legislative representatives to monitor legislation. Pertinent legislative concerns include the designation of Wilderness Areas, renewable energy development, frequency spectrum issues, airspace and urban development.

Legislation, such as the Owyhee Initiative (which is discussed in detail in Section 4), has the potential to establish operational limits such as minimum flight altitude and use restrictions that affect training activities. Loss of use of existing operational areas or additional constraints on use would create a critical impact to military missions and operations. The Owyhee Initiative has been adopted and does include language protecting military operations. Specifically, the legislation states that the establishment of wilderness and wild and scenic rivers will not affect military training including special use air space over-flights or low-level routes, emergency response capabilities, existing ground instrumentation sites and uses or wilderness compatible ground and air operations for readiness testing, rescue mission or training activities. Both state and federal legislation needs to be monitored for compatibility conflicts or potential limitations to military operations.

Discussion on withdrawing the impact area portion of OTA from BLM or State ownership and turning it over to the DOD has begun. This effort may require legislative action. If so, this will need to be carefully monitored so as not to cause interruption to critical military training and operating exercises.

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Interagency Coordination

Definition:

Interagency coordination relates to the level of interaction on compatibility issues between military installations, jurisdictions, land and resource management agencies, and conservation authorities.

The issues identified for this compatibility factor are listed on Table 3-35 for the MHAFB/MHRC Focus Area and on Table 3-36 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-35. MHAFB/MHRC Focus Area Interagency Coordination Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
General coordination between all entities (military, local, state, federal, Native American)	17A, 17B, 17C, 17D, 17E	•	•	•

Table 3-36. Gowen Field/OTA Focus Area Interagency Coordination Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
General coordination between all entities (military, local, state, federal, Native American)	17A			
Coordination between IDL/BLM on land exchanges	17B		•	

The military often conducts operations over land controlled by another governmental agency or that is privately held. The types of allowable uses and restrictions are often the result of negotiations between the parties or subject to the other agency's policies and regulations. These restrictive uses can limit training and operating activities.

The development of proactive partnerships between military installations, other governmental agencies and jurisdictions is required to ensure the continued sustainability of military operations and the protection of public safety and access to public lands. Active participation by all entities is essential to addressing these issues as the development of incompatible land uses could create safety concerns, cause pressure to modify operations and increase the disturbance of adjacent residents.

One of the factors requiring attention is the inclusion of the military in the early phases of the development review process or the drafting of legislation affecting the installation. Active participation by all entities is essential to addressing this factor as the development of incompatible land uses could create safety concern, cause pressure to modify operations and increase disturbance to new residents.

Enhanced communication will allow for a better discussion of alternatives that meet all parties' needs. This is more difficult to do as the process moves forward. Additionally, land exchanges will need to be coordinated in a manner so as not to interfere with military operations.

Given the unique relationship of the jurisdictions and stakeholders involved in this vast study area, the strategies in Section 5 will need to provide direction on a coordinated planning process that ensure all stakeholders are informed and involved.

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3.3 Natural Resource Compatibility Factors

In addition to man-made compatibility factors, natural compatibility factors are also potential sources of conflict with military readiness activities. Two of the three natural resource compatibility factors were identified during the JLUS process that currently present compatibility issues to each focus area. Like the previous section, natural resource compatibility issues that apply to specific locations are shown on Figure 3-18 for the MHAFB/MHRC Focus Area and on Figure 3-19 for the Gowen Field/OTA Focus Area.

18 Water Quality/Quantity

Definition:

Water quality/quantity concerns include ensuring adequate water supplies of good quality for use by the base and surrounding communities as the area develops.

The long term availability of water at sufficient quality and quantity within the study area is vital to sustaining local communities and the military installations. The issues identified for this compatibility factor are listed on Table 3-37 for the MHAFB/MHRC Focus Area and on Table 3-38 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-37. MHAFB/MHRC Focus Area Water Quality/Quantity Issues

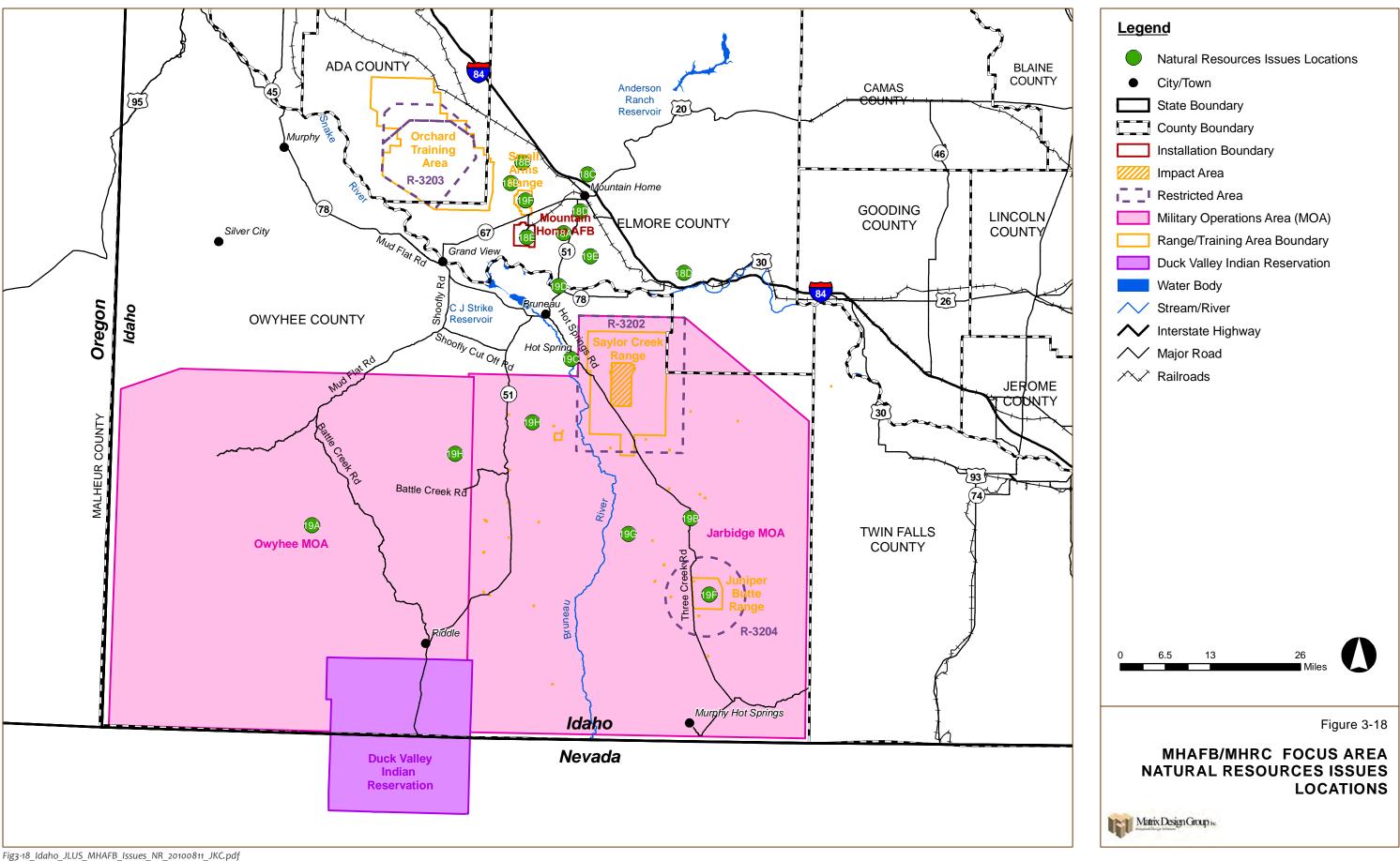
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Water availability/groundwater depletion	18A, 18B, 18C	•	•	
Water quality	18D			

Table 3-38. Gowen Field/OTA Focus Area Water Quality/Quantity Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
No Issues Identified	N/A	N/A	N/A	N/A

Please see the next page.

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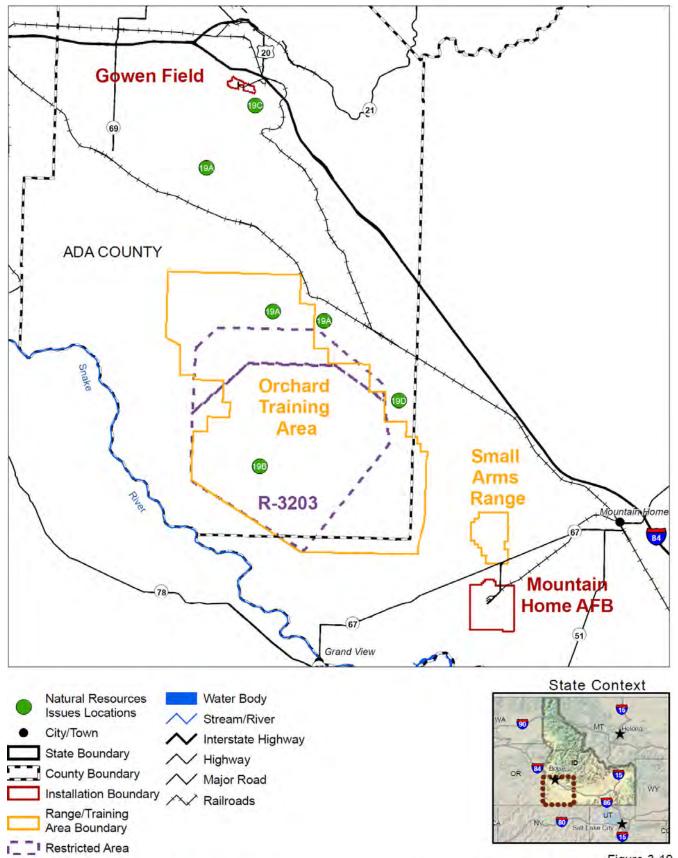


Figure 3-19



GOWEN FIELD/OTA FOCUS AREA NATURAL RESOURCES ISSUES LOCATIONS

For more information on the GWMAs and CGWAs located within the JLUS study area, see Section 2.4 Regional Assessment, under the heading Water Resources.

The Idaho Department of Water Resources is the entity responsible for managing and monitoring water resources within Idaho. Amendments to Idaho's Ground Water Act in 1953 provided for authority to designate areas to regulate withdrawal of groundwater from aquifers experiencing insufficient supplies. The first Critical Groundwater Area (CGWA) was designated in 1962, and in 1982 authority was granted for designating groundwater management areas (GWMA). The Grand View-Bruneau GWMA, located south of MHAFB, within the MHRC in Owyhee County, became the first GWMA on October 29, 1982 due to increases in withdrawal and declines in aquifer levels and spring flows. The only new diversions that have been authorized since designation are for domestic use and a Desert Land Entry development. Local well owners have also worked to secure wells to protect from leakage.

Due to declining groundwater levels in the area around MHAFB, the Cinder Cone Butte CGWA was created on May 7, 1981 and the Mountain Home GWMA was created on November 9, 1982. No new groundwater appropriations are allowed within the Cinder Cone Butte CGWA, while certain subareas of the Mountain Home GWMA may be able to support new appropriations without damaging existing water rights.

The areas around MHAFB/MHRC and OTA have historically had limited water supplies that have limited the amount of development that has occurred there. A current project is underway to construct water lines that will bring water supplies to this area. All alternatives for these water lines would connect to MHAFB and bring additional water to the facility. More information on the Elmore-Ada Water Project can be found under Compatibility Factor 5, Infrastructure Extensions.

The water system supply at MHAFB is currently composed of domestic water lines, groundwater wells and pumps, distribution lines, and storage tanks on the base. Drinking water is obtained from seven groundwater wells on the base. The base also includes wastewater treatment lagoons. Approximately 0.4 to 0.5 million gallons per day of treated and secondarily treated wastewater effluent is sent to the rapid infiltration basins and lagoon, not discharged off the base. An additional 130,000 to 200,000 gallons of treated wastewater effluent is used daily to irrigate the golf course located on the base.

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Threatened & Endangered Species

Definition:

An "endangered" species is one that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is one that is likely to become endangered in the foreseeable future. Many species that become extinct never make it to the endangered species list. The presence of threatened and endangered species may require special development considerations and should be included early in planning processes to ensure compatibility with military missions.

Restrictions for the purpose of protecting threatened or endangered species can reduce the value of an installation, range or operational area for testing and training by limiting the types of permissible activities in terms of composition, magnitude or timing. Mitigation measures and habitat protection restrictions may limit land available for development and make it more challenging for local governments to plan for growth as. The issues identified for this compatibility factor are listed on Table 3-39 for the MHAFB/MHRC Focus Area and on Table 3-40 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-39. MHAFB/MHRC Focus Area Threatened and Endangered Species Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Protection of Threatened and Endangered species/unique natural formations	19A, 19B, 19C, 19D, 19E, 19F, 19G	•	•	•

Table 3-40. Gowen Field/OTA Focus Area Threatened and Endangered Species Issues

	<u> </u>			
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Protection of Threatened and Endangered species/unique natural formations	19A, 19B, 19C, 19D			

Due to the size and amount of land included within the focus areas of this JLUS, there are a wide variety of native flora and fauna known to occur. There are also a wide variety of natural resources and protected areas, most prominently the Snake River Birds of Prey National Conservation Area (NCA).

The Snake River Birds of Prey National Conservation Area was established in 1993 and is managed by the BLM. It covers approximately 600,000 total acres of land, including the entire area of OTA. Although it does not include MHAFB, it does encompass lands surrounding the installation. This area houses one of the largest concentrations of nesting birds of prey in the world and includes roughly 800 pairs of falcons, eagles, hawks, and owls, including the bald eagle and the peregrine falcon, both previously listed as endangered species. This NCA imposes certain responsibilities on operations at OTA to ensure that operations conducted at the facility are in accordance with protecting and preserving raptor species habitat, cultural and natural resources, and that they are good stewards of the land.

The primary plant species of concern located within the two main focus areas is slickspot peppergrass (*Lepidium papilliferum*). This species was listed by the U.S. Fish and Wildlife Service (USFWS) as "threatened" on October 8, 2008. Federally listed and proposed threatened and endangered species are provided protection under the 1973 Endangered Species Act.

Slickspot peppergrass is a small flowering plant species that can be either annul or biennial. Biennial occurrences do not produce flowers the first year. The flowers produced by this species are small and white. Its habitat is restricted to semiarid sagebrush-steppe ecosystems and it grows primarily in slickspots (also called mini-playas or natric sites). Slickspots range from less than 1 square meter to about 10 square meters within communities dominated by other plants. These sparsely vegetated microsites are very distinct from the surrounding shrubland vegetation, and are characterized by relatively high concentrations of clay and salt. Slickspot peppergrass is found in concentrations on parts of OTA. The primary threats to this species come from competition with invasive species for habitat, grazing, pesticide spraying, fire, and manmade disturbances. The IDARNG requires all vehicles from outside the Treasure Valley to be washed prior to entering the OTA in order to control the spread of non-native species. The MATES facility maintains a high pressure wash facility for this purpose.

Although there have not been any recorded federally threatened or endangered species on any lands managed by the Air Force, there are several species with conservation status that have been identified in the January 2004 Integrated Natural Resources Management Plan (INRMP) for MHAFB, Small Arms Range, Saylor Creek Range, Juniper Butte Range, and MHRC sites. The following list of species with conservation status in the INRMP includes species that are either: federally listed as threatened or endangered, listed as species of concern in Idaho by the USFWS, listed by the Idaho Department of Fish and Game (IDFG) as Species of Greatest Conservation Need, or BLM sensitive species. The following is a list of species with conservation status that have been identified nearby or on Air Force managed lands:

Burrowing owl, identified near MHAFB and Juniper Butte Range. This owl typically nests in ground burrows excavated by other animals, and is found in dry, open grasslands. They have been known to be found in cities and golf courses as well.



Slickspot peppergrass

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- Ferruginous hawk, identified near Saylor Creek and Juniper Butte ranges. This migratory raptor species breeds in open habitats including grasslands, deserts, sagebrush steppe, and edges of pinyon-pine forests.
- Sage grouse, identified near Saylor Creek and Juniper Butte ranges.
 This bird is found in large sagebrush-grassland expanses or sagebrush-dominated stands.
- Loggerhead shrike, identified near Juniper Butte Range. This bird typically nests in sagebrush, and inhabits open areas with scattered trees and shrubs, in savannas, desert scrub, and sometimes in juniper woodlands.
- Long-billed curlew, identified near MHAFB and Saylor Creek Range. This bird inhabits grassy wet meadows, prairies, and open shrub-steppe. It prefers recently grazed shrub-steppe with short vegetation that it uses for nesting. It is sometimes found near water. During migration and winter months, it inhabits beaches and mudflats.
- Brewer's sparrow, identified near Juniper Butte Range. This bird often inhabits high desert scrub and breeds primarily in shrub-steppe areas.
- Sage thrasher, identified near Juniper Butte Range. This bird is found in dry sagebrush plains and sagebrush-steppe, and spends winters in dense thickets and lowland scrub. Its breeding areas include large tracts of sagebrush.
- Sage sparrow, identified near Juniper Butte Range. This bird inhabits large expanses of sagebrush and nests on the ground under the sagebrush. California bighorn sheep are known to occur in various areas of steep river canyons and hills in western Owyhee County and near the Bruneau and Jarbidge Rivers. Some of this habitat is included within the MHRC. This species is a USFWS species of concern, and areas where they are known within the MHRC have special overflight restrictions on them, such as height of aircraft and times of year at which flights are restricted, that can impact flight operations

This may not be a comprehensive list of sensitive species as future surveys may show the presence of additional sensitive species. Similarly, alternative suitable habitat may be identified.

According to the 2004 to 2008 INRMP for OTA, there are several special status species that have been observed at the training area. These include:

- Ring-billed gull and California gull, seen yearly as casual transients over OTA.
- Bald eagle, occasionally found as one or two individuals a few days during the winter seen in the northern part of OTA.

- Black-throated sparrow, which inhabits salt desert hillsides and breeds in salt desert shrub in the southwestern portion of OTA.
- Brewer's sparrow, which breeds in sagebrush areas in OTA.
- Ferruginous hawk, found throughout OTA and typically breed along the southern and northern boundaries.
- Loggerhead shrike, which are rarely found on OTA, but sometimes spend the winter months in stands of shrubs.
- Long-billed curlews, which arrive in early spring and nest in grassy areas in the northern portion of OTA. They usually leave before mid June.
- Merlin, occasionally found briefly on OTA, approximately once a year during migration.
- Peregrine falcon, rarely seen, as a migrant through OTA.
- Sage sparrow, which breeds in sagebrush and mixed shrubs on OTA.
- Sage thrasher, which breeds in sagebrush stands on OTA.
- Burrowing owl, which commonly nests and breeds on OTA.
- Long-nosed snake and ground snake, both found in two specific rocky, hilly areas rarely maneuvered by off-road vehicles or military activity.

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Definition:

Regulatory or permit requirements protecting marine and ocean resources can cumulatively affect the military's ability to conduct operations, training exercises, or testing in the marine environment.

The issues identified for this compatibility factor are listed on Table 3-41 for the MHAFB/MHRC Focus Area and on Table 3-42 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-41. MHAFB/MHRC Focus Area Marine Environments Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
No Issues Identified	N/A	N/A	N/A	N/A

Table 3-42. Gowen Field/OTA Focus Area Marine Environments Issues

Compatibility Issue	ID		Potential Impact	Existing Tools
No Issues Identified	N/A	N/A	N/A	N/A

There are no marine environments in the study area; therefore, no issues were identified under this Compatibility Factor.

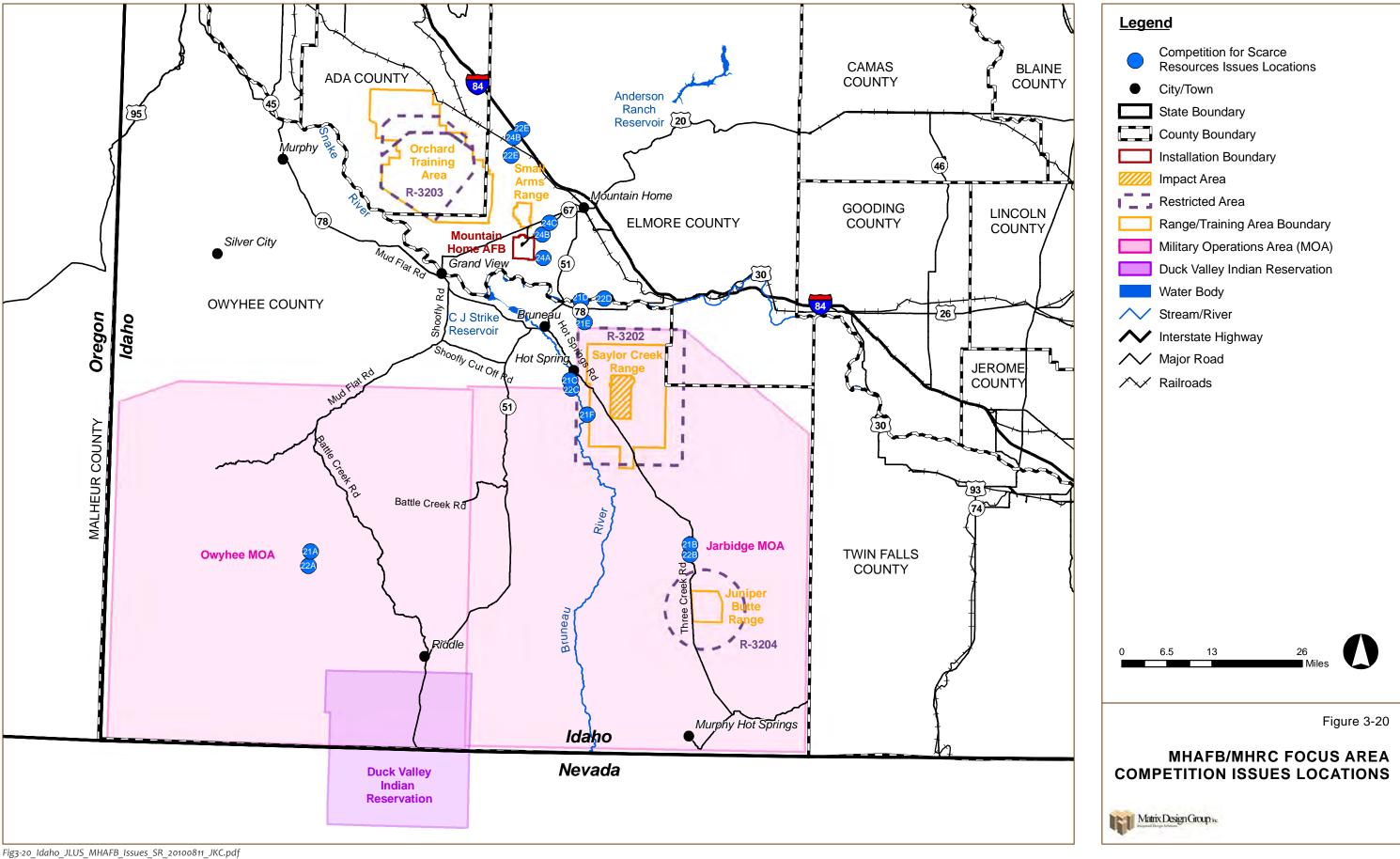
3.4 Competition for Scarce Resources

Competition for scarce resources can cause compatibility issues due to competition between local and federal government agencies, other agencies, private development concerns, and the military. The following is a description of some of the key resources that can be in high demand; however, only issues associated with the competition for Natural Resources, for Land and Air Spaces, and for Ground Transportation Capacity have been identified for the Idaho JLUS.

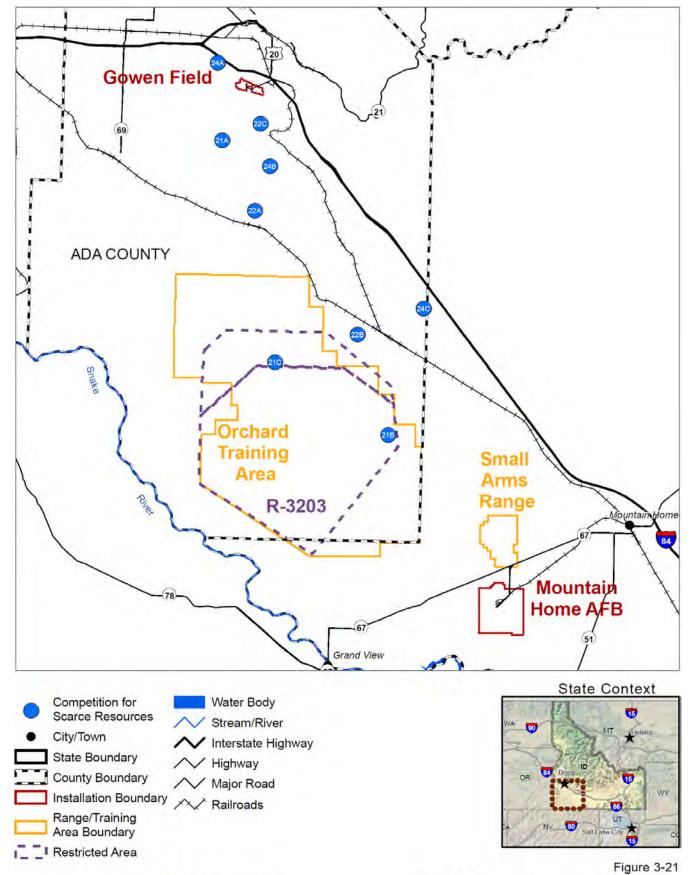
Like the previous section, issues related to competition for scarce resources that apply to specific locations are shown on Figure 3-20 for the MHAFB/MHRC Focus Area and on Figure 3-21 for the Gowen Field/OTA Focus Area.

Please see the next page.

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GOWEN FIELD/OTA FOCUS AREA

COMPETITION ISSUES LOCATIONS



21 Natural Resources

Definition:

Pressure to gain access to valuable natural resources (such as oil, gas, minerals, and water resources) located on military installations, within military training areas, or on public lands historically used for military operations can impact resource utilization and military operations.

Increasing development surrounding military installations will continue to compete with the need for naturally limited resources, such as water, oil, gas, minerals, and scenic/recreational assets. Continual development around the military installations could reduce the available supply of these finite resources. The issues identified for this compatibility factor are listed on Table 3-43 for the MHAFB/MHRC Focus Area and on Table 3-44 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-43. MHAFB/MHRC Focus Area Natural Resources Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Competition for habitat and use of unique natural formations	21A, 21B, 21C, 21D, 21E, 21F			

Table 3-44. Gowen Field/OTA Focus Area Natural Resources Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Natural resource extraction	21A, 21B, 21C			

Although MHAFB and portions of the ranges utilized by the Air Force are owned by the Air Force, the majority of military training areas where military operations take place associated with this JLUS are located on publicly owned land, primarily owned by the State of Idaho and the BLM. These public lands, although used for military activities, are generally open to the public for recreational uses such as hunting and off-road driving and are often used for grazing. The Snake River also provides water based recreational activities such as boating and fishing. The Snake River Birds of Prey NCA also includes many unique habitats that must be protected during military operations.

Since public lands used for military training are open to the public, another potential issue is the use of these lands for resource extraction. Searching or excavating for minerals or water sources could take place on training ranges or under military airspace. If specific mining or pumping rights are acquired by a member of the public in or around military ranges and training areas, it could place restrictions on military operations or overflight, as in the MHRC.

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Definition:

Land, Air, and Sea Spaces with regard to other airports in the proximity of the military installations.

Sufficient land and air resources must be available and of adequate size, cohesiveness and quality to accommodate effective training and testing. The demands of these needs will become increasingly important as the requirements and capabilities of weapons systems and command and control systems continue to improve. The issues identified for this compatibility factor are listed on Table 3-45 and Table 3-46 and further described in the following discussion.

Table 3-45. MHAFB/MHRC Focus Area Land, Sea, and Air Spaces Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Competition for land for multiple uses (military operations, recreation, natural habitat)	22A, 22B, 22C, 22D		•	
Competition for air space with private airports	22E			

Table 3-46. Gowen Field/OTA Focus Area Land, Sea, and Air Space Issues

155465				
Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Competition for land area	22A			
Rail spur to the MATES area	22B	_		
Competition for third runway	22C			

Competition of Airspace

Airspace in the region is a high demand resource. Restrictions in the use of the airspace, low level operational training and flight paths by the FAA could result in a reduction in the number of days available for testing and training. As such, the ability to conduct time sensitive training events and the recreation of comparative training and testing events would be compromised. These restrictions may also limit the ability of installations to access certain portions of available training ranges while non-military aircraft are provided access.

There are a number of public use airports within and in close proximity to the study area. In addition to Boise Airport and the military runways, there are 21 private airstrips, 11 private heliports, and nine municipal airports. A significant amount of airspace coordination is required to deconflict use of the airspace with military aircraft operations. The Boise Airport is the busiest public access airport in the study area. Between 200,000 and 300,000 passengers travel through the Boise Airport monthly. Military flights through Boise Airport/Gowen Field range between 600 to over 1,000 per month, while general aviation operations range between 3,000 to 6,000 per month. As previously outlined in Section 2, Idaho Army National Guard, commercial airlines, and general aviation operate from the shared airport facility in Boise.

Source: http://www.cityofboise.org/Departments/Airport/Statistics/page40309.aspx

The Boise Airport Master Plan outlines plans for a 3rd runway located southeast of the Gowen Complex. Although this airstrip is currently only used for military flights, the expansion will draw additional competition for commercial and general aviation use to the two existing runways. As airspace in the region is a high demand resource, the large number of civilian airports in the region can impact existing and future aircrat operations (i.e., approach and departure tracks, closed pattern flight tracks, etc.) at both Gowen Field and Mountain Home Air Force Base.

MILITARY AIRSPACE

Since both military airports in the study area include manned towers serviced by radar approach control and can handle flights using Instrument Flight Rules (IFR), both the airspace around Gowen and MHAFB are classified as Class C airspace. Class C airspace typically runs from the surface elevation at the airport to 4,000 feet above ground level (AGL). Class C airspace can be irregular in shape depending on local conditions and requirements. See Figures 3-22 and 3-23 for FAA Sectional Charts of the areas near these facilities.

REGIONAL AIRPORTS AND AIRSPACE

As mentioned above, there are 21 private airstrips, 11 private heliports, and nine municipal airports in the study area. Table 3-47 lists the operations per day (OPD) for the municipal airports in the study area. Figure 2-12 in Section 2 shows the location of airports in and near the study area.

Table 3-47. Nearby Airports and Airstrips

1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 4
Airport Name	Operations Per Day
Murphy Hot Springs	3
Homedale Municipal	20
Parma Airport	10
Murphy Airport	17
Mountain Home Municipal	62
Smith Prairie	3
Nampa Municipal	289
Caldwell Industrial	403

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Airport Name	Operations Per Day
Glenns Ferry Municipal	2
Pine Airport	4
Total	814

Source: FAA and www.airnav.com

Competition for Land

Both the Idaho Army National Guard and the Air Force mange or use various land spaces to accomplish training and operational missions. These resources must be available and of sufficient size, cohesiveness, and quality to accommodate effective training. In a similar manner, local governments and private citizens seek to use these resources to maximize their development potential and desired uses. Additional competition exists for land resources to place ground-based structures, such as telecommunications towers, wind generation facilities, and rail lines (see also Compatibility Factors 1, 5, and 11).

Development pressures east of OTA could be in direct competition with the military's safety, noise, and land use objectives. Further competition exists in this area due to the location or infrastructure expansions, proximity to the interstate highway, and availability of private land. Land uses such as the landfill, the proposed racetrack, and the proposed nuclear power plant add to the mix of potential users. These uses influence one another. For instance, if the racetrack or nuclear power plant are built, residential development will locate elsewhere. Existing military operations can be impacted based on where industrial development drives residential development.

Additionally, the mix of land owners with their own distinct objectives adds to the complexity of the competition of land issue. State endowment land, BLM land, areas leased or owned by the military, and private land all have similar and shared existing uses; however future land use objectives differ based on the owner (see also Compatibility Factor 17, Interagency Coordination).

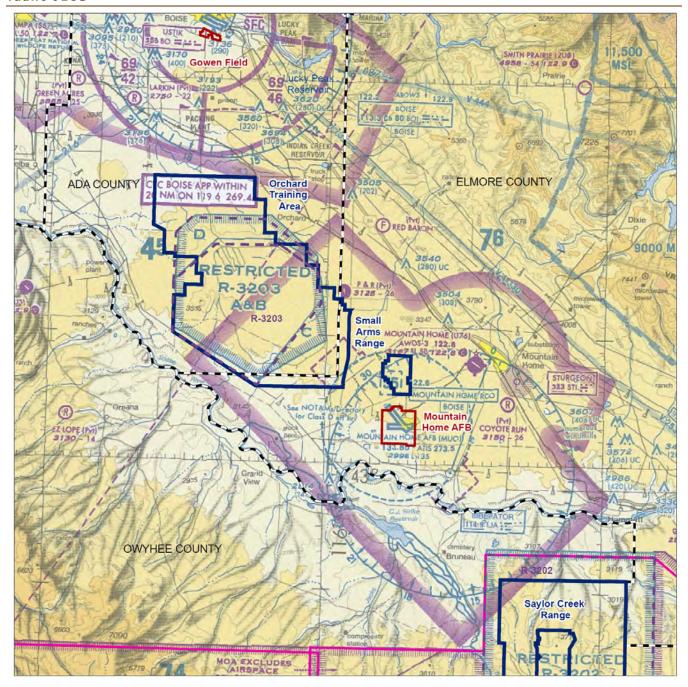








Figure 3-22
MOUNTAIN HOME AFB
AIRSPACE

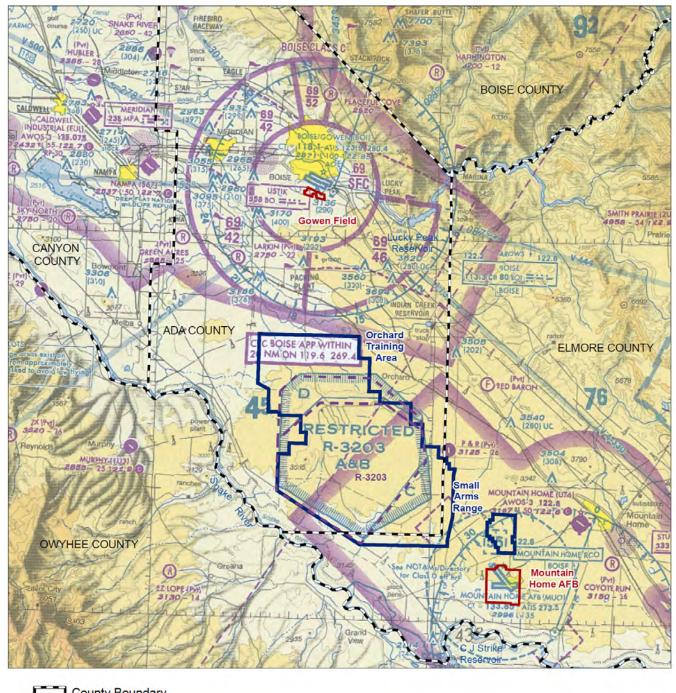








Figure 3-23
GOWEN FIELD/BOISE AIRPORT
AIRSPACE

Frequency Spectrum Capacity

Definition:

Frequency spectrum capacity is critical for maintaining existing and future missions at military installations. This also needs to be addressed from the standpoint of consumer electronics.

The electromagnetic spectrum is important to the electronic warfare missions and other electromagnetic test requirements of the military. The competition for available frequency spectrum may lead to a reduction in available spectrum from military training and developmental/operational testing activities. The lack of spectrum may decrease the effectiveness of exercises by restricting the number of war-fighting systems that can participate. In addition, spectrum limitations may restrict the use of the state-of-the-art instrumentation systems, resulting in less data for evaluators to use in training assessments and may also limit development testing of new technologies. Lack of available spectrum may result from federal agency regulations or from expanding public and commercial use of the frequency spectrum.

Additional information related to Frequency Spectrum Impedance and Interference is found in the discussion of Compatibility Issue 13. The issues identified for this compatibility factor are listed on Table 3-48 for the MHAFB/MHRC Focus Area and on Table 3-49 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-48. MHAFB/MHRC Focus Area Frequency Spectrum Capacity Issues

Compatibility Issue	ID		Potential Impact	Existing Tools
No Issues Identified	N/A	N/A	N/A	N/A

Table 3-49. Gowen Field/OTA Focus Area Frequency Spectrum Capacity Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
No Issues Identified	N/A	N/A	N/A	N/A

There were no issues identified under the compatibility factor for Frequency Spectrum Competition.

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Definition:

This factor addresses ground transportation capacity on highways and other local roads.

The issues identified for this compatibility factor are listed on Table 3-50 for the MHAFB/MHRC Focus Area and on Table 3-51 for the Gowen Field/OTA Focus Area and further described in the following discussion.

Table 3-50. MHAFB/MHRC Focus Area Ground Transportation Capacity Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Regional traffic/Level-of- service (LOS)	24A, 24C			
Maintaining National Guard lines of communication/logistics needed for mission sustainment	24B	_	-	-

Table 3-51. Gowen Field/OTA Focus Area Ground Transportation Capacity Issues

Compatibility Issue	ID	Current Impact	Potential Impact	Existing Tools
Orchard Road extension	24A			
Regional traffic/Level-of- service (LOS)	24B, 24C	-	-	

MHAFB/MHRC Focus Area

Mountain Home AFB enjoys a rural setting with one road, Grandview Road, providing access to the installation. Grandview Road extends west from the City of Mountain Home well past the installation. State Highway 67 runs north/south connecting Mountain Home AFB to Grandview Road. Simco Road runs north/south between OTA and the small arms range, connecting Grandview Road to Interstate 84. The primary users of Grandview Road are associated with the military installation; however additional development along Grandview Road west of Mountain Home could affect level-of-service standards.

Gowen Field / OTA Focus Area

As urban development expands into rural areas, roads once used primarily to provide access to rural areas or transport a limited number of vehicles per day begin to function more as urban major arterial roadways. These once rural roads are often the main transportation corridors for access to military installations. In addition, these facilities also induce growth as rural areas become more accessible.

In the Gowen / OTA Focus Area, Pleasant Valley Road and Kuna Mora Road are affected by this trend. As detailed earlier in the JLUS, Pleasant Valley Road is the major transportation route between the military facilities at Gowen Field and the OTA. As new commercial and residential uses develop along these major roads, competition for ground transportation facilities increases. The new residential developments discussed previously under Compatibility Factor 1 – Land Use contribute to the competition for transportation facilities between the military and community users. New development east of OTA, between the military installation and Interstate 84, will cause this same situation to develop along Mayfield Road and Simco Road.

As outlined under Compatibility Factor 5 – Infrastructure Extensions, road improvements are planned for the roads near the Gowen Field / OTA Focus Area including Kuna Mora Road, Orchard Road, and Lake Hazel Road. Improvements to these facilities can encourage new users and increase the competition for use of the transportation infrastructure. Use of Pleasant Valley Road is critical for Idaho Army National Guard mission Sustainment, as training at OTA is a critical part of their mission. Increasing the number of users to the transportation network utilized by the military not only threatens mission sustainability but local level-of-service standards as well.

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In this section		
#	Title	Page
4.1	Installation Plans	4-2
4.2	Local Jurisdiction Planning Tools	4-11
4.3	Other Agency Plans	4-49
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4.5	Other Resources	4-62

This section provides an overview of the primary plans and programs that are currently used or applied in evaluating and addressing study area compatibility issues in the three focus areas. The focus areas have a comprehensive foundation of planning documentation that guides the respective actions of the air force, national guard and private citizens. These documents include guidance on development, range management and natural and cultural resources, noise and fire management within Gowen Field, Orchard Training Area (OTA), Mountain Home Air Force Base (AFB), and Mountain Home Range Complex (MHRC).

The adjacent local jurisdictions, including the cities of Boise and Mountain Home and Ada, Elmore, and Owyhee Counties address compatibility issues through a number of planning and regulatory documents including general plans and regulatory tools (i.e., tools codified through a formal action such as a zoning ordinance, subdivision ordinance, building code). At this time these jurisdictions have limited regulatory tools to promote compatibility, although many common zoning regulations may apply to these issues. For example, zoning ordinances may include regulations on grading, dust control, height restrictions for new structures. This section will also describe major community and specific plans within the study area.

Additionally, there are several key state and regional plans and programs that have a substantial impact on the use of the land within the Joint Land Use Study (JLUS) study area. The Idaho Department of Lands and the BLM administer a substantial amount of land in the study area. There are also regional transportation improvements that will impact the future growth and development within the study area. Existing legislation includes national and state adopted legislation that regulates uses that enhance compatibility planning in the state of Idaho. The Department of Defense Office of Economic Adjustment (OEA) has been intimately involved around the country in assisting communities and military installations establish a cooperative approach to identify and address issues of concern. As such it has fostered the preparation of several documents to assist JLUS stakeholders collectively work together in protecting existing and future uses both inside and outside the fence.

4.1 Installation Plans

Mountain Home AFB General Plan

As a "city within a city", Air Force installation's possess an internal land use mixture similar to local municipalities that requires comprehensive and coordinated planning to ensure its physical layout will sustain the installation's vision for long-term growth and development. The installation's general plan identifies and confirms base constraints and opportunities, develops recommendations for improvements to infrastructure, and identifies potential land use changes and capital improvements. Although this document focuses on development within the installation boundaries, it is an important reference for all study area jurisdictions when planning for future growth. Information and plans detailed in the general plan can have both direct and indirect impacts on study area jurisdictions. The general plan will aid in the creation of strategies in this JLUS study by providing information on the recommended land use, capital improvements, and future development plans to be implemented in the future on the base. These developments will be critical in assessing compatibility between the installation and the community.

The Mountain Home AFB (MHAFB) General Plan was developed through coordination between the installation and local governments and jurisdictions in 2007. Some of the goals that are outlined in the general plan include: protect personnel and resources, ensure facilities and infrastructure support mission accomplishment, maintain environmental quality, and partner with local communities. These goals all aim at the overall purpose to ensure that MHAFB continues to be a viable military installation that works with local communities to reduce the impacts that the two could potentially have on each other. The plan discusses the relationship between Elmore County and MHAFB and how the County strives to enact measures to ensure compatibility through its guiding documents such as its comprehensive plan.

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The majority of the MHAFB General Plan discusses factors that affect the Base's potential and ability for future growth based on interaction with the surrounding area, as well as discussion of existing issues. The chapter is broken down into four sections to organize the information. The four sections are:

- Composite Constraints and Opportunities examines the natural and cultural environmental quality, man-made, and operational constraints to development, and the opportunities for future development.
- Infrastructure analyzes the utility systems, communications, fire protection, and transportation capabilities of MHAFB.
- Land Use and Transportation examines existing and potential land uses both on and off the installation.
- Capital Improvements Program uses information from other sections to assess the potential for future construction and develop recommendations for architectural compatibility and landscaping, urban development, and antiterrorism/force protection.

The General Plan contains a discussion on compatibility planning and includes policy directives related to compatibility issues described in this JLUS, including the following key statements.

Excerpt from MHAFB General Plan:

Protect our environment. Installation operations and development actions must be sensitive to the effects on the environment and consciously strive to further the policies and goals of the National Environmental Policy Act of 1969 (NEPA).

Promote compatible off-installation land uses that support current and potential missions. Compatible land uses adjacent to the installation are required to maintain the installation's viability for development as a prominent 21st Century Air Force base.

Mountain Home Range Complex Comprehensive Range Plan

The current Mountain Home Range Complex Comprehensive Range Plan includes the fiscal years 2007 to 2012 and complies with requirements set forth in Air Force Instruction (AFI) 13-212, Volume 1 (Range Planning and Operations) and AFI 32-7962 (AF Comprehensive Planning). This plan examines land and airspace compatibility on and surrounding the range, identifies existing and potential conflicts, and proposes and provides recommendations for meeting short and long term needs.

The MHRC Comprehensive Range Plan addresses environmental management, unexploded ordnance, land uses, and cultural resources. Since the land that composes the MHRC is rural, located in a remote area, and is

either owned or leased from a federal or state agency, safety is not a compatibility problem between aircraft operations and communities in the Range Complex. The Environmental Management section addresses many areas where flight and/or ground operations could impact local habitats or environmental features. Although brief descriptions are provided, for the specific issues, other resource management plans are typically identified, such as the Mountain Home Integrated Natural Resource Management Plan (INRMP). According to the Comprehensive Range Plan, there are no significant zoning or encroachment issues that are incompatible with range operations. All state lands that border the complex are zoned for agricultural use and are primarily rangeland or agricultural lands. Several cultural resources have been identified within the range complex that could be negatively impacted by military operations. As required by the National Historic Preservation Act (NHPA), the U.S. Air Force must consult with the Idaho State Historic Preservation Office (SHPO) and Native American tribes for any site eligible for the National Register of Historic Places.

Resource Management Plans

The Sikes Act Improvement Act (SAIA) of 1997 requires all military facilities to prepare and implement an INRMP, unless a lack of significant natural resources would exempt such an action. State legislation requires the Air Force within Idaho to maintain an INRMP to address the management of resources within Idaho lands affected by military training activities. The Air Force must work with the Secretary of Interior, State of Idaho, and Owyhee County to develop the plan.

The INRMP for Mountain Home and its associated ranges was prepared in 2004, and addresses threatened and endangered species, habitat conservation, and data inventory. The purpose of this INRMP is to ensure that natural resource conservation measures and military activities on installation land are integrated and consistent with federal stewardship requirements. As a result, the INRMP serves as the comprehensive plan for managing natural resources to attain and sustain stewardship requirements while optimizing primary activities on installation land and, where compatible, conducting secondary activities.

The INRMP will be a useful tool in implementing the strategies recommended within the JLUS. Compatibility between the installation and the community includes impacts to the natural resources which extend across jurisdictional boundaries. Information obtained and measures taken during the creation of the INRMP may also pertain to the surrounding region and can be adopted by local communities to continue the practice of resource stewardship seamlessly across the installation boundary.

Bird / Wildlife Aircraft Strike Hazard

A Bird / Wildlife Aircraft Strike Hazard (BASH) plan is designed to control birds, alert aircrew and operations personnel, and provide increased levels of flight

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safety, especially during the critical phases of flight, take-off, and landing operations. Mountain Home AFB has a very low incident of bird-aircraft strikes, according the installation's INRMP, even though bird-aircraft strikes have been identified and strikes remain a potential risk for air operations. The BASH Plan for Mountain Home was prepared in 2004, and addresses the following:

- Designates a Bird Hazard Working Group and outlines the members' responsibilities;
- Establishes procedures to identify high hazard situations and establish aircraft and airfield operating procedures to avoid these situations;
- Ensures that all permanent and transient aircrews are aware of bird hazards and the procedures for avoidance;
- Develops recommendations to decrease the attractiveness of the airfield to birds and disperse the number of birds on the airfield.

Air Installation Compatible Use Zone Study

The Noise Control Act of 1972 identified that noise not adequately controlled has the potential of endangering the health and welfare of people. It states that all Americans are entitled to an environment free from noise that can jeopardize their general health and quality of life. Along with state and local governments, actions from the Federal government were needed to ensure that the objectives of the Act were met. Concurrently, military installations were experiencing the impacts related to urban development moving closer to the installation and commenting on noise from flight operations. In 1973, the Department of Defense (DOD) responded by establishing the Air Installation Compatible Use Zone (AICUZ) program.

The most recent AICUZ report for Mountain Home AFB was released in 1998, which updated the noise and accident potential information from the previous 1981 study based on the presence of new aircraft and flight operations. The study is in need of updating to include information about the current aircraft at Mountain Home AFB and the addition of the Republic of Singapore Air Force. Its function is to assist local planning entities and developments protect public health, safety, and welfare from noise and safety issues associated with the Base, as well as preserve operational objectives at MHAFB. The study evaluates three compatibility components: hazards to flight operations from vertical obstructions on land uses, aircraft noise, and accident potential resulting from aircraft operations.

The flight tracks that are presented in the AICUZ have been developed based on consideration of the three key factors. These three considerations were taken into account for each type of aircraft operating at MHAFB since they each have different parameters for levels of noise etc. At the time this study was prepared, compatibility and encroachment factors only presented minor issues. The majority of the land that would be affected by, or have an effect

on MHAFB was either undeveloped, low density farmland, or livestock grazing, with a few scattered farmsteads and single family dwellings located within the established noise contours.

Deficiencies: Information is dated, AICUZ needs to be updated

Noise

Understanding Noise

Section 3.2 provides a more detailed description of noise.

Noise is the cornerstone of the AICUZ study. In order to measure noise levels and develop noise contours for flight operations, two methods were used: the computerized Day-Night Average A-Weighted Sound Level (DNL) metrics, and the DOD NOISEMAP program. Using these models, noise contours were plotted in increments of five decibels (dB), ranging from a DNL 65 dB contour to a DNL ≥80 dB contour. Relative to local communities, flight operations have been refined to generate minimal impact on residents, including avoiding populated areas and minimizing night flights. To fully appreciate the findings and recommendations presented in the AICUZ study, it is beneficial to have an understanding of how military aircraft noise is measured, evaluated, and graphically illustrated. Information on this can be found in Section 3.2 under Compatibility Factor #7, Noise

Vertical Obstructions

Vertical obstructions are evaluated based on Federal Aviation Administration (FAA) Regulation Part 77, Subpart C (see Compatibility Issue 3 in Section 3.2 and the Appendix for more details on this regulation). This regulation looks at the height of vertical structures or natural features in relation to their distance from the ends of the runway. Using the distance formula identified by this regulation, local jurisdictions can determine the height restrictions near airfields.

Accident Potential Zones

Understanding APZs and CZs

Section 3.2 provides a more detailed description of Accident Potential Zones and Crash Zones. As part of the AICUZ program and to aid in land use planning surrounding military bases, the DOD established Accident Potential Zones or APZs. These areas are determined based on a statistical analysis of all DOD aircraft accidents. Every Air Force installation has delineated at both ends of all active runways a set of three accident potential zones referred to as the Clear Zone (CZ), Accident Potential Zone I (APZ I), and Accident Potential Zone II (APZ II). The CZ is the area adjacent to each end of the runway and is the most hazardous of the three areas. The overall risk in these areas is so great that the DOD typically purchases land or easements on land that lies within them. The runway at MHAFB has a CZ that measures 3,000 feet wide by 3,000 feet long. APZ I measures 3,000 feet wide by 5,000 feet long, and APZ II measures 3,000 feet wide by 7,000 feet long. The AICUZ report contains a table showing all types of compatible or incompatible land uses within each of the three accident potential zones.

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Idaho National Guard Comprehensive Installation Plan

A comprehensive plan for all Idaho National Guard installations was published in February 2008. Not only does the plan provide an overview of Gowen Field and the Orchard Training Area (OTA), it also covers other statewide Idaho National Guard facilities such as Readiness Centers (armories), Field Maintenance Shops, recruiting storefronts, and Local Training Areas. The three primary National Guard goals that are outlined in the plan are:

- Provide the best trained, best lead, and most highly motivated military to be ready to respond to State of Idaho emergencies and to augment the United States (U.S.) military in the War on Terrorism.
- Maintain training facilities and ranges to improve utilization and facilitate training required to perform our missions.
- Recruit and retain sufficient National Guard members to sustain current funding level (\$177 million) and support current mission assignments.

The main focus of the plan is to two fold: to provide an overview of the types and locations of activities that take place at the specific installations operated by the Idaho National Guard, and to make installation decision-makers aware of issues that might affect future development of the facilities. It is meant to be used as a tool to help attain community planning goals and protect cultural and natural resources at the various installations. Finally, it discusses future needs of military facilities to accommodate growth, such as the development of new buildings or additions of new equipment or training areas. Balancing these needs with the growth of surrounding communities is the key to sustaining a compatible environment between all parties.

Idaho Army National Guard Statewide Operational Noise Management Plan

In response to the Noise Control Act of 1972 and the Quiet Communities Act of 1978 passed by Congress, the Department of the Army established the Operational Noise Management Program. The purposes of this program are to address all forms of noise generated by military activities and determine its effect on local communities and effectively manage the noise to reduce the impact to residents.

The 2006 Idaho Army National Guard (IDARNG) Statewide Operational Noise Management Plan is intended to promote compatible land use planning through the use of Noise Zones (NZ) I, II, and III and Land Use Planning Zones (LUPZs) based on noise levels. Each zone has a different level of noise associated with it, depending on its distance from the source, and recommended land uses that would be compatible within each zone. The primary purposes of the Operational Noise Management Program are to: protect the health and welfare of people from environmental noise generated by Army activities both on and off installations, and reduce the impacts of

Army generated noise on communities to the extent feasible without curtailing necessary Army activities. Program literature identifies the roles and responsibilities of Army planners, including monitoring noise levels to ensure they are minimal and assessing noise impacts on the surrounding communities, to ensure compatibility between an Army installation and its neighboring areas. The types of noise sources at Orchard Training Area are generated by small arms, large arms and artillery, explosives, tank and vehicle operations, and aircraft, including various types of helicopters and airplanes.

Gowen Field / Orchard Training Area Integrated Natural Resources Management Plan and Environmental Assessment

The IDARNG prepared an INRMP for the natural resources within the Orchard Training Area (conducted from 2004 to 2008) which fully complies with the Sikes Act Improvement Act, the National Environmental Policy Act, the Endangered Species Act, and Public Law 103-64, Morley Nelson Snake River Birds of Prey National Conservation Area. The plan not only ensures that federal stewardship requirements of natural resources and compliance with environmental laws and regulations are maintained, it also allows the ability to maintain sufficient lands for military missions to be accomplished.

The INRMP encourages interaction between the IDARNG, Bureau of Land Management (BLM), and other entities with the intent to maintain and protect the natural assets of the area. It was prepared under a partnership including the U.S. Fish and Wildlife Service (USFWS), the Idaho Department of Fish and Game (IDFG), the BLM, Shoshone Paiute Tribes, and other local, state, and federal entities. The plan proposes specific projects and steps to be taken in order to balance natural protection and sustainment of a realistic military mission. The overarching goals of the INRMP include:

- Provide quality natural resources as a critical training asset upon which to accomplish the military mission of Orchard Training Area.
- Comply with laws and regulations that pertain to management of Orchard Training Area natural resources.
- Manage natural resources within the Orchard Training Area to assure responsible stewardship of public lands entrusted to the care of the National Guard.
- Support goals and objectives established by the BLM and mandated by Public Law 103-64 for the effective management of the Morley Nelson Snake River Birds of Prey National Conservation Area. Memorandum of Understanding: Idaho Military Division & Bureau of Land Management.

In 1979, the Governor of Idaho, on behalf of the Idaho Military Division (IMD), signed a Memorandum of Understanding (MOU) with the State Director of the BLM, authorizing the IDARNG use of the OTA for military training. This MOU stipulated reviews every five years. In response to the creation of the

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Morley Nelson Snake River Birds of Prey National Conservation Area, (NCA), the MOU was rewritten in 2003 to include a direct reference to this NCA. The 2003 agreement set forth the following objectives:

- Provide the BLM and IMD clear operating procedures, responsibilities, and limitations for the use and management of the OTA;
- Continue military use of the public lands in the OTA consistent with the NCA;
- Ensure the safety of the general public, BLM, and military units using the OTA;
- Provide for the authorization and protection of IMD facilities in the OTA;
- Provide for the rehabilitation of areas disturbed by military training or military training-related fires; and
- Provide a means to control unauthorized use of the OTA.

The MOU requires the two parties to meet annually to discuss the IMD's use of the OTA for the following year. The parties agreed to jointly assess disturbance to the OTA from military activities, develop a fire mutual aid operating plan, to protect and manage cultural resources within the OTA, and to develop and maintain law enforcement standard operating procedures for the OTA.

Idaho Army National Guard Integrated Cultural Resources Management Plan (ICRMP)

All Army and Army National Guard installations and sites that are supported with Federal funds or that require Federal approval are required to prepare an ICRMP as compliant to DOD Instructions 4715.3, Army Regulations (AR) 200-4, and National Guard Bureau All States Letter on February 8, 2001. The purpose of the plan is to ensure compliance with Federal historic preservation regulations and responsible stewardship of cultural resources by the IDARNG, while also maintaining efficient military mission operations. The document identifies and evaluates historic properties on IDARNG lands and provides a five-year plan for protecting them.

The 2003-2007 IDARNG ICRMP was prepared as a joint undertaking between the IDARNG and the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation. It was recognized that the Shoshone-Paiute Tribes do not represent all of Idaho's sovereign Indian Tribes. The other tribes that have identified cultural resources within the study area include the Coeur d'Alene Tribe, the Kootenai Tribe of Idaho, the Nez Perce Tribe, and the Shoshone-Bannock Tribes. The plan examines all IDARNG facilities in the State of Idaho, but focuses primarily on the OTA. Some of the overall goals outlined in the document include:

- Provide guidance and procedures for the IDARNG to meet its legal responsibilities and ensure that the identification, evaluation, and protection of cultural resources take place during the planning and implementation of all military activities.
- Maintain long-term working relationships with the SHPO, BLM, and the Coeur d'Alene, Kootenai, Nez Perce, Shoshone-Bannock, and Shoshone-Paiute tribes.
- Integrate cultural resource issues into other IDARNG documents.
- Provide training to IDARNG staff regarding federal compliance requirements, standard operating procedures, Native American consultation, and effective planning.

Gowen Field currently contains a large amount of World War II era buildings. Of the 104 buildings evaluated by the Air Guard, 94 were constructed during World War II. A few of the buildings were deemed eligible for listing in the National Register of Historic Places (NRHP). The plan also discussed the urban growth that has located around Gowen Field and the changes the installation has undergone since the 1950's; particularly the transition from industrial and agricultural to heavy commercial and residential uses.

Since the 1970's, several surveys have been conducted by various entities for lands within the Orchard Training Area. As a result, through the combination of BLM and Boise State University survey efforts, 31 significant cultural and historic sites have been identified and protected through monitoring strategies. The majority of these sites contain Native American resources. In addition, 74 archaeological sites have been recorded, which includes 35 prehistoric sites, 30 historic sites, and nine multi-component sites. Of these sites, 31 have been formally nominated to be included in the National Register of Historic Properties.

Orchard Training Area Integrated Wildland Fire Management Plan

The Orchard Training Area (OTA) Integrated Wildland Fire Management Plan (IWFMP) was developed to identify firefighting responsibilities on the BLM land used by the IDARNG for training. The IWFMP includes the Cooperative Wildland Fire Protection Agreement between the Idaho Army National Guard and the Bureau of Land Management, which identifies the boundary of the OTA firefighter's area of responsibility. The agreement provides OTA firefighters with initial attack responsibility for the geographical area within the OTA. Conversely, the area of mutual support is more discretionary and reflects a boundary which extends past the OTA (as shown in Figure 4-1) and can vary according the conditions and circumstances. Notably, the plan documents the occurrence of fires on the OTA, stating that nearly 42% of the training area has burned since 1980. The plan outlines procedures for training activities to minimize the risk of fire during periods when danger is high. OTA Range Control is authorized to limit or modify the use of certain munitions based on fire danger based on the recommendation

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of the Boise Interagency Dispatch Center; an agency whose members include the BLM, the Boise National Forest, and the Southwest Idaho Department of Lands. When fire danger is rated high, very high, or extreme, military activities can be limited, modified, or suspended.

The plan additionally sets forth procedures for communications, dispatch, suppression, records and monitoring and rehabilitation needs. A burn plan as well as smoke management and air quality recommendations are additionally included in the plan.

4.2 Local Jurisdiction Planning Tools

This subsection outlines planning tools used by local jurisdictions including comprehensive plans, zoning and development codes, and special area and special purpose plans and studies.

State of Idaho

The State of Idaho requires cities and counties to develop local land use planning and zoning standards through Title 67 State Government and State Affairs, Chapter 65 Local Land Use Planning.

COMPREHENSIVE PLANS

The Idaho Legislature passed the Local Planning Act in 1975, providing a statutory framework for local planning and land use regulation. However, it allowed these regulations to be administered and decisions made by local officials. In 1995, the Act was renamed the Local Land Use Planning Act, due to the fact that it includes zoning, subdivision regulation and Area of City Impact (ACI), as well as comprehensive planning.

The goals of the Local Land Use Planning Act include:

- To protect property rights while making accommodations for other necessary types of development such as low-cost housing and mobile home parks.
- To ensure that adequate public facilities and services are provided to the people at a reasonable cost.
- To ensure that the economy of the state and localities is protected.
- To ensure that the important environmental features of the state and localities are protected.
- To encourage the protection of prime agricultural, forestry and mining lands for production of food, fiber and minerals.
- To encourage urban and urban-type development within incorporated cities.
- To avoid undue concentration of population and overcrowding of land.

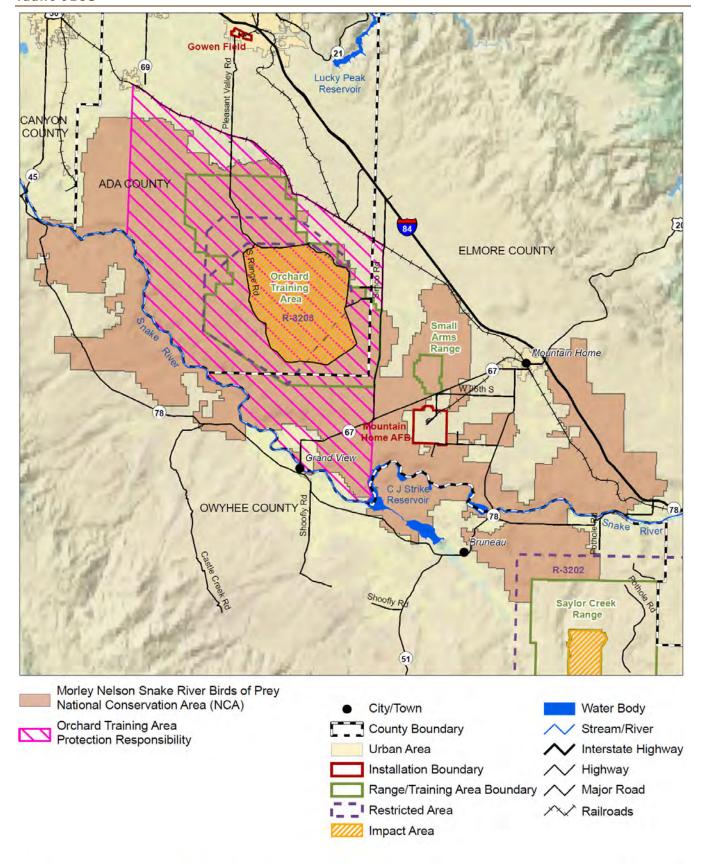






Figure 4-1
OTA FIRE PROTECTION RESPONSIBILITY

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- To ensure that the development on land is commensurate with the physical characteristics of the land.
- To protect life and property in areas subject to natural hazards and disasters.
- To protect fish, wildlife and recreation resources.
- To avoid undue water and air pollution.
- To allow local school districts to participate in the community planning and development process so as to address public school needs and impacts on an ongoing basis.

The Local Land Use Planning Act requires every city and county to enact:

- A comprehensive plan;
- A zoning ordinance, with provisions for variance applications and timely processing of permits;
- A subdivision ordinance;
- Area of city impact ordinances;
- An ordinance or resolution establishing procedures for public hearings; and
- Regulations for confined animal feeding operations (counties only).

Even though the Local Land Use Planning Act requires every city and county to enact zoning and subdivision ordinances and a comprehensive plan, it is important to note that each local government determines the level of complexity of planning and land use regulation that is ultimately prepared and adopted.

The Local Land Use Planning Act also grants cities and counties the authority to adopt certain laws and policies at the discretion of the governing board. Local governments have the ability to:

- Establish a planning and zoning commission (or separate planning and zoning commissions) to assist the governing board address planning and land use matters,
- Establish a future acquisitions map,
- Provide for development agreements,
- Allow transfers of development rights,
- Establish hearing examiners,
- Regulate planned unit developments,
- Provide for enforcement of land use regulations,
- Establish development standards, and
- Provide for conditional use permits.

ZONING

As identified above, the provision of zoning is also regulated by the State of Idaho, and states:

"Each governing board shall, by ordinance adopted, amended, or repealed in accordance with the notice and hearing procedures provided under section 67-6509, Idaho Code, establish within its jurisdiction one (1) or more zones or zoning districts where appropriate. The zoning districts shall be in accordance with the policies set forth in the adopted comprehensive plan. Within a zoning district, the governing board shall where appropriate, establish standards to regulate and restrict the height, number of stories, size, construction, reconstruction, alteration, repair or use of buildings and structures; percentage of lot occupancy, size of courts, yards, and open spaces; density of population; and the location and use of buildings and structures. All standards shall be uniform for each class or kind of buildings throughout each district, but the standards in one (1) district may differ from those in another district."

The zoning ordinance (also referred to as a development code) is the primary mechanism whereby local governments influence the direction, type, use, density, and location of development. The primary purpose of zoning is to:

- Protect public health, safety, and welfare;
- Protect against physical danger, particularly safety considerations for properties in proximity to military ranges or within military flight areas;
- Protect against common law nuisances noise, vibration, air pollution, etc. – associated with military operations;
- Protect against aesthetic nuisances impacting military installations;
- Protect against "psychological nuisances" such as perceived and actual dangers associated with military operations;
- Regulate uses impacting light, glare, air quality, and privacy issues; and
- Provide open space and agricultural preservation.

Zoning ordinances enumerate uses permitted by right or are subject to the approval of a land use review process within each district. Local zoning ordinances and development codes are the primary mechanisms to designate defined geographic areas or zones that separate incompatible uses. Most ordinances also describe a process to consider and grant discretionary permits, provided certain conditions are met. These discretionary permits are often referred to as Conditional Use Permits (CUP) or Special Use Permits (SUP).

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In addition to land uses, the zoning ordinances sets the development standards for permitted land uses, densities or development, location of structures, building heights, setbacks, acreage requirements, and other standards.

City of Boise

COMPREHENSIVE PLAN

The Boise City Comprehensive Plan (adopted in 1997) addresses compatible land use throughout the entire City, which includes the Boise Airport and Gowen Field as shown on Figure 4-2. The comprehensive plan is organized and mandated by state law. As defined by Section 67-6508 of the Idaho State Code, the mandated and optional elements often overlap in subject matter and policy direction. The plan organizes the City into a total of 10 planning areas, with the Airport Planning Area including Gowen Field. The boundaries for this planning area include the Boise Airport and the additional area covered by the Airport Master Plan. Appropriate uses include Airport activity, aviation-related businesses and the Idaho National Guard. It does not include commercial and industrial uses around the airport. Development intensity is limited to a floor area ratio (FAR) of 0.35. The comprehensive plan policies that pertain to the Airport Planning Area include:

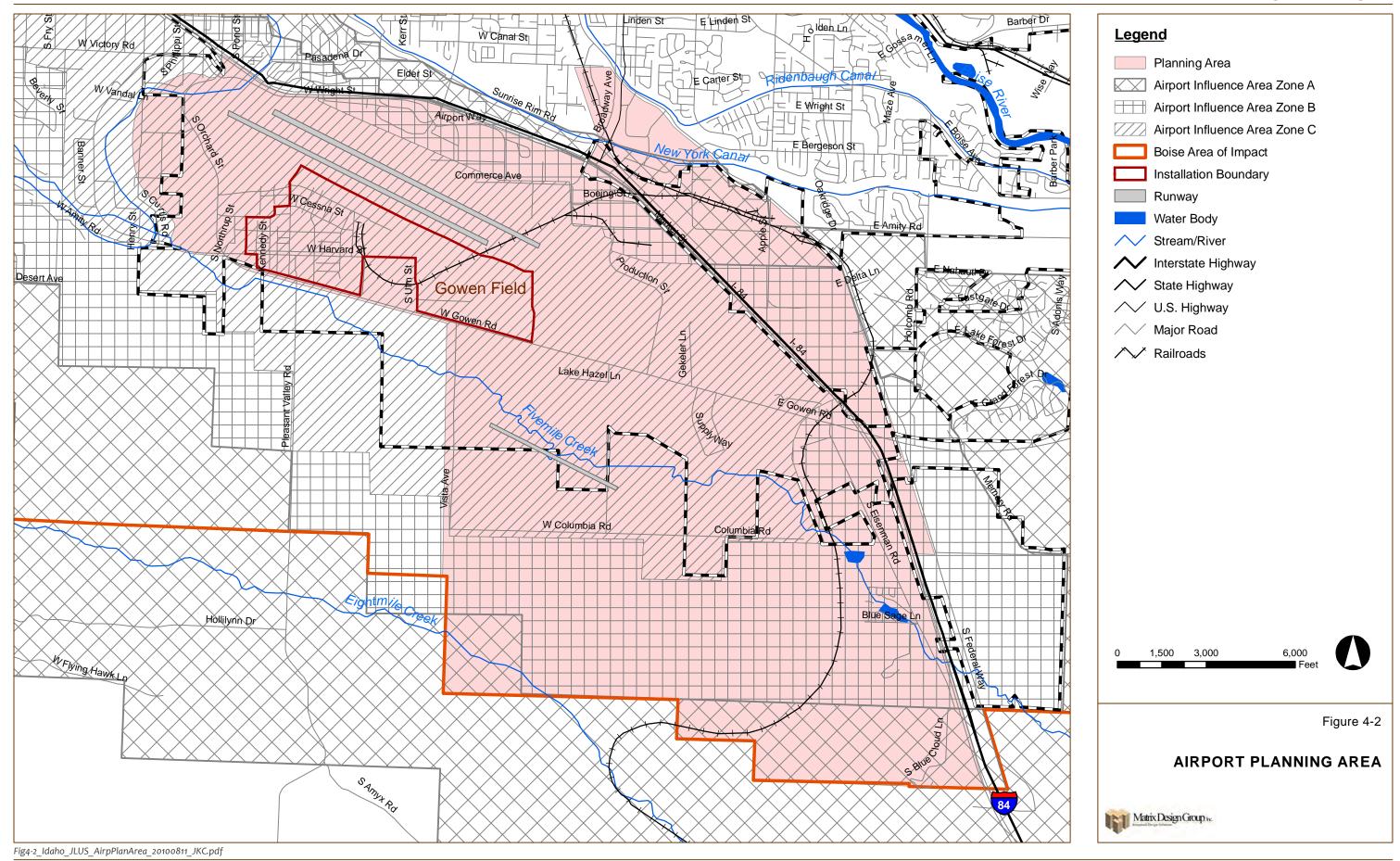
GOAL: ACHIEVE A CITY THAT MINIMIZES SUBURBAN SPRAWL, THAT PROVIDES FOR A DIVERSE MIXTURE OF LIFESTYLES AND ATMOSPHERES AND A SENSE OF PLACE THAT VARIES THROUGHOUT THE DIFFERENT AREAS OF THE CITY, AND THAT EFFICIENTLY PROVIDES BASIC SERVICES AND FACILITIES IN CLOSE PROXIMITY TO WHERE PEOPLE LIVE.

OBJECTIVE 14: LAND USE AND DEVELOPMENT POLICIES SPECIFIC TO THE AIRPORT AREA SHALL INCLUDE THE FOLLOWING:

Policies:

- 1) Protection of the airport from encroachment of residential uses and other incompatible forms of development shall be the highest priority for the Airport Planning Area.
- 2) The building standards and land use restrictions of the Airport Influence Area shall be strictly enforced.
- 3) Industrial areas east and west of the airport shall be supported as the appropriate location for manufacturing and open-storage uses.
- 4) The Factory Outlet Mall area shall be allowed to continue to develop with regional retail uses, and shall continue the design theme of inward-oriented buildings with strong pedestrian connections.
- 5) South of the Factory Outlet Mall, the I-84 corridor shall be reserved for garden office developments that present an attractive eastern entrance to the Boise area through architectural design, landscaping, signage and unified access.
- 6) The Airport Conservation Area south of the Boise Airport shall be reserved for future expansion of the airport. Allowable uses shall be limited to grazing, agriculture, mining and low-intensity recreation such as golf courses.
- 7) The northern portion of the airport area shall continue to be an appropriate location for retail services associated with regional air travel, such as hotels and motels, restaurants, parcel delivery services, car rentals and related uses.
- 8) All development within the Airport Conservation Area shall be required to adhere to the standards for development as outlined in Chapter 3 Environmental Quality, 3.3 Noise Goals, Objectives and Policies, Objective 2, Policy 2) a-d.

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Additional policies in the land use and other comprehensive plan elements that are pertinent include:

LAND USE

OBJECTIVE 9: SPECIAL OVERLAY DISTRICTS SHALL BE ADOPTED TO PROVIDE UNIQUE USES AND OR PROTECTION FOR UNIQUE AREAS.

Policy: 1) Overlay districts may include: — Airport Overlay, to include the Airport Influence Area Boundaries

OBJECTIVE 13: LAND USE AND DEVELOPMENT POLICIES SPECIFIC TO THE SOUTHWEST SHALL INCLUDE THE FOLLOWING:

Policy: 9) The industrial area west of the airport shall be protected for light manufacturing uses. Retail and office uses may be permitted outside the approach zones and in compliance with the airport land use standards.

Policy: Development in the Reserve Planned Community area shall adhere to the land-use restrictions of the Airport Influence Areas.

OBJECTIVE 15: LAND USE AND DEVELOPMENT POLICIES SPECIFIC TO THE SOUTHEAST SHALL INCLUDE THE FOLLOWING:

Policy: Land use restrictions of the Airport Influence Area shall be adhered to as described in Chapter 3 Section 3.3 Noise Goals, Objectives and Policies.

ENVIRONMENTAL QUALITY

OBJECTIVE 1: ADOPT AND ENFORCE APPROPRIATE NOISE ORDINANCES, REGULATIONS AND GUIDELINES TO CONTROL AMBIENT AND SITE-SPECIFIC NOISE CONDITIONS AND IMPACTS.

Policies:

- 2) Modify and update all local noise ordinances, regulations and guidelines as required by state and federal standards and guidelines, including the latest edition of the Airport Master Plan.
- 2) All new development and existing structures within the Airport Influence Area must be soundproofed according to (specific) standards.

OBJECTIVE 3: Protect existing noise-generating uses from encroachment of noise-sensitive uses.

Policies:

- 1) Control land uses within the Airport Influence Area to promote non-residential uses, limit expansion of existing noise-sensitive land uses and prohibit increased residential uses.
- 2) Control land uses within the Federal Way and Airport heavy industrial area to prohibit encroachment of residential and other "noise-sensitive" uses.

ECONOMIC DEVELOPMENT

OBJECTIVE 1: FOSTER A DIVERSE ECONOMY THAT WILL MINIMIZE THE IMPACTS OF CYCLICAL ECONOMIC DOWNTURNS ON THE CITY AND ITS RESIDENTS.

Policy: Coordinate with the Chamber of Commerce, the State Department of Commerce and others to monitor local, regional and national economic trends and market Boise as a desirable place to do business.

OBJECTIVE 2: PROTECT THE ECONOMIC CLIMATE FOR EXISTING BUSINESSES AND MAINTAIN OPPORTUNITIES FOR BUSINESS EXPANSION.

Policies:

- 4) Maximize the economic viability of commercial and industrial uses through the creation of specialized districts and nodes including the Downtown, Park Center, Town Square Mall, the Factory Outlets, Micron Tech Park, Hewlett-Packard Tech Park, the Franklin Industrial Corridor, the Boise Airport, and Boise State University.
- 6) Protect existing business and industrial areas from encroachment of incompatible or non-complimentary uses.

OBJECTIVE 5: PARTICIPATE IN THE GROWING REGIONAL ECONOMY IN A MANNER THAT MINIMIZES CONFLICT BETWEEN JURISDICTIONS AND THAT MAXIMIZES NATURAL MARKET STRENGTHS.

Policy: Coordinate comprehensive planning efforts with the other cities and agencies in Ada County, Canyon, Boise, Elmore and Gem Counties.

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NOISE

OBJECTIVE 2: PREVENT AND MITIGATE ADVERSE IMPACTS OF EXCESSIVE NOISE EXPOSURE.

Policy: 2) All new development and existing structures within the Airport Influence Area must be soundproofed according to the following standards:

- a. All new residential development and new schools in Airport Influence Area A, which are affected by average sound levels in the 60-65 DNL and/or aircraft traffic patterns below 1,000 feet, shall be required to provide a sound level reduction of 25 dB.
- b. All development within Airport Influence Area B is affected by average sound levels in the 65-70 DNL and/or aircraft traffic patterns below 1,000 feet. Residential development is not allowed. All compatible uses will be required to provide sound insulation in noise sensitive areas of a facility.
- c. All development within Airport Influence Area B-1 is affected by average sound levels in the 65-70 DNL and/or aircraft traffic patterns below 1,000 feet. New residential development shall be required to provide a sound level reduction of 30 dB. For new residential development, the maximum density is three residential units per acre. No new schools are allowed. Office and commercial uses are compatible. All compatible uses shall be required to provide sound insulation in noise sensitive areas of a facility.
- d. All development within Airport Influence Area C is affected by average sound levels greater than 70 DNL. The approved Airport Noise Compatibility Plan identifies existing residential uses in this area to undergo sound insulation. Residential uses in this area shall be considered non-conforming and no new residential development is allowed. Non-noise sensitive manufacturing, industrial and commercial uses are allowed. All compatible uses shall be required to provide sound insulation in noise sensitive areas of a facility.

Due to the access and use of OTA by personnel from Gowen Field, the area of the City located between these two originations and destinations are important in compatibility planning. The comprehensive plan identifies two land use categories for the majority of the land within this region and includes Airport Conservation and General Industrial categories. The Airport Conservation Area includes the area south of the developed Boise Airport, which is reserved for future expansion. Uses are limited to livestock grazing, mining, farming and non-intensive recreation such as golf courses. The other prevalent category in this area is General Industrial, which includes standard industrial land uses such as Heavy and light manufacturing, warehousing, mini-storage, open storage, multi-tenant industrial parks, automotive repair and similar uses are permitted. Limited office and commercial uses may be permitted as ancillary uses. Development intensity is limited to a 0.50 FAR.

The comprehensive plan has been amended and updated over the years and now includes the designation of an Airport Influence Area (AIA). Land use standards have been developed for the AIA, which includes four different zones, based on proximity to the runway as shown on Figures 4-3 and 4-4. All new developments and existing structures within the AIA must grant an avigation easement on the entire property to the Airport. All sign and exterior lighting within the AIA must also be directed down. Furthermore, all new structures within the AIA are required to meet specific sound attenuation standards depending on the noise level of the respective zone it is located within.

Currently, the City is developing a new comprehensive plan known as *Blueprint Boise*. *Blueprint Boise* will focus on creating a clear and compelling vision for the City's future as well as integrating regional planning concepts and continuing the concepts of transit-oriented development and mixed-use activity centers that were identified in the 1997 Comprehensive Plan. Included in the comprehensive plan update will be reorganization and reformatting of the city's Code as well as amending the Code to ensure that the appropriate tools and regulations are in place to implement the new comprehensive plan. The draft update includes policies to maintain the AIA, as well as the industrial uses west of the airport. *Blueprint Boise* is scheduled to be complete in 2009 and will not be adopted until after completion of the Idaho JLUS.

Deficiencies:

 The existing 1997 Comprehensive Plan does not address Gowen Field specifically. However the 2009 update is in draft form (Blueprint Boise) and addresses the Idaho Army National Guard use of Gowen Field.

ZONING CODE (TITLE 11 OF THE BOISE CITY CODE)

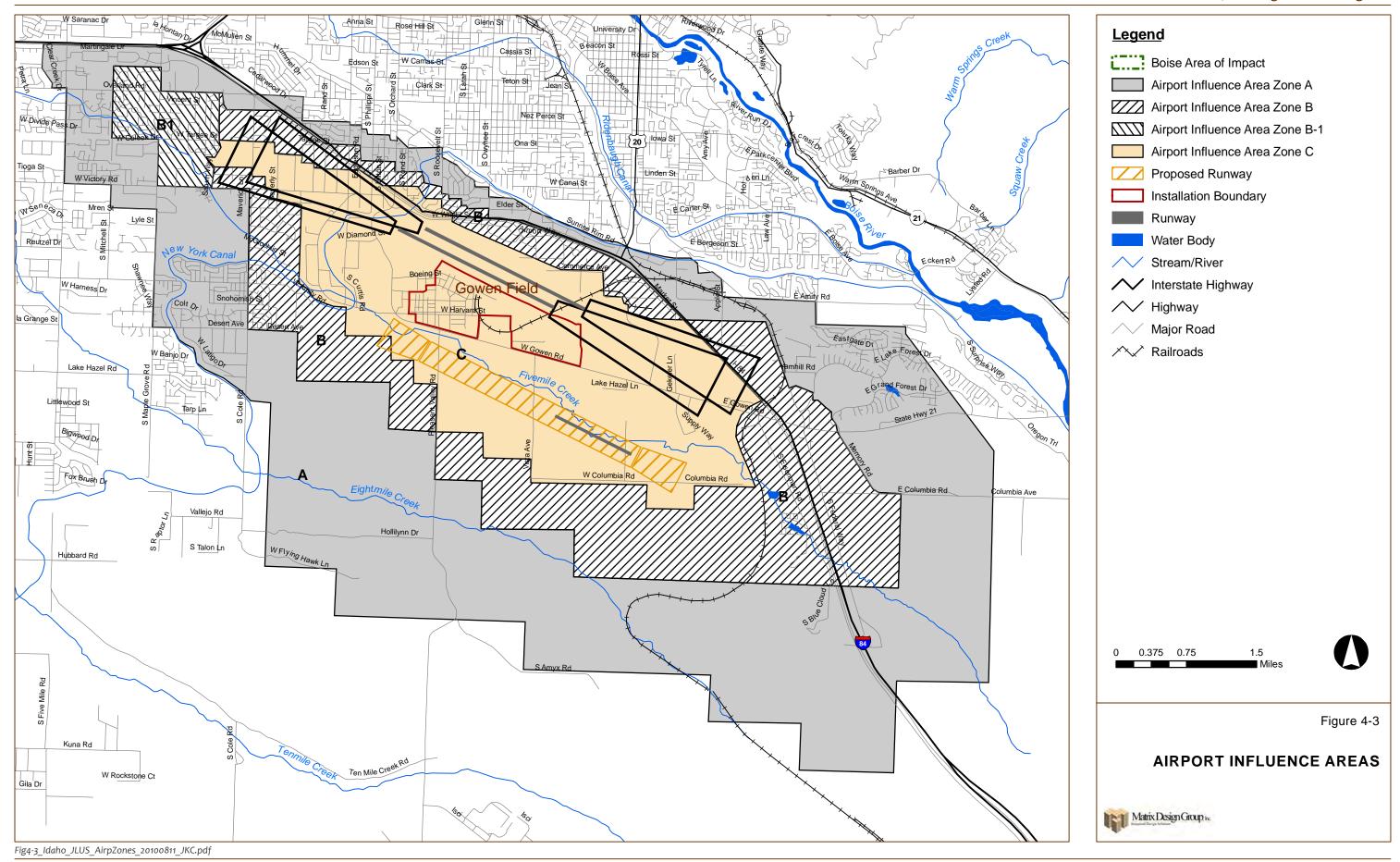
Zoning is considered a semi-permanent planning tool because it provides the regulatory foundation to guide development, but can be amended at any time. While the zoning code typically controls the type, density, and intensity of land use, it also has the ability to serve as a tool to prevent future encroachment onto the installation or adjacent operational areas. The zoning code can be used as the regulatory foundation to ensure mission sustainability; particularly in relation to dark sky provisions, height restrictions, and sound attenuation for certain districts.

The Boise Zoning Code addresses areas where downward directed lighting is required to avoid light trespass onto adjacent property. However, its regulations do not specifically address light and glare impacts in proximity to the airport or military facilities.

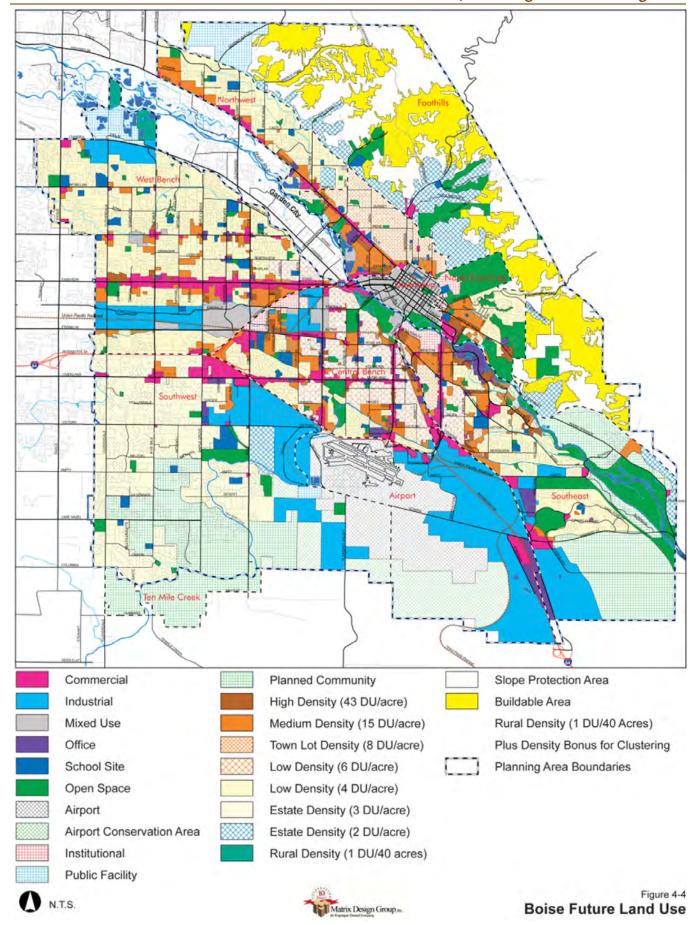
Deficiencies:

 The code does not reference Gowen Field specifically with regard to compatible land uses or light and glare prevention.

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AREA OF CITY IMPACT AGREEMENT

Section 11-15 of the zoning code is titled Area of City Impact Agreement. This agreement, executed between Boise and Ada County designates the area around Boise as the ACI as shown on Figure 4-5. This is the land that is available for the City to annex. If the City wishes to annex land outside of this boundary, then it is required to renegotiate the Area of City Impact Boundary with Ada County in accordance with Idaho Code 67-6526(d). In certain circumstances pursuant to Idaho Code 50-222, renegotiation is not required. The agreement outlines which jurisdiction has regulatory authority of specific land use activities. The division of power is as follows:

- The Boise City Comprehensive Plan, the Boise City Park and Recreation System Plan, and the Boise street numbering standards are applicable within the Area of City Impact.
- The Area of City Impact remains under the provisions of the Ada County Zoning Ordinance.
- Both the City and the County are required to notify each other in the event an amendment is proposed within the ACI of either jurisdiction that pertains to its comprehensive plan, zoning ordinance, subdivisions, rezonings, and conditional use permits.
- The City of Boise impact fees are applicable to development in the Area of City Impact.

Deficiencies:

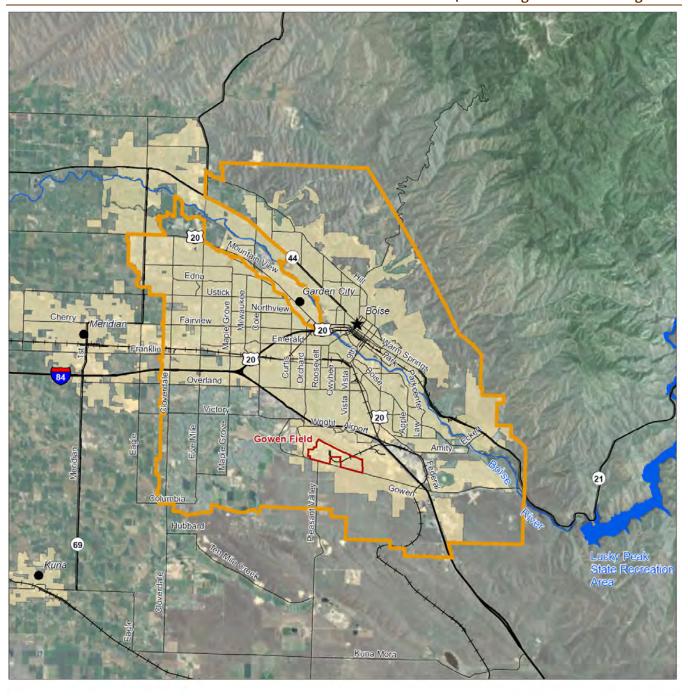
• The Area of City Impact Agreement does not apply directly to interagency coordination on compatibility related issues.

BOISE AIR TERMINAL ORDINANCE (TITLE 12 OF THE BOISE CITY CODE)

The Boise Air Terminal Ordinance was drafted jointly by the City of Boise and Ada County to designate a Boise Air Terminal District. This ordinance and district also includes Gowen Field. The District includes nine zones around the airport and Gowen Field, at varying lengths originating from the runways. Each zone allows different types of land uses and height limitations, depending on their proximity to safety zones and distances from runways.

In high impact noise areas, the City has adopted a policy prohibiting the approval or issuance of zone changes, conditional use permits, subdivision plats, or building permits for uses subject to noise impacts within an area identified as the Noise Exposure Forecast for three runways at the airport. This is an important compatibility tool as it excludes certain incompatible uses within noise-sensitive areas. Land use limitations are based on proximity to the landing strip, with the adjacent/proximate areas to the landing strip limited to open space, directional aids, and structures essential to air navigation and operation.

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Stream/River





Figure 4-5
CITY OF BOISE AREA OF IMPACT

The next zone (Zone B) beyond the landing strip allows agricultural uses, sanitary landfills, and sand and gravel pits. The third zone (Zone H) permits limited uses to those allowed in the zoning regulations with the exception of hospitals, schools, and public gathering places. Residential uses are allowed, however site design for residential areas in this zone is more extensive than typically required in the zoning ordinance. Structures in this third zone (Zone H) are required to provide sound attenuation reducing the interior sound level to sixty decibels (60 dB).

Deficiencies:

- The ordinance does not adequately address light, glare, or frequency compatibility factors.
- The allowance of sanitary landfills in Air Terminal Zone B may increase the presence of birds which could cause a safety issue for aircraft.
- Sound attenuation is only clearly identified for one of the seven zones outlined in the Air Terminal Ordinance.

BUILDING CODE (TITLE 4-02 OF BOISE CITY CODE)

The City of Boise has adopted the 2006 International Building Code (IBC), portions of the 2006 International Residential Code (IRC), and portions of the 1997 Uniform Building Code to regulate building construction, materials, alteration and occupancy to ensure health, safety and welfare. The building code regulates building construction such that it is compatible with military installations, including heights for residences and other types of buildings. Building codes, similar to other regulatory tools, are considered semi-permanent. The Boise Building Code serves an important role in compatibility planning.

Deficiencies:

 Although sound attenuation standards are required for Air Terminal Zone B, the City adopted building codes do not address the technical methods for accomplishing the required levels of sound attenuation.

SUBDIVISION ORDINANCE (CHAPTER 9-20 OF BOISE MUNICIPAL CODE)

The subdivision ordinance describes the manner in which land can be subdivided within the corporate limits of the City of Boise. The subdivision ordinance can be a useful tool in promoting compatibility by regulating size and density of new developments, or specifying the type of infrastructure needed in order for the subdivision of land to take place. The Boise Air Terminal District comments on all subdivision plats within the Airport Influence Area (AIA). If a subdivision request is approved within the AIA the Airport requires a plat note as well as an avigation easement stating that the property is located in the AIA.

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Deficiencies:

None noted at this time.

COMPREHENSIVE PARKS AND RECREATION SYSTEM PLAN UPDATE, 2004

The plan's Open Space chapter addresses acquisition and land management strategies currently employed to retain open space lands in the City of Boise.

Boise has sought to acquire and manage many of the region's most important open space features. Public open spaces such as the Boise Foothills have been protected through the *Public Lands Open Space Management Plan for the Boise Foothills.* The plan involved collaboration by all public land agencies, and passed with the \$10 million serial levy for foothills land acquisition in 2001. The foothills serial levy initiative acknowledged that a vast amount of foothills land extends beyond City boundaries. The lands are multijurisdictional, with ownership comprised of local, state, and federal entities.

Currently, approximately 6,100 acres of public lands are held as open space within Boise's Area of City Impact. Approximately 2,000 acres are preserved in perpetuity by public resource agencies such as Boise Parks & Recreation (Department), Idaho Department of Fish and Game, and Idaho Department of Parks and Recreation. Approximately 247 acres are considered "semi-protected," that is, under the control of a public agency or other entity that uses lands for a specific purpose that may provide for partial protection of open space values, such as the Boise Airport, Bureau of Reclamation (BOR), canal companies, or others. Idaho Department of Lands (IDL) manages 3,850 acres in the Boise Foothills that are within, or immediately adjacent to, the City's ACI. These lands are managed for financial benefit of the state's educational system and have been identified as important in the pursuit of an exchange to another agency to ensure protection as open space.

PUBLIC LANDS OPEN SPACE MANAGEMENT PLAN FOR THE BOISE FOOTHILLS

This plan guides future open space acquisition and promotes coordination and cooperation among agencies, open space interest groups, private landowners, and the public. Key components of implementing the *Public Lands Open Space Management Plan for the Boise Foothills* include the following:

- Continue to assess open space impact fees to acquire identified heritage preservation sites.
- Pursue and maintain partnerships for acquisition and management of open space lands.
- Identify alternative funding sources and supplemental revenue streams that enhance limited acquisition and management resources (serial levies, grants, special purpose taxes, user supported services, exchanges, transfers, donations, volunteers, and others).

- Develop management plans and strategies to promote the linkage of, and connectivity to, public open space parcels, meet wildlife needs, protect rare and endangered plants, provide public education, protect natural resources, and provide for recreational trails.
- Establish strategically located public access trailheads that promote the open space experience by providing adequate parking, restroom amenities, and management signage.

FOOTHILLS CONSERVATION ADVISORY COMMITTEE

In 2001, a two-year property tax serial levy was passed to raise \$10 million for conservation efforts in the Boise Foothills. Beginning in November 2001, the City included the two-year levy in property taxes for commercial, residential and industrial property.

The Foothills Conservation Advisory Committee, consisting of 12 volunteer citizens appointed by the Mayor was established to manage the funds appropriated for conservancy. The Committee makes recommendations to the City Council for permanent protection of natural open space in the Boise Foothills, consistent with the open space serial levy.

To date, the committee has used \$6 million from the Foothills levy funds to acquire 8,200 acres of undeveloped foothills property protected as public open space through acquisition, donation, conservation easement, or land exchange. The remaining \$4 million has been set aside to focus on protecting critical habitat, riparian corridors, rare plants, historic sites, and potential trail connections from east to west across the Boise Front.

BOISE AIRPORT AVIGATION EASEMENTS

Many land owners in the Boise AIA have an avigation easement on their property. A majority of the easements were granted by the subdivision developer or obtained when the owner applied for a building permit from either Ada County or Boise City. These easements grant the Airport the right to use navigable airspace, generate noise associated with aircraft operations, and to prohibit future airspace obstructions. Between 1998 and 2003, the Boise Airport acquired approximately 28 residential parcels located off of Victory Road, to the west of the Airport, between Curtis and Cole Roads with FAA Part 150 Noise Grant Funds. These properties were identified in the 1996 Part 150 Noise Plan as being affected by high noise levels. The acquisition program was voluntary on the part of the owners. The project has been closed since the summer of 2003. Future home purchases are expected to be very limited as the majority of the eligible areas have been purchased.

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City of Kuna

COMPREHENSIVE PLAN

The City of Kuna recently updated its current comprehensive plan 2009. The updated comprehensive plan includes a future land use plan map, a proposed Area of City Impact, overlay districts and a future planning area. The plan clearly indicates that the City of Kona is growing and the goals and policies therein discuss how the City plans to manage that growth.

The plan clearly identifies how and in what manner the City of Kuna expects to grow. For example the Kuna's Area of City Impact (ACI) is reflected in the City's Future Comprehensive Land Use Plan Map to include all land currently within the City's municipal boundary and lands outside the municipality contemplated for future annexation. Additionally the plan prioritizes conservation and open space and such strategies as Conservation Design to minimize infrastructure expenditure and maximize conservation of open space. Some relevant excerpts from the Plan include:

PRIVATE PROPERTY RIGHTS

Goal 1: Ensure that the City of Kuna land use policies, restrictions, conditions and fees do not violate private property rights. Establish an orderly, consistent review process for the City of Kuna to evaluate whether proposed actions may result in private property "takings".

ECONOMIC DEVELOPMENT

Goal 1: Promote and support a diverse and sustainable economy that will allow more Kuna residents to work in their community.

OPEN SPACE

Goal 4: Preserve key natural and open spaces, maintain and enhance existing park spaces, create interconnectivity between areas through pathways and promote the development of additional park spaces to meet growing demands.

 Deficiencies: The plan does not represent the regional context nor does it discuss the impact of the surrounding military operations.

KUNA AREA OF CITY IMPACT

Like other cities in Idaho, Kuna also has an Area of City Impact that establishes land available for the city to annex into its incorporated limits from Ada County. New developments within the ACI are subject to compliance with the comprehensive plans of both Kuna and Ada County, and the zoning ordinance

of Ada County. As of June 2009, the ACI was included approximately 8 square miles of land around the City. Conditional use permits, zoning change requests, subdivision plats, comprehensive plan and zoning ordinance amendments, and planned unit developments within Kuna's ACI must be jointly reviewed by the City and the County. Upon negotiations between the City and County, the ACI can be amended to include or reorganize areas in which growth of the City is expected to occur. Kuna is proposing a new ACI that will expand the amount of land within it to approximately 58 square miles of land.

ZONING ORDINANCE

The City of Kuna has established five distinct zoning districts through its zoning ordinance. These five districts are Agriculture, Residential, Business, Manufacturing, and Miscellaneous. All of these except Agriculture include subzones that establish density, types of building allowed, and/or terms of use. Although Kuna is not currently affected by military operations at Gowen Field or OTA, its rapid growth could place it within the vicinity of one or both of these installations. Currently, the zoning ordinance does not address compatibility with military operations or establish any districts for such efforts.

Deficiency:

 Land use compatibility between the City of Kuna and nearby military installations is not established in the zoning ordinance.

SUBDIVISION ORDINANCE

The purpose of the City of Kuna Subdivision Ordinance is to promote health, safety, and welfare of residents, and ensure that the City develops in an orderly manner that does not cause gaps in utility infrastructure that could cost the City unnecessary funds to provide such services. The regulations set forth in this ordinance apply to lands within the City limits, as well as any property within one mile outside the corporate limits and within the ACI established between Kuna and Ada County. The ordinance also established standards for street widths, and naming configurations. All new subdivisions are required to be connected to City water and sewer and served with public utilities. If not available, resources must be constructed for future connection. Streetlights are required at all intersections and near all fire hydrants and have a maximum spacing of 250 feet throughout the interior and exterior of the subdivision. Streetlights must also conform to the requirements of the City and the public utility provider. There are no references to military operations at Gowen Field or OTA in the subdivision ordinance to provide standards if the city were to expand close enough to them.

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BUILDING CODE

The City of Kuna has adopted the 2006 International Building Code (IBC), including the incorporated IRC to guide building construction and all associated aspects within the City. Certain amendments have been added to the building code; however no amendments have been made relating to sound attenuation in the event that Kuna expands far enough to where it could be affected by noise at Gowen Field. As a caveat, agricultural buildings are exempt from the adopted codes.

Deficiency:

 Standards for sound attenuation and dark sky lighting are not included in they city's building codes.

City of Mountain Home

COMPREHENSIVE PLAN

The City of Mountain Home's comprehensive plan was adopted on November 24, 2008. The comprehensive plan includes chapters addressing a wide variety of topical areas including, mission and vision statement, property rights, population, economic development, community design, housing, natural resources and open space, hazardous areas, public services, transportation, parks and recreation, cultural resources, energy conservation, land use and planning.

Mountain Home AFB is referenced in the comprehensive plan, specifically relative to the topic of housing. Chapter 7.1 of the comprehensive plan states the following goal: Provide opportunities for quality housing, a variety of housing types, and quality residential living environment.

The Objectives and Action Steps of the plan don't directly address housing concerns but 7.4.2 states: The future challenges to the City will be in maintaining the affordability and adequate supply of certain housing types. Continuation or expansion of the Mountain Home AFB will place a demand on providing rental housing units at affordable rates. Additional retirement residents will also seek efficiencies in housing. At some point the demand for less expensive housing will reach a point where some disparity in costs with the rest of the region will be reached.

The comprehensive plan includes population forecasts from Mountain Home AFB, and analyzes the impact of retirees on the City's population. Additionally, the comprehensive plan outlined the economic impact of 2005 Base Realignment and Closure (BRAC) actions on the City in terms of civilian jobs lost. The economic development chapter of the comprehensive plan sets a goal of diversifying and improving the City's economy with action step 5.3.3 stating that the city will continue to work with the Air Force Base in planning housing, retail, and service uses to meet the needs of military personnel.

Additionally, action step 5.3.4 states that the City will continue to work with state and federal officials to ensure the long term viability of MHAFB.

The comprehensive plan additionally addresses noise issues in relationship to the Mountain Home Municipal Airport, which is occasionally used by the Idaho Army National Guard for helicopter operations. The comprehensive plan also includes action step 11.3.2 which states that the city will encourage open space, planting, construction materials and other noise attenuation methods be implemented to reduce the noise impact from aircraft on surrounding land uses.

A review of the City of Mountain Home Comprehensive Plan has outlined the following deficiency:

1. Although the comprehensive plan outlines a strong relationship between the City and MHAFB, specific protocol for coordination on impacts between the two entities are not outlined in the document.

MOUNTAIN HOME AREA OF CITY IMPACT

The Idaho Code requires that cities and counties negotiate an ACI to identify the logical urban fringe area adjoining cities with counties. The City of Mountain Home has established an Area of City Impact agreement outlining the location of the ACI and the ordinances and provisions governing the ACI. The following tools are applicable in the ACI:

- Zoning: Zoning for the land in the ACI is under the jurisdiction of Elmore County; however must be based on the City of Mountain Home's Comprehensive Plan.
- The ACI is subject to the Mountain Home Aquifer Community Development Overlay (CDO); provisions for the CDO are included in the Elmore County Zoning Ordinance. Provisions in the CDO mainly pertain to water, surface drainage, and sewer system requirements.
- Subdivision: The ACI agreement states that subdivision regulations are under the jurisdiction of the entity which regulated subdivisions at the time the agreement was signed.
- Other Permits: Rezonings, conditional use permits, variances, planned unit developments, and various other permits are under the jurisdiction of Elmore County. The County must notify the City of Mountain Home within 15 days of receipt of a completed permit application in the ACI.
- Traffic and Public Service: Elmore County and the City of Mountain Home share the responsibility of reviewing all land use projects to determine impacts to road capacity, traffic service, and all other public services.

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In addition to provisions for the topics above, the ACI agreement outlines review procedures, procedures for modifying the ACI, and measures for enforcement of the agreement.

ZONING ORDINANCE

The Mountain Home Zoning Code distinguishes 11 zoning districts for the City. These are divided up by residential, commercial, industrial, limited office/residential. Each of the first three categories has multiple districts based on density, sizes, and types of dwellings that can be placed on them. The maximum heights allowed are for districts that are non-residential, and are limited to 35 feet. There are no specific zoning districts established to provide land use compatibility with the military installations.

Deficiencies:

 Land use compatibility between the City of Mountain Home and MHAFB is not established in the zoning ordinance.

SUBDIVISION ORDINANCE

The purpose of the Mountain Home Subdivision Ordinance is to promote health, safety, and welfare of residents, while also ensuring that the City develops in an orderly manner that does not cause gaps in utility infrastructure that could cost the City unnecessary funds to provide such services. The regulations set forth in this ordinance apply to lands within the City limits, as well as any property within one mile outside the corporate limits and the ACI established between Elmore County and Mountain Home. All new subdivisions are required to be connected to City water and sewer and served with public utilities. If not available, resources must be constructed for future connection. Streetlights are required at intersections and other areas as deemed necessary by the City engineer. There are no references to Mountain Home AFB in the subdivision ordinance.

Deficiencies:

 Plat notes are not required for subdivisions located in proximity to MHAFB.

BUILDING CODE

The City of Mountain Home has adopted the 2003 IBC, including the incorporated IRC to guide building construction and all associated aspects within the City. As a caveat, agricultural buildings are exempt from the adopted codes.

Deficiencies:

 Standards for sound attenuation and dark sky lighting are not included in they city's building codes.

Ada County

COMPREHENSIVE PLAN

The most recent update of the Ada County Comprehensive Plan was adopted by the Board of County Commissioners on November 27, 2007. A regional plan "Blueprint for Good Growth" a joint city-county planning process, which was completed in 2007, substantially changed growth goals and policies in Ada County. The County updated the comprehensive plan and it was approved by the Board of County Commissioners on June 14, 2008. No specific military related compatibility policies were noted in the comprehensive plan.

The Land Use section of the Ada County Comprehensive Plan addresses an AIA. The goal of the influence area is to provide land uses compatible with aircraft noise, approach zones, and operation activities of the Boise Airport, and to protect public health, safety, and welfare. Ada County coordinates with the City of Boise to ensure consistent city and county development regulations in the Airport Influence Area. The land use diagram for Ada County is illustrated on Figure 4-6 (also shows Elmore County).

Deficiencies:

- The comprehensive plan does not address land use surrounding military lands and operations (at Orchard Training Area).
- Mission sustainment policies are not addressed in the plan, nor are fiscal impacts of the military upon Ada County.
- Partnership and interagency communication policies are not addressed in the plan.
- The plan does not identify policies addressing encroachment upon military operation areas.

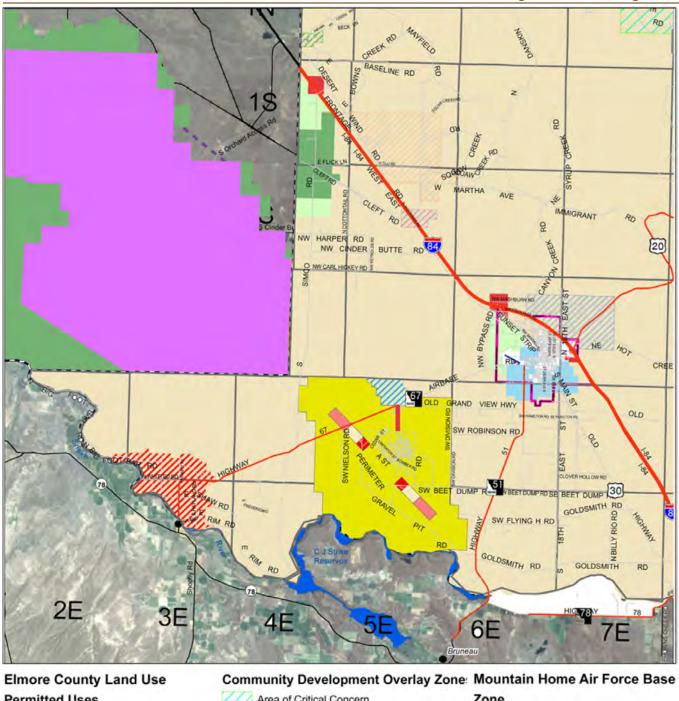
ZONING CODE

Article 3A of the Ada County Zoning Code addresses the Boise Airport Influence Overlay District. The article references the policies outlined in the comprehensive plan described above, and requires land uses compatible with airport/aircraft operations, noise and approach zones. The overlay areas include three influence areas where restrictions upon land uses are contingent upon specified noise levels.

Deficiencies:

- The zoning code does not specifically address land use compatibility with the operations at the Orchard Training Area.
- The lighting standards do not pertain specifically to compatibility with military operations.

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N.T.S.



Figure 4-6
Elmore / Ada County Future Land Use

- The zoning code does not reference compatibility with military operations and aircraft noise levels.
- The code does not reference height restrictions or light and glare regulations surrounding military installations.

Planned Community Zoning Ordinance (8-2E)

Ada County has provisions in its zoning code for the development of Planned Communities, both within and outside areas of city impact in accordance with the appropriate comprehensive plan. The purpose of Planned Community (PC) zoning districts is to allow development that is in character with a small town or an urban area when public facilities and services can be provided. The PC zone allows for community-specific comprehensive plans and zoning regulations for each planned community.

For a proposed development to be eligible to move forward under the Planned Community ordinance, it must:

- Consist of a minimum of 640 contiguous acres (1 square mile) under one ownership or control.
- Be located outside existing areas of city impact and the Idaho national guard artillery range
- Be located within an existing rural preservation or rural residential base district
- Be located within an Agricultural, Rural Lifestyle, or Foothills Planning Area land use designation on the Ada County Comprehensive Plan Generalized Land Use Map

Zoning Overlay District

Each Planned Community has a specific overlay district, which identifies allowed uses, dimensional standards, and bulk regulations. The overlay district is subject to the regulations set forth in the underlying zoning district unless the overlay district explicitly authorizes different regulations. The zoning must include:

- A legal description of the Planned Community boundaries
- A development agreement
- Zoning text that describes purpose, applicability, allowed/ conditional/prohibited uses, setback, bulk regulations, lot requirements, landscaping requirements, parking requirements, grading requirements, and design standards.

Comprehensive Plan

Similarly, each community has a Sub-Area Comprehensive Plan that is used to guide and review development within that planned community. The Comprehensive Plan must include:

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- A vision statement that is consistent with the Planned Community section of the Ada County Comprehensive Plan
- Goals, objectives, and policies that are consistent with the vision statement as well as the Ada County Comprehensive Plan that address property rights, population, school facilities, transportation, economic development, land use, natural resources, hazardous areas, public services, transportation, recreation, special areas or sites, housing, community design, and implementation
- A conceptual land use map showing boundaries, land use patterns, and circulation systems. The land use patterns must show proposed densities and intensities of development
- Illustrations showing proposed street, trail, and path cross sections

Economic Study

An Economic Study is required that details economic feasibility, infrastructure and financing plans, and fiscal impact, as prepared by a qualified economist. The studies must demonstrate that the applicant shall mitigate all identified tax revenue shortfalls and negative impacts to existing services levels to all directly affected municipalities and districts. The Economic Study must be independently verifiable.

Development Plan

A Planned Community Development Plan must be submitted that includes a natural features map and technical maps produced by qualified experts detailing hydrology, drainage, soils, vegetation, sensitive species, historical and cultural resources, and other applicable features.

A narrative describing proposed land uses and design of the site should also be included in the development plan, addressing topics such as housing mix, price points, building quantities, commercial nodes, and public spaces.

Other elements of the development plan include:

- A map of existing land uses within 1 mile of the boundaries of the Planned Community.
- A narrative assessment of population and development trends.
- A transportation and mobility plan.
- A community services and utilities plan.
- An open space, parks and trails plan.
- A wildlife mitigation plan.
- A narrative of central design concepts guiding land use and development.
- A phasing plan.

Process

Work sessions with planning staff and other agencies are required so that the applicant and staff can develop a mutual understanding regarding existing conditions, project design, proposed zoning regulations, environmental impacts and mitigation measures, and consistency with applicable local, state, and federal regulations as well as the Ada County Comprehensive Plan and any other relevant plans.

- One work session must include a site visit with planning staff and the applicant.
- The draft zoning ordinance text amendment is submitted during this phase.
- Economic information is also submitted at this time.

At least one neighborhood meeting must be held that invites all property owners within 1,000 feet of the proposed boundary (or more, as determined by the planning director).

The entitlement process consists of a preapplication acceptance, which is the date of Ada County's letter to the applicant indicating that all required elements are substantially complete. This date establishes the applicable ordinance and comprehensive plan.

The Planned Community Comprehensive Plan, if approved by resolution of the board subsequent to a recommendation from the Planning Commission, shall be adopted as an amendment to the Ada County Comprehensive Plan. The Planned Community Zoning Ordinance and Map are adopted by ordinance.

Within 15 days of the acceptance of the final application, the applicant must hold another work session with all agencies identified by the Ada County development services department in order to provide an overview of the development and answer questions. The first public hearing must be scheduled within 90 days of the final application acceptance.

Subdivision Ordinance (part of Title 8, Ada County Zoning)

The Ada County Subdivision Ordinance requires all new subdivisions and developments to include approved sewer and water systems that either connect to existing municipal facilities, or alternatively provide services approved by County health inspectors and engineers. A review of the Ada County subdivision ordinance identified the following deficiencies:

Deficiencies:

- The subdivision ordinance does not require interagency communication between the County and the proximate or adjacent military installation when a new subdivision application is received.
- The subdivision ordinance does not require plat notes identifying proximity to military installations.

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BUILDING CODE

Ada County has adopted the 2006 IBC and the 2006 IRC to guide construction standards and associated actions within the unincorporated areas of the County.

Deficiency:

 Sound attenuation standards are not addressed for areas near military activities that generate frequent noise.

ADA COUNTY HAZARD MITIGATION PLAN

The Ada County Harzard Mitigation Plan was adopted in May of 2006. The purpose of the plan was to assess wildfire, flood, landslide, earthquake, and severe weather risks and other factors. The intent of the plan is to reduce the potential for these hazards to threaten people, structures, infrastructure, and unique ecosystems in Ada County. The plan identifies the need for interagency coodination with the military to provide assistance when such hazards strike the County.

Elmore County

COMPREHENSIVE PLAN

The Elmore County Comprehensive Plan was adopted by the Board of County Commissioners in 2004. The plan identifies two land uses that impact Mountain Home AFB and include the Air Base Hazard Zone and the Air Base Commercial Zone.

Air Base Hazard Zone (ABHZ): The ABHZ is a necessary designation for the land surrounding the Mountain Home AFB. The purpose is to prevent encroachment while allowing the most appropriate use of private lands in this zone (as long as private uses do not conflict with Air Base operations). Significant land use restrictions will apply in the ABHZ area. The only use allowed by right in this area is agriculture, and a very limited number of other uses are allowed through a conditional use permit.

Air Base Commercial Zone (ABCZ): The ABCZ is a necessary designation for the highway entrance to the Mountain Home AFB, and is used to designate a specific area for commercial uses near the base. Like the Air Base Hazard Zone, the Air Base Commercial Zone is intended to prevent encroachment while allowing the use of private lands in this zone that do not conflict with Air Base operations. Significant land use restrictions will apply in this ABCZ area.

General Agriculture: While not implemented expressly for the purposes of the Mountain Home AFB, General Agriculture is the base zoning district for the county and immediately surrounds the ABHZ. It is designed to control

urban development and other uses in agricultural areas so that agricultural operations are not adversely affected, but also has the added effect of protecting military operations at the base. Allowed uses include farming, ranching, grazing, forest products, and limited mining.

The comprehensive plan addresses Mountain Home AFB, attributing at least 50 percent of the County's growth and development to the installation.

The plan's second economic development objective is to encourage broad-based economic development programs that include military expansion and development. It recommends the maintenance of policies and ordinances that will not impair the mission of MHAFB. The eighth economic development objective is to continue ongoing coordination, cooperation, and support among economic development entities within Elmore County, including those at the state and regional levels. This objective can be seen as a foundation for promoting partnerships and cooperation among communities, agencies, and the military to promote compatible land use.

The plan's fish and wildlife objective encourages a multiple-use land and wildlife management concept within the Morley Nelson Snake River Birds of Prey NCA to ensure that future livestock and agricultural uses together with military training uses, and wildlife hunting and feeding grounds take place.

Chapter 5, the Land Use Element, of the County's growth and development plan states that the County must allow for future expansion of cities, communities, and districts while protecting MHAFB from encroachment. Land use classifications include two categories relating to military uses: the ABHZ, and the ACZ. The land use diagram for Elmore County is illustrated on Figure 4-6 (also shows Ada County).

Objectives in the Land Use Element relating to the military and land use compatibility include:

- **Objective 3.** Coordinate land use planning with adjoining counties where joint land use problems or opportunities exist.
- Objective 15. Evaluate all development proposals in terms of land use and environmental compatibility
- Objective 21. Review the current zoning ordinance and consider a new commercial zoning designation to regulate commercial business near public airports and MHAFB.

Deficiency:

None noted at this time.

ZONING ORDINANCE

Elmore County does not have a specific Dark Sky Ordinance in its zoning code; however, Chapter 21, Lighting Standards and Plans, of the zoning code

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addresses height and illumination of light fixtures. The standards outlined in this ordinance are essentially the same as those outlined by Ada County. The goal is the prevention of light trespass onto neighboring properties and to promote a more enjoyable nighttime environment for unincorporated areas of the County. Streetlights installed by the Elmore County Highway District or the Idaho Department of Transportation are exempt from the standards of lighting fixtures that have a maximum output of 1,800 lumens. All master site plans and development applications where master site plans are not required must include an associated lighting plan.

Chapter 36, Airport Zoning and Development Ordinance, of the County zoning code restricts the height and uses of property in the vicinity of MHAFB and other airports in the County. The chapter identifies sub-zones in which height limitations are applied accordingly. It discusses three zones surrounding MHAFB: the Precision Instrument Runway Approach Zone (PIR), which allows agriculture but no residences; the AICUZ, which allows agriculturally related land use and buildings, and very limited single family residences (one per original lot on record at the time of adoption of the Airport Hazard Zone in 1974); and the Airport Commercial Zone (ACZ), which allows selected commercial uses at a minimum lot size of five acres.

Elmore County's current zoning ordinance (adopted May 13, 2009) includes the following land uses in the immediate vicinity of Mountain Home AFB.

Air Base Hazard Zone

The Air Base Hazard Zone (ABHZ) zone is designated as agriculture and density is restricted to a one-family living unit per three hundred twenty (320) acres or original lot. The only other land uses allowed include home occupations, fences and agriculture uses. There are twelve other land uses that could be potentially allowed, but will require the approval of a conditional use permit (CUP).

Air Base Commercial Zone

The Air Base Commercial Zone does not allow single-family dwelling units. The only other permitted land uses include home occupations, fences and general agriculture/grazing and forest uses. There are 60 other land uses that could be potentially allowed, but will which require the approval of a CUP, as well as other supplemental requirements.

General Agriculture Zone

In the General Agriculture Zone surrounding the ABHZ, residential development is allowed to the extent that it supports agricultural operations; specifically, the maximum permitted residential density in the district is 1 dwelling unit per 40 acres. In order to develop a single residential property, there must be at least 40 contiguous agriculturally-zoned acres owned by a single property owner, which prevents the clustering of homes in agricultural areas.

Deficiency:

 The zoning code does not include specific Dark Sky Ordinance and does not address light in terms of adjacent military land uses that may be affected by illumination and glare.

ELMORE COUNTY HAZARD MITIGATION PLAN

Similar to the Ada County Hazard Mitigation Plan, the Elmore County Hazard Mitigation Plan was created to address the risks associated with wildfire, flood, landslide, earthquake, and severe weather, as well as other hazards. The intent of this plan is to reduce the potential for these hazards to threaten people, structures, infrastructure, and the ecosystem. The Elmore County Hazard Mitigation Plan does not directly include potential military related hazards.

Owyhee County

COMPREHENSIVE PLAN

The Owyhee County Comprehensive Plan was adopted by the Board of County Commissioners on February 11, 2002. Within the plan, the land use chapter states that federal and state governments control 82.7 percent of the land within Owyhee County. Another 10.8 percent is classified as "rangeland". While this is not a precise, legally defined term, rangeland will be defined as that land so classified by the National Resource and Conservation Service (NRCS) (formally Soil Conservation Service (SCS). A significant amount of the rangeland in Owyhee County is located far from urbanized areas, lacks developed roads, fire protection, emergency services, schools and utilities, and may not have a predictable water source. Because of these factors, some of this land maybe not suitable for residential development. No specific military compatibility policies were noted in the comprehensive plan. The plan contains land use categories including agricultural, residential, commercial, and industrial land use categories, which are described below.

Agricultural Land Use: The purpose of the agricultural zone is to preserve and protect the decreasing supply of agricultural land, and to control the infiltration of urban development into agricultural areas which will adversely impact agricultural operations and will result in adverse impact on the county's tax base and economy.

Residential Land Use: Residential zones may be designated where residential development already exists and may be extended or enlarged.

Commercial Land Use: Commercial land use in Owyhee County has traditionally been located along the state highways and County roads and in incorporated areas, with the primary uses serving travelers through the area, serving the consumer needs of the residents, and serving agricultural needs.

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Industrial Land Use: It is the policy of the citizens to allow and encourage such development in the appropriate industrial zones. Industrial uses should be located within areas of impact where city services are more likely to be available or in industrial zones.

The comprehensive plan references the Land Use Management Plan for State and Federally Managed Lands, and the creation of a land use planning committee in 1991 to serve as advisors on matters relating to the lands administered by federal and state agencies, which make up a large proportion of lands in the County. The committee adopted a comprehensive plan for the federally and State managed land. This plan and the Owyhee County Comprehensive Plan must be implemented in coordinated fashion, and should complement each other in planning for the future of Owyhee County. The Planning and Zoning Commission coordinates its activities with the Owyhee County Natural Resources Committee to ensure proper planning for the entire County and the protection of private property rights which are critical to the custom, culture and economic stability of Owyhee County.

The fifth objective of the Land Use section of the comprehensive plan identifies the desire for the best uses of land within the County and development of the zoning ordinance and map to reflect these uses. The formulation of standards for development in each of these identified areas is also identified to ensure compatible development.

Deficiencies:

- The plan does not reference military lands specifically.
- The plan does not contain a land use map for the recommended land use categories.
- The plan does not reference the impact of the military upon the region or vice versa.

ZONING CODE

The intent of the Owyhee County Zoning Code is to, among other things, protect private property rights, preserve the cultural and historic aspects and features within the County, minimize the urban impact on agricultural lands, and protect and conserve natural resources through proper land use. The Code established six zoning districts within the unincorporated County, which include agricultural, multi-use, residential, commercial, industrial, and historical. The Owyhee zoning code does not specifically identify the Mountain Home Range Complex or any military activities.

Deficiencies:

- The Code does not address land uses around military operational areas.
- The Code does not include any standards for light and glare restrictions or reduction.

BUILDING CODE

Owyhee County has adopted the 2006 IBC, with certain modifications, deletions, and amendments. Agricultural buildings are exempt from the building code, but are still subject to regulations established by the zoning code.

Deficiency:

• The Code does not address sound attenuation for areas that are located near military operations where noise is an issue.

OTHER LOCAL PLANS

The following subsection provides an overview of the major community and specific plans approved within the study area (presented in alphabetic order).

BOISE AIRPORT MASTER PLAN

The Boise Airport serves as the primary commercial service airport in southwestern Idaho, but its service area (with a population in excess of 500,000) extends well into eastern Oregon. The master plan is a comprehensive guide for future improvements on the airfield and in the terminal area.

This project involves an extensive study of future (30-year) Airport facility needs, an analysis of alternatives, and documentation of the findings in an Airport Master Plan Update and Airport Layout Plan for Boise Airport (BOI).

The Master Plan Study and Airport Layout Plan will be conducted in accordance with the requirements of the FAA and the City of Boise.

The FAA recommends Master Plan updates every five years, or as necessary to keep them current. BOI's last Master Plan update was published in February 2001. Since the last Master Plan update, BOI has completed several major projects and the aviation industry has undergone major changes. As a result, BOI anticipates updating the Master Plan in the near future.

Major elements of the Master Plan Study include:

- Project Scoping and Public Outreach Program
- Inventory of Existing Information and Conditions
- Aviation Activity Forecasts
- Capacity Assessment and Facility Requirements Analysis
- Airport Alternatives for Meeting Future Facility Needs
- Refinement of Alternative Analysis
- Airport Layout Plan

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- Implementation and Phasing Plan
- Financial Plan
- Environmental Assessment
- Final Documentation

Vision — Boise Airport serves the regional, national and international needs of all segments of aviation.

An overview of the 2001 Airport Master Plan is provided below.

Landside Facilities — The landside facilities include terminal, fixed base and corporate aviation facilities, storage hangars, the National Interagency Fire Center, Gowen Field, and various facilities which provide support to the airport operation.

Gowen Field Facilities — Gowen Field is a National Guard installation located on the south side of the airfield. It is used by both the Air National Guard (ANG) and Army National Guard (ARNG) units of the State of Idaho. Gowen's military reservation consists of a 570-acre parcel of land leased by the ANG from the City of Boise. The Base was originally established in 1941. The 124th Fighter Wing of the Idaho ANG is the host unit at Gowen Field.

The Wing formerly operated fighter aircraft, but was recently received a new mission: training crews in the operation of ground-support aircraft. Crews are to receive training in both airdrop proficiency and short field runway maneuvers. Authorized aircraft include 17 A-10s and five C-130s. The Idaho ARNG contains armored, helicopter, and training units. A Master Plan was completed for the ANG and ARNG facilities in October 1997. The plan provides short-term and long-term implementation plans and a generalized future land use plan. The plan was well coordinated with the City of Boise and reflects plans by the airport for a wide-spaced parallel runway system and connecting taxiway.

Military Operations Forecast — Military activity over the past decade has remained relatively constant, with the exception of 1997, when nearly twice the number of local operations were recorded on the airfield. This was attributable to the fleet transition which occurred at that time. Generally, the level of local training activity does not exceed 5,000 annual operations. The recorded itinerant operations has declined slightly in recent years to a level of approximately 10,000 annually. The National Guard does not anticipate any significant fluctuation in these levels over the planning period. For planning purposes, the thresholds of 10,000 annual itinerant operations and 5,000 annual local operations will be applied to subsequent analyses.

Land Acquisition Considerations — As part of the alternatives analysis, consideration was acknowledged to the ultimate property acquisition needs for the Airport while considering natural boundaries, such as roadways. In analyzing future airfield development and the need for additional terminal area expansion, the natural boundaries of the airport are defined by I-84 and

W. Gowen Road (existing alignment for existing conditions and potential bypass alignment for future conditions). Areas outside of these natural boundaries will be defined by noise exposure areas around the Airport. Using these parameters, additional property acquisition should continue to be pursued on the north side of the airfield, where it would create the opportunity for long-term terminal development and options for terminal support facilities. On the south side of the airfield, additional properties should be acquired within the potential boundaries of the roadway by-pass. Continuing land acquisition within runway approach areas is currently defined by the Airport's noise compatibility plan.

A new airport master is currently being conducted. The City and the Boise Airport staff and those involved with the comprehensive plan and master plan are aware of the JLUS process and have been keeping compatibility issues in mind when planning for growth.

A Runway Protection Zone (RPZ) was established, which is a trapezoidal area centered on the extended runway centerline. This area should not contain land uses that create glare and/or smoke. Additionally, the FAA recommends that airport operators keep the zone clear of incompatible land uses, specifically residences, fuel storage facilities, and places of public assembly (e.g., churches, schools, office buildings, and shopping centers).

The Land Use (Section 2.6.2) of this plan references the Boise Comprehensive Plan in identifying Airport Influence Areas and permitted uses within the areas. Land uses listed as compatible in the areas surrounding the airport include: commercial, industrial, office, grazing, agriculture, mining, and low-intensity recreational uses.

The Military Facility Requirements (Section 4.3.3) references the Gowen Field Master Plan (1997) as addressing existing and future facility requirements. This section does not detail the Gowen Field facility requirements, but states that there will be a mission change of the Idaho Army National Guard, which will be accommodated in the currently leased area.

Section 8.1, Noise, addresses noise levels and contours at Boise Airport, and provides maps of the noise contours. Section 8.2 describes compatible land use as it relates to noise, and states that a large amount of the land surrounding the Airport is already developed, with the largest area of undeveloped land to the south, and is designated as Airport Conservation.

County and City Planning Tool Summary

Based on the plans renewed, Table 4-1 provides a summary of county and city plans renewed.

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Table 4-1.	County and	City Planni	ng Tools Table
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Jurisdiction	Planning Tools								
	Comprehensive Plan	Zoning Code	Zoning Code - Dark Sky	Zoning/Building Code – Sound Attenuation	Zoning Code - Height Restrictions	Subdivision Ordinances	Building Code	Annexation	Air Terminal Regulations
Ada County	Υ	Υ	Υ	N	Υ	Υ	Υ	N	Y
Elmore County	Υ	Υ	U	N	Υ	Υ	Υ	N	N
Owyhee County	Υ	Υ	N	N	Υ	Υ	Υ	N	N
City of Boise	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
City of Mountain Home	Υ	Υ	N	N	Υ	Υ	Υ	Υ	N

Legend:

- = Deficient as a compatibility tool
- Y= Yes, the jurisdiction utilizes this tool
- = Not deficient as a compatibility tool N= No, the jurisdiction does not utilize this tool
- U = Unknown whether the jurisdiction uses this tool

4.3 Other Agency Plans

Idaho State Board of Land Commissioners

The Idaho State Board of Land Commissioners oversees about 2.5 million acres of land granted by the federal government as part of the Idaho Admission Bill when it became a state in 1890. The land mandate was codified in Article IX, Section 8 of the Idaho Constitution, which states that the land is to be managed, "... in such manner as will secure the maximum long term financial return to the institution to which granted." The primary beneficiary is the public school system, and management activities on state endowment land are not intended to benefit the general public, but are directed solely to the good of the beneficiaries of the original land grants.

In December of 2007, the State Board of Land Commissioners approved the State Trust Lands Asset Management Plan. Although this plan includes information on managing financial and land assets, it does not indicate a timeframe for the sale of specific endowment lands. The land must be managed to the full benefit of the beneficiaries. State held lands are located within and adjacent to the study area. Thus, the Board of Land Commissioners should be involved in studying compatibility factors for the sake of the land beneficiaries. A review of the asset management plan identified the following deficiencies:

Deficiency:

 The Asset Management Plan does not outline the parcels which may be sold in the next 1-5 years. An understanding of the location of

lands which may be sold in the near future would be beneficial in order to more effectively address land use compatibility factors.

Regional Transportation Plans

The Community Planning Association of Southwest Idaho (COMPASS) prepared the Long Range Transportation Plan (LRTP) encompassing a large portion of the study area. The LRTP is a twenty-five year infrastructure and service plan setting priority for transportation projects in the region. The LRTP is referred to as the Communities in Motion plan, and was originally approved in 2006. An update to the LRTP is to be adopted in 2010.

The LRTP focuses on two key elements, Community Choices and Regional Corridors. Community Choices is the scenario for land use and transportation that emerged from public workshops. Choice reflects the desire for options in housing types and transportation modes. Regional Corridors pertains to the fact that this plan encompasses a larger study area than past plans, and analyzes the transportation system at the regional corridor level. The desired result of the plan is to preserve open space, encourage infill and redevelopment, create choices in housing types including currently unavailable housing types, expand the transit system and provide alternatives to the automobile, and create a jobs/housing balance. The current version of Choice was developed in 2005, updates happen as needed and in concert with the LRTP update.

Deficiencies:

• None noted at this time. Plan currently undergoing an update.

BLM Resource Management Plans

The BLM uses Resource Management Plans (RMPs) to guide land use decisions and management actions on the public lands it manages. RMPs identify lands that are open or closed for certain uses, including any applicable restrictions. RMP decisions are made on a broad scale and guide subsequent site specific implementation decisions. RMP implementation decisions may have future implications for those who manage adjacent lands or resources. Figure 4-7 shows the BLM resource areas.

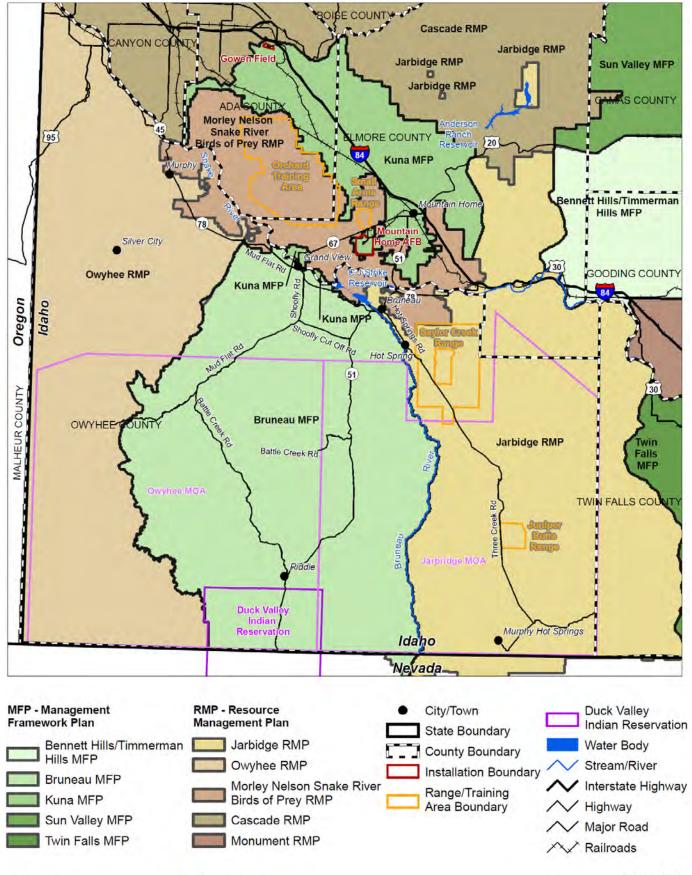
Owyhee Resource Management Plan

The Owyhee Resource Area, located in southwestern Idaho's Owyhee County, encompasses 1,779,492 acres. The area is bounded on the west by Oregon, on the south by Nevada, on the north by the Snake River and on the east by Castle Creek, Deep Creek, the Owyhee River, and the Duck Valley Indian Reservation. Most of the public lands are contiguous with only a few scattered or isolated parcels. The resource area contains the northern extent of the Owyhee Mountain Range and lies within what is often referred to as the Columbia Plateau.

Communities in Motion

The name is meant to illustrate that Treasure Valley communities are growing rapidly and need transportation systems that help people and the goods and services they need to move between and within communities effectively.

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Matrix Design Group is:

Figure 4-7
BLM LAND USE PLAN

The Owyhee Resource Management Plan does not address military lands and activities directly, although the plan does make minimal reference to federal agencies and land use compatibility. The Owyhee Resource Area, as seen in Figure 4-7, does not contain military lands but the Owyhee MOA extends into the southern portion of this area. Therefore, future updates to this RMP should include reference to the effects or acknowledgment of the use of military air operations within the MOA that extends into the area managed by the BLM, as described in the Owyhee RMP.

JARBIDGE RESOURCE MANAGEMENT PLAN

The Jarbidge RMP includes lands within the BLM Jarbidge Field Office's (FO) planning area (see Figure 4-7). The Jarbidge RMP planning area extends from the Bruneau River on the west to Salmon Falls Creek on the east, and from the Snake River on the north to the northern boundaries of the BLM Elko FO and the Humboldt-Toiyabe National Forest on the south. It includes parts of Elmore, Owyhee, and Twin Falls Counties in south central Idaho and Elko County in northern Nevada. The majority of the planning area supports fire rehabilitation projects.

Military lands included in this area include the Saylor Creek Air Force Range (SCAFR), Juniper Butte Range (JBR), and several emitter sites. Management of these military lands, as they relate to the BLM, is discussed in a separate military section in the RMP. The information provided below outlines how withdrawn lands are managed, as described in the RMP's military sections.

According to the Jarbidge RMP, Land withdrawal is the removal or "withholding" of public lands from operation of some or all of the public land laws (settlement, sale, mining, and or mineral leasing). Withdrawal is an action that restricts the use or disposal of public lands, segregating the land from the operation of some or all of the public land and/or mineral laws and holding it for a specific public purpose. Withdrawals may also be used to transfer jurisdiction of management to other Federal agencies.

Saylor Creek Air Force Range

The Jarbidge RMP states that the USAF is responsible for the overall management and use of withdrawn lands in the SCAFR. As of 2006, the BLM win Falls District entered into an agreement with the USAF, the State of Idaho, and US Department of Interior to offer fire suppression and reseeding on military lands outside of the exclusive use area (EUA). The USAF is required to prevent the pollution of water on or in the vicinity of withdrawn lands. Livestock grazing is permitted on SCAFR lands outside of the EUA used for gunnery, as long as it does not interfere with military operations.

Juniper Butter Range

The BLM provides fire suppression assistance at the request of Mountain Home AFB, including the EUA and 960 acres of State-leased land.

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Emitter Sites

Fourteen emitter sites are located in the Jarbidge FO, nine of which are quarter acre sites, and the remaining five are one acre or larger. The quarter acre sites are used by the USAF through a BLM right-of-way (ROW) authorization, through which the BLM has made the Air Force responsible for reseeding disturbed areas and identifying and controlling noxious weeds within the issued ROWs. The larger emitter sites are withdrawn from public use and are under the management of the USAF.

In addition to describing BLM versus military management of lands in the aforementioned areas, the RMP outlines the condition and opportunities for improvement of the current management actions. Stating that the 1987 Jarbidge RMP did not contain goals, objectives, or management actions relating to the military, the current RMP calls for improvement of communication and cooperation of the Jarbidge FO with the USAF regarding the management of SCAFR and BLM lands adjacent to JBR and the associated facilities.

BRUNEAU MANAGEMENT FRAMEWORK PLAN

The BLM Bruneau FO planning area does not currently utilize an RMP; instead, they have a Management Framework Plan (MFP) dating to 1983. The planning area includes military lands comprising Mountain Home AFB, DoD withdrawn lands, the DoD-leased Grasmere EC Site and the Saylor Creek AFR. Even though these installations and lands are not identified within the text or maps, the military use of lands and management of lands surrounding these Air Force lands occurs. This JLUS proposes that the Bruneau FO work with Owyhee County, the State of Idaho, Shoshone Paiute Tribes, and the Air Force to ensure the coordination, cooperation, and compatibility of land management and use between BLM, the military, and the public.

FOUR RIVERS RESOURCE MANAGEMENT PLAN

An RMP is currently being developed for the Four Rivers planning area (see Figure 4-7), which encompasses about 783,000 acres of public land within nine Idaho counties. This area lies north of the Snake River from approximately Glenns Ferry on the southeast, west to the Oregon border and north to McCall.

The Scoping Report was issued in 2008 as an update to the progress of the development of the RMP. The report lists the agencies that were invited to participate in the preparation of the plan. Among others, Mountain Home AFB was invited to participate, but declined. The report also identifies MHAFB as a potential partner in creating opportunities for helping the BLM develop increased involvement and wider acceptance and ownership in the planning process. The report stresses the importance of increasing communication, cooperation, consultation, and participation in the development of goals and objectives that address the compatibility of adjacent lands for the management and use of the Four Rivers FO planning area.

SNAKE RIVER BIRDS OF PREY NATIONAL CONSERVATION AREA RESOURCE MANAGEMENT PLAN

The Snake River Birds of Prey NCA RMP was completed in 2008 as a management framework for 483,700 acres of public land along 81 miles of the Snake River, including 138,500 acres of the OTA. The RMP replaces portions of the 1983 Bruneau MFP, 1987 Jarbidge RMP, and 1999 Owyhee RMP, among two others not associated with the study area of this JLUS.

The NCA was established in 1993 for the conservation, protection, and enhancement of raptor populations and habitats, and the natural and environmental resources and values associated with them. The BLM Four Rivers Field Office (FRFO) is the management agency in charge of the NCA lands included in the RMP. The proposed action for the RMP emphasizes the restoration and rehabilitation of all non-shrub areas outside the OTA to improve raptor and raptor prey habitat while imposing moderate restrictions on recreation, military training, and commodity uses. Management decisions of FRFO public lands within the RMP include the:

- Protection of shrub communities through aggressive wildfire suppression;
- Restoration of up to 130,000 acres of shrub habitat;
- Completion of up to 100,000 acres of fuel management projects;
- Modification of IDARNG training activities by limiting vehicular maneuver training to non-shrub communities to protect existing military maneuvers impacted by restrictions.

The MOU under which the military is authorized to conduct its activities within the OTA was amended in 2010, extending the MOU another 30 years and requiring the Snake River Birds of Prey NCA RMP process to incorporate decisions that affect operational aspects of the OTA. The OTA Impact Area is closed to public access to protect the public from the potential safety and health hazards related to live firing, unexploded ordnance, and munitions-related chemical soil contamination.

The RMP lists standard operating procedures of management actions as they relate to the IDARNG. These procedures have been excerpted verbatim:

- Military training activities will be restricted from sensitive resource areas and cultural resources.
- Existing firing ranges, support and maintenance facilities, and utilities will be operated, maintained, and upgraded by IDARNG, as authorized under BLM ROWs.
- OTA road improvements and maintenance, fence repair, sign maintenance, and public notification of training activities are authorized or required through the OTA MOU.

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■ IDARNG has responsibility for (1) initial attack for fires within the OTA (2) maintenance of a BLM-authorized firebreak system, (3) hazardous fuels management within the Impact Area, and (4) strict control of ignition sources (pyrotechnics and tracer ammunition) in times of high fire danger.

The RMP authorizes military training as long as it reduces impacts to existing shrub habitats, supports BLM habitat restoration projects, and provides modified and/or new areas to enhance military training opportunities.

Management actions of the military included in the RMP include:

- Recommend to Congress, through the Secretary of the Interior, that the OTA Impact Area be withdrawn to the DOD, with the IDARNG having administrative authority for all uses in the Impact Area, including livestock.
- Allow recreational activities within the OTA outside of the Impact Area (IDARNG Map).
- Require all military vehicles from outside the Treasure Valley area to be washed prior to entering the OTA.
- Incorporate into the OTA law enforcement Standard Operating Procedures (SOPs) a requirement to monitor and report public contacts/incidents in the OTA.
- Authorize one 5-acre and one 50-acre excavation training site. (IDARNG Map).
- Authorize temporary or permanent military drop zones on a case-bycase basis.
- Locate military assembly and bivouac areas in existing, hardened sites adjacent to designated roads in the Bravo Area and as needed throughout the rest of the OTA in non-shrub sites. Where appropriate, BLM will authorize IDARNG to gravel or cinder frequently used sites.
- Require IDARNG to avoid shrub stands with 10% or greater canopy cover during military training activities.
- Restrict vehicle maneuver training to designated routes in the 22,300-acre Bravo Area. This restriction becomes effective after the authorization for an additional 4,100 acres (expanded Maneuver Area) goes into effect on land adjacent to the existing OTA boundary.

Of note in the RMP is the exclusion of wind energy development in the NCA. The RMP states, "... It should be noted that [Desired Future Conditions] DFCs were developed early in the process and since that time, wind energy developments have been determined to be incompatible with the NCA-enabling legislation. While this wording remains in the [RMP], there will be no wind energy developments in the NCA." DFCs are goals that specifically

To protect sensitive resources, this RMP excludes wind energy development on BLM managed lands. This has the added benefit of removing a potential aviation safety issue relative to potential new vertical obstructions.

address the issues and perspectives identified by the public and others and are generally broad statements.

Ada County Highway District Capital Improvements Plan

The Ada County Highway District (ACHD) developed the 2007 ACHD Capital Improvements Plan (CIP) to meet the requirements of the Idaho Impact Fee Act. In all cases the CIP was prepared using the most recent and best available data. The 2009 CIP is the most recent ACHD CIP and is a limited update to the 2007 CIP. The transportation modeling and analysis is unchanged from the 2007 CIP. All other components of the CIP were updated with the most recent, best available data including updated revenue projections and project cost estimates.

The 2009 CIP was developed with consideration of adopted plans, including:

- ACHD 2003 CIP
- Destination 2030 Regional Transportation Plan
- ACHD Five-Year Work Plan
- Lake Hazel Corridor Study

The 2009 CIP is also based on an analysis of future transportation system deficiencies. The COMPASS Regional Travel Demand Model was summarized to identify where future traffic volumes exceed the capacity of ACHD's roadway system.

As detailed in Section 2 of this JLUS, the CIP shows the Lake Hazel Road Realignment, which could impact transportation in the Gowen / OTA focus area.

Information regarding the Lake Hazel Road realignment project can be found in Section 2.

4.4 Legislation and Other Regulations

The following is an overview of existing legislation and policy that impacts compatibility planning.

State Legislation

SENATE BILL 1468

Bill's Statement of Purpose: This is the fiscal year 2009 appropriation for the Office of Species Conservation in the Governor's Office in the amount of \$8,030,800. Source: http://www3.state.id.us/oasis/S1468.html#sop

These types of funds are often used for acquisition and can be used to leverage other funds to achieve compatibility planning goals. Conservation areas are often prioritized for acquisition if they can be demonstrated to accomplish many common goals. Buffer areas for military operations and

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conservation areas are often one in the same, thus it will be important to follow the progress of this Bill through the implementation stages of this plan.

HB 192, CENTRAL IDAHO NATIONAL FOREST AND PUBLIC LANDS MANAGEMENT ACT

Sec 208 Military Overflights: This bill outlines wilderness areas in Idaho, and states that low-level military aircraft overflights, flight testing and evaluation, or the designation or creation of new units of SUA or military flight training routes are not restricted in wilderness areas.

HB 146, TRANSPORTATION AND DEFENSE AIRPORT ZONING

Requires municipalities with an airport to discourage the siting of incompatible uses adjacent to the airport or in the flight path of an airport through their comprehensive plans and development regulations.

STATE CODE CHAPTER 5 TITLE 21, AIRPORT ZONING ACT, AIRPORT ZONING REGULATIONS

The State may adopt, administer, and enforce airport zoning regulations using the police power, in aviation hazard areas in order to prevent aviation hazards. The regulations may divide areas into zones and specify permitted land uses within those zones, and regulate and restrict the height to which structures and trees may be erected or allowed to grow.

SB 2833, OWYHEE INITIATIVE

Passed by the U.S. Senate on January 14, 2009 – The Public Land Management Act of 2008, also known as the Owyhee Initiative (OI), involved the cooperation of a large number of stakeholders to address land use conflicts that have endured in Idaho focused on lands specified for conservation. The initiative will create a program in Owyhee County that will support a contiguous landscape and address areas of ecological and cultural concern while supporting the economic stability of communities by preserving livestock grazing as an economically viable use. The OI designates 517,000 acres of public land as the Owyhee-Bruneau Wilderness; 199,000 acres of current wilderness as non-wilderness multiple-use management areas; and 316 miles as wild and scenic rivers.

Wilderness areas located on or adjacent to military lands can impact military operations by restricting low-level flights. The Owyhee Initiative designates new Wilderness areas adjacent to Mountain Home AFB and the Saylor Creek Air Force Range, and concerns of the impacts this might have on military flight operations have been evaluated. The legislation addresses military overflights directly, stating that "nothing in the act restricts or precludes low-level overflights of military aircraft over the areas designated as wilderness, including military overflights that can be seen or heard within the wilderness areas, flight testing and evaluation, or the designation or creation of new

units or special use airspace, or the establishment of military flight training routes over the wilderness areas." See Figure 4-8 for a map of the area affected by the Owyhee Initiative.

Environmental Compliance

NATIONAL ENVIRONMENTAL POLICY ACT

The NEPA of 1969 requires Federal agencies to file an environmental assessment (EA) and sometimes an environmental impact statement (EIS) for major Federal actions that have an environmental impact. NEPA is applicable to all Federal agencies, including the military.

NEPA mandates that the military analyze the impact of its actions and operations on the environment, including that of the surrounding communities. Inherent in this analysis is an exploration of methods to reduce any adverse environmental impact. The EIS is a public process that allows participation by the community.

For local planning officials, an EIS or EA is a valuable planning document in determining the extent of impacts of changing military actions or operations on their policies, plans, and programs, if any, and on the surrounding community. Public hearings are required for all EIS and EA documents released by the military under NEPA. A Finding of No Significant Impact (FONSI) under an EA or a full EIS that considers alternatives to the proposed military actions or operations also is required and is subject to public scrutiny. The information obtained by the EIS/EA is valuable in planning coordination and policy formulation at the local government level. To date, there have been several EA and EIS documents prepared for the military installations that are a part of this JLUS, including the Air Force in Idaho 1992, the Enhanced Training in Idaho EIS January 1998, Employment of the 2.75-Inch Rocket at Saylor Creek Range Draft 2006, and the Paradise MOA Expansion EA 2009.

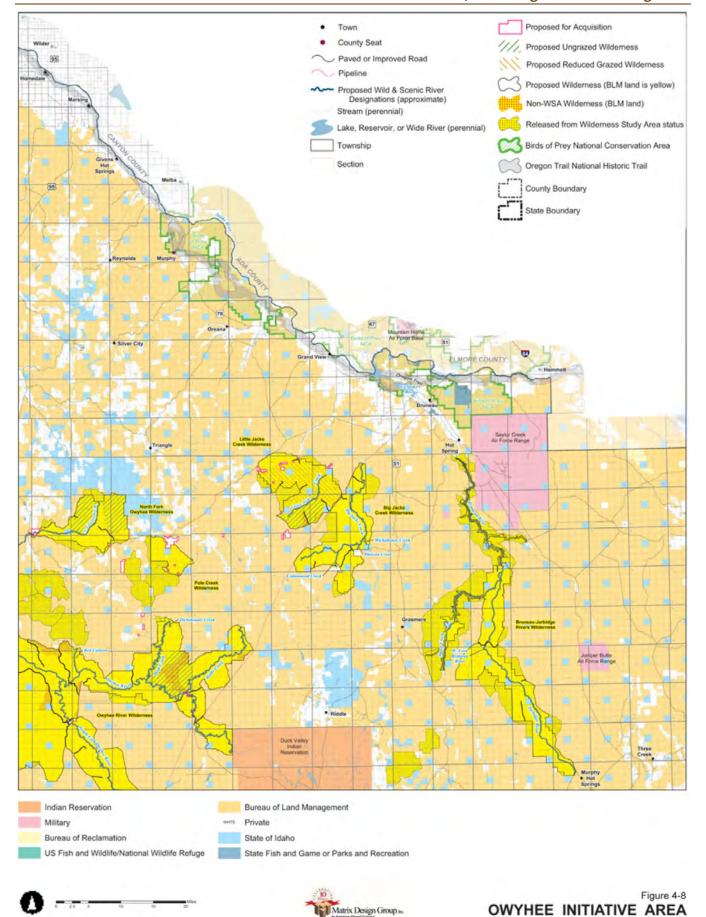
Federal Initiatives

The following is an overview of existing legislation and policy that impacts military activities and surrounding communities.

AIR INSTALLATIONS COMPATIBLE USE ZONES PROGRAM

The Air Installations Compatibility Use Zones program is a DOD planning program that was developed in response to incompatible urban development and land use conflicts around military airfields. (Note: the Air Force use the singular form, Air Installation Compatible Use Zone) The AICUZ program seeks to provide information on compatibility, develop a cooperative relationship between communities and military installations, and provide land use compatibility guidelines that protect public health and safety and maintain military readiness.

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The purpose of an AICUZ is to:

- Protect investment by safeguarding installation operational capabilities;
- Protect the health, safety, and welfare of civilians and military personnel by encouraging land use which is compatible with aircraft operations;
- Inform the public about the AICUZ program and seek cooperative efforts to minimize noise and aircraft accident potential impact by promoting compatible development in the vicinity of military air installations.

DOD CONSERVATION PARTNERING INITIATIVE

In 2003, Congress amended Title 10 U.S.C. §§2684a and 2692a (P.L. 107-314) to add authority to DOD to partner with other federal agencies, states, local governments, and conservation-based Non-Governmental Organizations (NGOs) to set aside lands near military bases for conservation purposes and to prevent incompatible development from encroaching on, and interfering with, military missions. This law provides an additional tool to support smart planning, conservation, and environmental stewardship on and off military installations.

DOD READINESS AND ENVIRONMENTAL PROTECTION INITIATIVE

To implement the authority provided by Department of Defense Conservation Partnering Initiative, the DOD established the Readiness and Environmental Protection Initiative (REPI). This initiative enables DOD to work with state and local governments, non-governmental organizations, and willing landowners to limit encroachment and incompatible land use. REPI funds are used to support a variety of DOD partnerships that promote compatible land use. By relieving encroachment pressures, the military is able to test and train in a more effective and efficient manner. In addition to preserving the land surrounding military installations from development encroachment, the REPI program also provides for the conservation land for plant and animal habitat.

FEDERAL AVIATION ACT

The Federal Aviation Act requires the Secretary of Transportation to make long-range plans to formulate policy for the orderly development and use of "navigable air space" to serve the needs of civilian aeronautics and national defense except for the specific needs of military agencies. Military planning strives to work alongside local, state, and federal aviation law and policies but sometimes must supersede other levels of government due to national security interests.

The '500-foot rule' is discussed in the Federal Aviation Act. It states that flights 500 feet or more above ground level (AGL) do not represent a compensable taking because flights 500 feet AGL enjoy a right of free passage

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without liability to the owners below. This is important to military installations and their surrounding communities when considering land acquisition and development rights.

Another important outcome of the Federal Aviation Act is known as FAA Part 77, Objects Affecting Navigable Airspace. The main focus of FAA Part 77 is to establish standards used to determine obstructions within navigable airspace, typically within a certain distance from an airport or airfield. It defines an obstruction to air navigation as an object that is of "greater height than any of the following heights or surfaces:

- A height of 500 feet AGL at the site of the object.
- A height that is 200 feet AGL or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.
- A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required clearance.
- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.25, 77.28, or 77.29. However, no part of the take-off or landing area itself will be considered an obstruction." FAR Part 150, Airport Noise Compatibility Planning, sets forth compatibility guidelines for residential, public, commercial, manufacturing, and recreational land uses.

In addition, per Section 77.13, any entity proposing construction or alteration meeting certain criteria, such as exceeding 200 feet or being placed on an airport operated by the armed forces of the U.S., must submit a Notice of Proposed Construction or Alteration to the FAA.

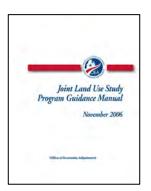
JOINT LAND USE STUDY

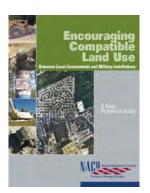
A Joint Land Use Study is a collaborative planning effort between active military installations, surrounding state, county and city lands, Native American government lands, and lands owned or managed by other affected agencies and property owners. The JLUS is an inter-jurisdictional partnership that is funded by the DOD OEA. The JLUS process encourages residents, local decision-makers, and installation representatives to study issues of compatibility in an open forum with the goal of balancing both military and community interests. The resulting recommendations are intended to reduce

potential conflicts while accommodating growth, sustaining the economic health of the region, and protecting public health and safety.

4.5 Other Resources







Documents

To prevent land use compatibility issues between the military and the local community, the DOD OEA and other public interest groups, such as the National Association of Counties (NACO), have taken steps to inform the public on encroachment issues and methods that can be used to address or completely avoid compatibility issues. Below are four resources that have been published to inform the public on those issues.

The Practical Guide to Compatible Civilian Development near Military Installations (July 2007), OEA. This guide offers general information on community development and civilian encroachment issues. The guide can be obtained at: http://www.oea.gov/.

Joint Land Use Study Program Guidance Manual (November 2006). This manual provides guidance on the JLUS program, process, and efforts to support compatible development. This manual can be obtained on the OEA internet site at the following address: http://www.oea.gov/.

Encouraging Compatible Land Use between Local Governments and Military Installations: A Best Practices Guide (April 2007), National Association of Counties. This guidebook presents case studies of best practices between the military and communities through communication, regulatory approaches, and Joint Land Use Studies. The guide can be accessed on the NACO internet site at the following address: http://www.naco.org/.

Videos

The Base Next Door: Community Planning and the Joint Land Use Study Program, OEA. This informative video discusses the issue of encroachment on military installations as urban development occurs in the vicinity of installations.

Managing Growth, Communities Respond, OEA. This video highlights the lessons learned from three communities successful in managing growth near military installations.

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In ti	his section	
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5.2	Existing Conditions	5-3
5.3	Other Native Americans in the Region	5-9
5.4	Agreements	5-9

This section provides important information about the Native American presence within the Idaho Joint Land Use Study (JLUS) focus areas. It is organized to present an overview of the history of the Shoshone-Paiute Tribes and the Duck Valley Indian Reservation; existing conditions at the reservation; the Tribes relationship to the lands and operations at Mountain Home Air Force Base (MHAFB), the Mountain Home Range Complex (MHRC), Gowen Field, and Orchard Training Area (OTA); and provides a profile and analyses of demographic information and trends.

5.1 Duck Valley Indian Reservation



Duck Valley Indian Reservation Vicinity Map

Overview

The Shoshone-Paiute Tribes of the Duck Valley Indian Reservation (hereafter "Shoshone-Paiute Tribes") are two closely related tribes that once occupied land encompassing what is now the tri-state Idaho, Nevada, and Oregon region. The Tribes' range has since dwindled as a result of displacement associated with the arrival of European settlers in the region.

The Shoshone-Paiute Tribes now occupy the Duck Valley Indian Reservation, located on the border between Idaho and Nevada. This reservation was established on April 16, 1877, by the Executive Order of President Rutherford B. Hayes, and it was expanded by the subsequent Executive Orders of Presidents Grover Cleveland and William H. Taft in 1886 and 1910, respectively. Today, the Reservation spans about 453 square miles and is generally square in shape (about 22 miles on each side), with its land evenly split between the two states that it straddles. In Idaho, the Reservation occupies southern Owyhee County, and in Nevada, the Reservation lies in the northwestern portion of Elko County. The northern boundary of the Duck Valley Indian Reservation lies less than 65 miles south of Mountain Home AFB. It is partially located within the southeastern portion of the Owyhee Military Operations Area (MOA) in the Mountain Home Range Complex. Of the reservation's 453 square miles, roughly 227 square miles lie within the Owyhee MOA.

History

In the early days of the Reservation, it was occupied by the Shoshone, who were roving bands alternating between living inside and outside its borders depending on their survival needs. During this time period, the Bannock War of 1878 erupted as a series of conflicts fought by the Bannock and Northern Shoshone Tribes against the U.S. in an effort to ward off starvation being caused by the grazing of livestock by white settlers and competition with the settlers for game. The Northern Paiutes joined the fight against the U.S., and even though the Tribes eventually surrendered, they became allied on a larger reservation in 1886 after the conclusion of the war when Grover Cleveland expanded the reservation for both the Shoshone and Northern Paiute Tribes' use.

In 1934, the passage of the Indian Reorganization Act that allowed Native Americans a return to self governance on a tribal basis. The Shoshone and Paiute Tribes of the Duck Valley Reservation formed their own united government through a Constitution and Bylaws, which were adopted in 1936.

Today, farming and ranching are still economic mainstays for the Duck Valley Reservation, which is held in trust by the U.S. government for the benefit of the Shoshone-Paiute. (Source: http://www.shopaitribes.org; McKinney, Whitney. A History of the

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<u>Shoshone-Paiutes of the Duck Valley Indian Reservation</u>. Institute of the American West and Howe Brothers, 1983.)

Government



The Shoshone-Paiute Tribes of the Duck Valley Reservation are governed by a Business Council, which is composed of a Chairman, a Vice-Chairman, and five Council Members. All are elected to three-year terms by the Shoshone-Paiute people. The Business Council directs and manages operations of the Tribal government. Currently, there are four divisions within the Tribal government; each division oversees a different aspect of tribal life: Health & Human Services, Judicial Services, Tribal Programs, and Support Services.

(Source: http://www.shopaitribes.org; McKinney, Whitney. <u>A History of the Shoshone-Paiutes of the Duck Valley Indian Reservation</u>. Institute of the American West and Howe Brothers, 1983.)

5.2 Existing Conditions

The main transportation route for the Reservation is Idaho State Highway 51 / Nevada State Highway 225, which runs in a north-south direction through the center of the Reservation and the Town of Owyhee. Electricity is supplied by the Idaho Power Company and the Bureau of Indian Affairs extends water and sewer services. The Reservation also includes a Public Health Service hospital.

The only incorporated settlement within the Duck Valley Indian Reservation is the small town of Owyhee, which is home to 1,100 of the estimated 1,700 people living on the Duck Valley Reservation. The town is located in Nevada, a few miles south of the Idaho state line. Owyhee is very isolated, with the nearest town of any significant size almost 100 miles to the south (Elko, Nevada).

The Town of Owyhee has one gas station, one grocery store, one café, one deli, and a high school known as Owyhee High (formerly Swayne School) that is part of the Nevada's Elko School District. Owyhee High has about 85 students. Also, approximately 26 students in the town are in Junior High, and 117 students are of elementary age.

The majority of the residents at the Duck Valley Indian Reservation are ranchers or farmers who grow wheat and hay. Fishing and game hunting are also important means of livelihood to local residents. In 1936, Wild Horse dam was constructed 35 miles upstream of the reservation to create a reservoir for the Duck Valley Irrigation project, which irrigates lands along the Owyhee River. The dam was replaced in 1969, and the reservoir doubled in size. The reservation has three reservoirs within its boundaries: Sheep Creek, Mountain View, and Lake Billie Shaw. Other than ranching or farming, the primary sources of income on the Reservation includes the sale of fishing permits for the reservoirs on the Reservation, a marina store, business leases, land leases, and grazing permits.



Town of Owyhee, Nevada

Demographics

According to the US Census Bureau (2000 Census, see Table 5-1), the Town of Owyhee had just over 1,000 people, 75 percent of whom identified themselves as Native American. The people are significantly younger than the U.S. as a whole, with a median age of 25 years versus 35 years, respectively.

Household and family sizes are slightly higher than U.S. averages, and the population is noticeably skewed toward being male (58.1 percent), instead of the roughly even split found across the country as a whole. The other major difference of note is the age distribution of the population. Owyhee has almost twice the national percentage in the 5 to 19 year age cohorts, with lower percentages (compared to national numbers) in the other age cohorts shown.

Table 5-1. Demographics – Town of Owyhee

	Number	Percent	U.S.
Total population	1,017		
Male	591	58.1%	49.1%
Female	426	41.9%	50.9%
Median Age	25.2		35.3
Under 5 years	58	5.7%	6.8%
5 to 19 years	414	40.7%	21.8%
20 to 64 years	467	45.8%	58.9%
65 years and over	78	7.7%	12.4%
Race (top 3 identified)			
American Indian	763	75.0%	0.9%
White	181	17.8%	75.1%
Black or African American	36	3.5%	12.3%

Source: United States Census, 2000

Socioeconomic Conditions

Socioeconomically, the population of Owyhee lags behind the rest of the U.S. in key economic indicators, with a variety of indicators suggesting a disadvantaged community (see Table 5-2). Versus nationwide averages, high school graduation rates are five percent lower, people are only half as likely to hold college degrees, and are almost twice as likely to have military service.

Table 5-2. Social Characteristics

	Number	Percent	U.S.
Population 25 years and over	519		
High school graduate or higher	393	75.7%	80.4%
Bachelor's degree or higher	67	12.9%	24.4%
Civilian veterans (civilian population			
18 years and over)	125	20.4%	12.7%

Source: United States Census, 2000

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Similarly, employment and income levels are significantly below national averages, which is a situation that is partially offset by the rural character of the area and lower cost of living (see Table 5-3). Household and family income levels are about half the national levels, despite having slightly larger than average families. Per capita income is below 50 percent of national levels.

Table 5-3. Economic Characteristics

	Number	Percent	U.S.
In labor force			
(population 16 years and over)	343	42.6%	63.9%
Median household income in 1999	23,214		41,994
Median family income in 1999	28,846		50,046
Per capita income in 1999	9,869		21,587

Source: United States Census, 2000

These figures for Owyhee mirror the Duck Valley Reservation as a whole. In 2000, the median household income in the reservation was just over \$23,000, and per-capita income was roughly \$9,800 and \$9,500 in Nevada and Idaho portions of the reservation, respectively.

In comparison to the counties surrounding the Duck Valley Reservation (Owyhee County, Idaho and Elko County, Nevada), per capita incomes on the Reservation are notably lower. Table 5-4 shows the difference in income levels between the two halves of the Reservation and the two counties.

Table 5-4. County vs. Reservation Per Capita Incomes

	1999 Estimated Per Capita Income
Northern half of Reservation (Idaho)	\$9,536
Owyhee County, Idaho	\$13,405
Southern Half of Reservation (Nevada)	\$9,869
Elko County, Nevada	\$18,482

Source: US Census, 2000

Relative to future trends, there is an upward trend in income levels in Elko County between 1999 and 2008. However, a rapid rise in affluence in the entire county is not typically a good indicator of potential change on the Reservation itself, especially since income levels inside and outside the reservation is so vastly different. In Owyhee County, which includes the northern half of the reservation, there is no real gain in affluence during the same time period, since increases in income there were roughly in line with inflation. Figure 5-1 shows the relative gains in median household income in the two counties between 1999 and 2008.

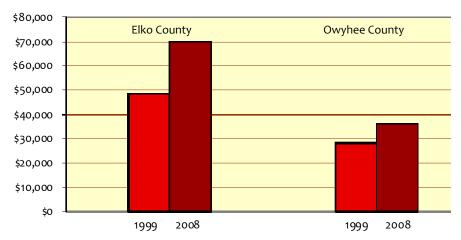


Figure 5-1. Change in Median Household Income (Elko and Owyhee Counties)

Cultural Resources

For the purposes of this JLUS, cultural resources can be defined as evidence of past human activities that are at least 50 years old, but generally much older. There are several types of cultural resources found within the areas analyzed for this JLUS, including pioneer homes and buildings, prehistoric village sites or settlements, human burial sites, and other artifacts or objects. It is important to preserve these sites when they are discovered, as they can provide information about past societies, or they contain historic significance to Native American tribes.

There are several federal regulations and legislation that have been instituted for the protection of cultural resources, including the National Historic Preservation Act of 1966, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1990.

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National Register Bulletin 38 Guidelines for Evaluating and Documenting Traditional Cultural Properties

The following is an excerpt from this bulletin relative to Traditional Cultural Properties, an important aspect of planning and cultural resource protection.

The National Register of Historic Places contains a wide range of historic property types, reflecting the diversity of the nation's history and culture. Buildings, structures, and sites; groups of buildings, structures or sites forming historic districts; landscapes; and individual objects are all included in the Register if they meet the criteria specified in the National Register's Criteria for Evaluation (36 CFR 60.4). Such properties reflect many kinds of significance in architecture, history, archeology, engineering, and culture.

There are many definitions of the word "culture;" but in the National Register programs the word is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the people of the nation as a whole.

Traditional cultural values are often central to the way a community or group defines itself, and maintaining such values is often vital to maintaining the group's sense of identity and self respect. Properties to which traditional cultural value is ascribed often take on this kind of vital significance, so that any damage to or infringement upon them is perceived to be deeply offensive to, and even destructive of, the group that values them. As a result, it is extremely important that traditional cultural properties be considered carefully in planning; hence it is important that such properties, when they are eligible for inclusion in the National Register, be nominated to the Register or otherwise identified in inventories for planning purposes.

Traditional cultural properties are often hard to recognize. A traditional ceremonial location may look like merely a mountaintop, a lake, or a stretch of river; a culturally important neighborhood may look like any other aggregation of houses, and an area where culturally important economic or artistic activities have been carried out may look like any other building, field of grass, or piece of forest in the area. As a result, such places may not necessarily come to light through the conduct of archeological, historical, or architectural surveys. The existence and significance of such locations often can be ascertained only through interviews with knowledgeable users of the area, or through other forms of ethnographic research. The subtlety with which the significance of such locations may be expressed makes it easy to ignore them; on the other hand it makes it difficult to distinguish between properties having real significance and those whose putative significance is spurious. As a result, clear guidelines for evaluation of such properties are needed.

Source: http://www.nps.gov/history/nr/publications/bulletins/nrb38/

Cultural Resources and Air Force Installations / Use Areas

Dozens of cultural resource identification surveys have been conducted on Air Force owned and managed lands over the years. As a result, hundreds of culturally significant sites have been identified on MHAFB and MHRC. In compliance with federal law, the Air Force must take measures to protect identified cultural resources. Sites that have been identified are primarily in relation to Native American tribes, including camps, settlements and artifacts, but also include some pioneer settler buildings and artifacts. The 366 FW at MHAFB consults regularly with the Shoshone and Paiute Tribes of the Duck Valley Reservation and the Idaho State Historic Preservation Office to ensure cultural sites are protected appropriately.

Cultural Resources and National Guard Installations / Use Areas

The Orchard Training Area has a significant amount of recorded cultural sites, which are largely remnants of Native American tribes. Extensive coordination has occurred among the IDNG, the BLM, the Idaho Department of Lands, Native American tribes, and other entities to ensure that cultural sites are protected where they exist. The Joint Environmental Management Office and Construction Facility Management Office are responsible for managing the coordination between the agencies, as well as providing direction on handling cultural and environmental resources within the Orchard Training Area. Personnel are educated on the importance of protecting the cultural resources. All future construction projects must be coordinated and administered by a representative of the Joint Environmental Management Office.

Other Cultural Resources

Within the Morley Nelson Snake River Birds of Prey National Conservation Area, over 200 Native American cultural sites have been recorded, including petroglyphs that date human occupation back to 10,000 B.C. The Guffey Butte-Black Butte Archaeological District, which is located entirely in the NCA, was admitted to the National Register of Historic Places (NRHP) in 1979. The Guffey Butte-Black Butte Archaeological District covers roughly 26,300 acres and includes over 200 known prehistoric sites.

Source: http://www.blm.gov/id/st/en/fo/four rivers/special areas/snake river birds.html

Portions of the Oregon Trail also are located through the JLUS study area, generally following the path of the Snake River. Wees Bar, located near Swan Falls, is a large boulder field where hundreds of Native American petroglyphs are found etched into the rocks. It is one of the largest concentrations of petroglyphs in the Pacific Northwest. Other cultural sites that are found throughout the study area include lithic scatters, caves, habitation sites, rockshelters, burial grounds, and rock art created by Native Americans.

Source: Snake River Birds of Prey National Conservation Area RMP and ROD, September 2008

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5.3 Other Native Americans in the Region

Close cousins of the Northern Paiute people are the Bannock, who traditionally lived in southeastern Oregon and Southern Idaho. After the Bannock War of 1878, they were moved to the half million acre Fort Hall Indian Reservation in southeastern Idaho, and merged with Northern Shoshone tribes, to become known as the Shoshone-Bannock. Fort Hall is lies to the east of the Owyhee and Jarbidge MOAs, but the Bannock people are still a presence across southern Idaho.

Source: http://www.seidaho.org/forthall.html

5.4 Agreements

A number of treaties and agreements exist between the Shoshone-Paiute Tribes and the federal government covering a wide range of topics. For purposes of the JLUS, this section will focus on the settlement agreement with the Air Force, which defined operational parameters.

Settlement Agreement with Air Force

On May 8, 1992, the Shoshone-Paiute Tribes filed action in the United States District Court for the District of Idaho concerning the beddown of a composite wing at Mountain Home Air Force Base (MHAFB). The action alleged violations of the National Environmental Policy Act (NEPA), the National Historic Preservation Act, the American Indian Religious Freedom Act, and the First Amendment of the United States Constitution.

A settlement agreement was reached in 1996 that, in exchange for the Shoshone-Paiute Tribes' agreement to release their claim and dismiss the case, provided certain restrictions on military operations relating to Mountain Home Air Force Base. These most notable of these restrictions as they relate to the base and its operations are as follows:

Absent compelling national security circumstances, the Air Force will **not**:

- use supersonic airspeeds over the Duck Valley Reservation,
- use flares at night or below 20,000 feet during the day over the Duck Valley Reservation,
- use chaff for training operations over the Duck Valley Reservation,
- fly at any altitude within 5 nautical miles of the town of Owyhee, and
- fly below 10,000 feet above the Duck Valley Reservation except during emergencies.

Finally, the Air Force agrees to reschedule or relocate aircraft operations away from the Duck Valley Reservation to the greatest extent practicable due to ceremonies or other similar requests given enough advance notification by the Shoshone-Paiute.

Please see the next page.

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In this section...

#	Title	Page
6.1	Developing Recommendations	6-3
6.2	Area of Military Influence	6-13
6.3	Strategies	6-24

This section identifies and organizes a specific course of action that has been developed in a cooperative spirit among the representatives of Ada, Elmore, and Owyhee Counties; the cities of Boise and Mountain Home; Mountain Home Air Force Base (AFB); Idaho National Guard; the State of Idaho; Shoshone-Paiute Indian Community; Bureau of Land Management (BLM); Idaho Department of Lands, and other interested agencies, local organizations, and the public. Because the Joint Land Use Study (JLUS) is the result of a collaborative planning process, the recommendations in this section represent a true consensus plan; a realistic and coordinated approach to compatibility planning developed with the support of stakeholders involved throughout the process.

- Q Did the process provide for substantial involvement of those responsible for implementation?
- A Due to the extensive study area for the Idaho JLUS, it was determined that two focus areas would be appropriate. These are the Mountain Home AFB / Mountain Home Range Complex focus area and the Gowen Field / Orchard Training Area (OTA) focus area. These areas are described in more detail in Section 1.3.

To assist in the development of this JLUS, a JLUS Policy Committee (JPC) was set up to provide overall policy guidance, and a Technical Working Group (TWG) was set up to provide technical

As the document is being reviewed now, no consensus has been reached. This reflects the statement that will hopefully be true by the time a public draft is released.

expertise to help refine the information developed. To ensure the JLUS addressed the needs of each focus area, a JPC and TWG was set up for each focus area. During the preparation of the Idaho JLUS, it was determined that an additional venue was needed to get input from landowners in the study area. To accommodate this need, a Landowners Committee was set up for each focus area.

These six committees met throughout the development of the JLUS and provided input on each step of the study's development. The committees, as well as the public, assisted in the identification of compatibility issues (both current and future) and the development and refinement of the strategies presented in this section. The insight provided by the committee members and the public helped to develop a set of strategies that not only could resolve the compatibility issues identified, but also be successfully implemented because they had the support of the study stakeholders.

The recommendations presented in this section represent a consensus supported by the members of the two JPCs and TWGs.

- Q Do the recommendations cover the geographic area necessary to ensure appropriate compatibility planning?
- At the beginning of the JLUS process, the project team invited agencies, organizations, and the public to be a part of the planning process and to assist in identifying any area that may be important to the development and implementation of the JLUS. During the process, the committees and working groups identified the two overlapping focus areas from the larger study area that covered the southwestern portion of the State of Idaho.
- O Are the proposed strategies realistic?
- The organization and composition of the committees assisted in making sure the results of the study and the strategies proposed would be realistic. Both JPCs represented decision makers from each of the jurisdictions, agencies and organizations within the two focus areas. They helped develop approaches that could be implemented. The two TWGs represented the staff functions of these agencies and organizations. They helped refine the strategies and provided input on the processes, staffing, and funding necessary for implementation.

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- Q Do the strategies strike a balance between sustaining military operations and providing opportunities for local economic development?
- The JLUS process brought together all of the stakeholders in the study area to discuss compatibility issues and potential solutions. The role of the JPCs and TWGs was to ensure the strategies could be accomplished with the resources available, were applied only to the geographic areas where specific compatibility issues were a concern, and/or provided the appropriate protections without being overly restrictive.
- Q Does the plan include a mechanism to oversee the implementation of the JLUS recommendations?
- A Strategy 39 establishes a JLUS Coordinating Committee, comprised of representatives from the Idaho National Guard, Mountain Home Air Force Base, county/local jurisdictions, and other stakeholders in the two focus areas. The Committee will monitor, assess, and refine the strategies in this document to address and resolve existing and future encroachment challenges in Southwest Idaho.

6.1 Developing Recommendations

JLUS strategies constitute a variety of actions that county and local governments, military installations, agencies and other stakeholders can take to promote compatible land use planning. When these strategies are implemented, existing and potential compatibility issues arising from the civilian / military interface can be removed or their adversity can be significantly reduced. As such, the recommended strategies function as the heart of the JLUS document and are the culmination of the planning process.

Strategy Foundation

As designed, this section builds upon the foundation of information contained within Sections 2, 3, 4, and 5.

- Section 2 provided an overview of existing conditions in the study area as well as a description of the operations conducted at Mountain Home AFB, Mountain Home Range Complex, Gowen Field, and OTA.
- The foundation for Section 3 was provided through input received from workshops with the JPCs TWGs, as well as the public. Starting from their insights into existing or potential compatibility issues or opportunities, additional items were added by the consulting team based on a review of conditions in the area. For each of the 22 compatibility factors identified to apply in the study area, background information was added to underpin each factor to be addressed in this JLUS.

- Before establishing new strategies, it is critical to understand the existing strategies available and currently in use. Section 4 provides a high level overview of the current planning strategies and tools used in the study area. The purpose of this evaluation is to determine:
 - o Is the issue already addressed in part or all of the study area? If adequately addressed throughout the study area, additional action is not needed. If a strategy is identified to satisfactorily address the issue, but only in a portion of the study area, can it be modified and used by other stakeholders?
 - o Is a strategy currently in place that only partially addresses an issue identified in Section 3? If so, how can that strategy be modified? As an alternate tactic, should the existing strategy be replaced with a more effective approach?
 - Is an appropriate strategy currently missing? In this case, what new strategies will fit in with the capabilities of the stakeholders in the study area to implement them?
- The Duck Valley Indian Reservation lies under the Military Operation Areas (MOA) that define the airspace used for Mountain Home Range Complex (MHRC). In addition, many areas within the Study Area are part of the cultural heritage of the Shoshone-Paiute Tribes. To reflect the issues and planning resources specific to the Shoshone-Paiute Tribes, **Section 5** provides a information similar to Sections 2-4 as they apply to the Tribes.

Strategy "Toolbox"

To help organize the presentation of the JLUS recommendations, the strategies and tools proposed are grouped within one of 23 categories. These types represent the complete range of strategy types that can be applied to compatibility issues. It is important to note that not every strategy type is required to address compatibility near Gowen Field, Orchard Training Area, Mountain Home Air Force Base or the Mountain Home Range Complex. For the Idaho JLUS, strategies are proposed under 18 of the 23 categories. Like the 24 compatibility factors used as the basis for Section 3, this approach ensures a comprehensive response to the identified compatibility factors.

The 23 potential strategy types are listed below. For the 18 categories used in the Idaho JLUS, a table number follows each heading. The table number refers to the location in this section where the proposed strategies under this category are located.

- Area of Military Influence Strategy (Table 6-2)
- Acquisition Strategies (Table 6-3)
- AICUZ Strategies (Table 6-4)
- Airport Master Plans / Airspace Studies Strategies (None Proposed)

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- Avigation Easement Strategy (Table 6-5)
- BASH Strategies (Table 6-6)
- Military Planning and Operational Strategies (Table 6-7)
- Building Code Strategies (Table 6-8)
- CIP / Infrastructure Master Plan Strategies (Table 6-9)
- Cluster Development Strategies (None Proposed)
- Code Enforcement / Building Inspection Strategies (covered on Table 6-8)
- Communications / Coordination Strategies (Table 6-10)
- Deed Restrictions / Notifications / Covenants Strategies (Table 6-11)
- Comprehensive Plan / Area Plan Strategies (Table 6-12)
- Habitat Conservation Strategies (None Proposed)
- Hazard Mitigation Plan Strategies (None Proposed)
- Legislative Strategies (Table 6-13)
- MOU Strategies (Table 6-14)
- Partnership with Non-Governmental Organization Strategies (None Proposed)
- Real Estate Disclosure Strategies (Table 6-15)
- NEPA Strategies (Table 6-16)
- Zoning / Subdivision Strategies (Table 6-17)
- Other Strategy (Table 6-18)

How to Read the Strategies

For each of the 18 strategy categories used, one or more strategies are presented. The strategies are all presented using the same format for easy reference. The following paragraphs provide an overview of how to read the information presented for each strategy. Figure 6-1 provides a graphic guide to reading the strategies presented in this section.

Strategy Number (#). Each strategy is assigned a number for purposes of referencing a specific strategy. The numbers are sequential, with the first strategy presented given the number "1", the second "2", and so forth. The numbers do not show any other hierarchy or priority.

Strategy. The second column provides the text of the strategy. The text is designed to explain the action proposed.

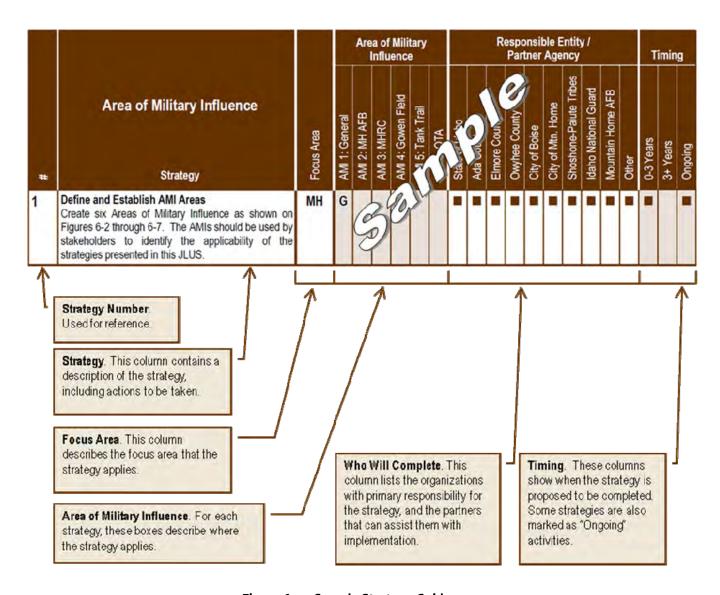


Figure 6-1. Sample Strategy Guide

Focus Area. As stated earlier, the Idaho JLUS study area was divided into two focus areas. On the table, the following symbols are used to represent which study area a particular strategy applies.

MH = Mountain Home AFB / Mountain Home Range Complex

NG = Gowen Field / Orchard Training Area (Idaho National Guard)

Area of Military Influence. An Area of Military Influence (AMI) is a formally designated geographic planning area where military operations may impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. In this JLUS, AMIs are used to define where the strategies in the Idaho JLUS are to be applied. This technique ensures the strategies are applied to the appropriate areas, and that locations

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that do not raise a specific compatibility issue are not adversely impacted by regulations that are not appropriate for their location or circumstance.

The AMIs used in this JLUS are defined in Section 5.2. Maps of each AMI and associated zones are also included in this section. Each AMI may have one or more zones that help refine where a strategy applies. A letter under an AMI heading in the strategy tables means that AMI is used for that strategy, and the letter reflects which zone is used to determine if a strategy applies to an area.

Who Will Complete. For each strategy, the columns listing the major stakeholders (City of Boise, Mountain Home Air Force Base, etc.) identify who will be involved in implementing the strategy. Two symbols are used to represent the level of involvement.

- **Primary Responsibility.** A square symbol (■) designates that the stakeholder identified is responsible for implementing the strategy.
- Partner. A hollow square symbol (□) designates that the stakeholder identified can provide technical information or otherwise support the efforts to implement the strategy, but is not directly responsible for its successful achievement.

For items designated for the "State of Idaho" or "Other", a description of the specific entity involved is included with the strategy description.

Timing. The table also identifies when the strategy is proposed to be completed.

Sensitive Land Uses

In this section, several strategies use the term "sensitive land uses". This term includes land uses which, due to their special sensitivity, should be excluded from certain locations near airfields, ranges, and other military operations areas or include mitigations appropriate for the use and location. The following types of uses are classified as sensitive land uses within this JLUS.

- Child day-care center
- Church
- Community treatment facility
- Family day-care provider
- Heliport or helipad
- Hospital or convalescent facility
- Hotel
- Manufactured home park

- Motel
- Nursing home
- Participant sports and recreation
- Public assembly facilities (spectator amphitheater, spectator sports facility, theater)
- Recreational vehicle park
- School
- Residential

Strategy Summary

Table 6-1 provides both an index and a summary of the strategies contained under each category. The corresponding page number for each strategy is also listed for quick reference.

Table 6-1. Index of Strategies

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#	Strategy	Page in JLUS	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
Area	of Military Influence Strategy																					
1	Define and Establish AMI Areas	6-24	МН	G																		
Acqui	sition Strategies																					
2	Identify Priority Locations for Acquisition – Tank Trail Area	6-26	NG					Α														
3	Identify Priority Locations for Acquisition – OTA	6-26	NG																			
4	Identify Priority Locations for Acquisitions – MHAFB	6-26	MH																			
5	Maintain Existing Easements	6-27	МН		В																	
6	Leverage Appropriate Grant Funding to Leverage Local, Regional, and State Resources	6-27	MH NG		Α			Α	Α													
7	Use DOD Easement Partnership Program	6-27	MH NG		Α				Α													
8	Explore Strategic Land Exchanges Proximate to Military Installations To Achieve Mutual Landowner Objectives	6-27	MH NG		Α				Α													
AICU	Z / Noise Modeling Strategies																					
9	Update the Existing Mountain Home AFB AICUZ	6-29	МН		B C																	
10	Implement AICUZ Recommendations	6-29	MH		С																	
11	Future Mission Noise Potential, Gowen Field	6-29	NG				В												•			
12	Future Mission Noise Potential, MHAFB	6-29	МН		С																	
Aviga	tion Easement Strategies																					
13	Develop or Update Avigation Easement Programs	6-31	MH	A B																		

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#	Strategy	Page in JLUS	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
BASH	l Strategies																					
14	Modify Zoning Ordinances for BASH	6-32	MH NG	A B																		
15	BASH Consideration in Jurisdiction or Agency Projects	6-32	MH NG	A B																		
16	Develop Bash Education Materials	6-32	MH NG	G																		
17	Distribute BASH Educational Materials	6-32	MH NG	A B																		
18	Control Bird and Wildlife Attractions Near Installations	6-33	MH NG	A B																		
19	Approved Access on Private Lands	6-33	MH NG	A B															•			
Milita	ry Planning and Operational Strategies																					
20	Flight Operations for Future Missions	6-34	MH NG	G																		
21	Update the MHAFB General Plan	6-34	МН	G																		
22	Involve Stakeholders in Defining Data Needs	6-34	MH NG	G																		
23	Locate New Operations	6-34	NG	G																		
24	Conduct Updated Noise Studies for the Orchard Training Area	6-35	NG	G																		
Build	ing Code Strategies																					
25	Set Interior Noise Levels	6-37	MH NG	G																		
26	Sound Attenuation for New Construction	6-37	MH NG		В		В	Α	Α													
27	Expansion of Sound Attenuation Requirements - City of Boise and Ada County	6-38	NG				В															
28	Noise and Vibration Along Tank Trail	6-38	NG					Α		•												
29	Development Near Tank Trail	6-38	NG					Α														
30	Sound Attenuation for Existing Structures	6-39	MH NG		В		В	Α														
31	Provide Sound Attenuation Technical Support	6-39	MH NG	G																		

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#	Strategy	Page in JLUS	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
32	Ensure Construction Standards for Sound Attenuation are Met	6-39	MH NG	G																		
33	Potential Lighting on Structures Over 50 Feet in Height	6-39	MH NG	A B																		
CIP/I	nfrastructure Strategies																					
34	Incorporate Compatibility Planning Concepts into CIPs / Infrastructure Master Plans	6-40	MH NG	Α						•												
35	Conduct a Traffic Impact Analysis on Pleasant Valley Road	6-41	NG					Α														
36	Promote Sustainable and Compatibility- Oriented Transportation Projects	6-41	NG	Α																		
37	Investigate Tank Trail Grade Separations for High Volume Road Corridors	6-41	NG	Α				Α														
38	Future Access Points	6-42	NG	Α				Α														
Comn	nunications / Coordination Strategies																					
39	Establish a JLUS Coordinating Committee	6-43	MH NG	G																		
40	Establish Procedures for Formal Military Plan Review and Comment	6-44	MH NG	G																		
41	Military as Part of Pre-Application Review	6-44	MH NG	G																		
42	Transmit Development Applications to the Military for Formal Review and Comment	6-45	MH NG	G																		
43	Transmit Jurisdictional Plans and Programs to the Military for Formal Review and Comment	6-45	MH NG	G																		
44	Involve Military Officials in General Aviation Facility Planning	6-45	MH NG	G																		
45	Educational Outreach on Aviation Planning	6-45	MH NG	G																		
46	Coordination on School Siting	6-45	MH NG	G																		
47	Develop and Implement a Public Outreach Program	6-46	MF NG	G						•								•				
48	Technical Support for Local Decision Making Process	6-47	MH NG	G																		
49	Establish and Maintain Compatibility Clearinghouse	6-47	MH NG	G																		

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#	Strategy	Page in JLUS	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
50	Leverage Existing Organizations to Provide Compatibility Planning Training for Jurisdictions and Resource Agencies	6-47	MH NG	G																		
51	Work to Ensure Availability of SUA Information	6-48	MH NG	G																		
52	Refer Specific BLM and Idaho Department of Lands Development and Use Permit Applications to Military Installations for Review / Comment	6-48	MH NG	Α																		
53	Partnering for Sustainable Use – MHRC	6-48	МН			Α																
54	Partnering for Sustainable Use – IDNG	6-49	NG						В													
55	Signage at MHRC	6-49	МН			В																
56	Establish Procedures to Avoid Frequency Conflicts / Issues*	6-49	MH NG	G																		
57	Review of Military Planning Documents	6-49	MH NG	G																		
58	Housing Needs for Military Members	6-50	MH NG	G																		
59	Noise Data	6-50	MH NG	G																		
60	Public Affairs Liaison	6-50	MH NG	G																		
61	Coordination with Shoshone-Paiute Tribes	6-50	MH NG	G																		
Deed Strate	Restrictions / Notifications / Covenants gy																					
62	Recommend Deed Notifications	6-52	MH NG		Α		В	Α	В													
Comp	rehensive Plan / Area Plan / RMP Strategies																					
63	Update Comprehensive Plans with the Compatibility Policy Set	6-54	MH	A B																		
64	Include a Policy Statement on Sound Attenuation	6-54	MH NG		В		В	Α	Α													
65	Incorporate Military Housing Needs in City / County Comprehensive Plans	6-54	MH NG	G																		
66	Encourage Planned Communities	6-55	NG					Α	В													
67	Vertical Obstruction Management	6-56	MH NG	A B																		

					Ar	ea o Infli	f Mil Jeno		/			F	Resp Pa	onsi rtner	ble Ag	Enti ency	ty / /			ī	Γimir	ng
#	Strategy	Page in JLUS	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
68	Wind Generation Facilities on BLM Lands	6-56	MH NG	A B																		
69	Consolidation of Training Facilities at OTA	6-56	NG	G																		
70	Land Use Change Guidelines	6-57	MH NG						Α													
Legis	lative Strategies																					
71	Amend the Local Land Use Planning Act	6-63	MH NG	G																		
72	Provide Legislative Support for Avigation Easement Programs	6-63	MH NG	G																		
MOU	Strategies																					
73	Develop a Memorandum of Understanding (MOU) to Implement the Joint Land Use Study	6-64	MH NG	G																		
74	Develop Specific MOUs to Implement JLUS Recommendations	6-65	MH NG	A B																		
75	Seek Military Input on Permit Applications	6-65	MH NG	A B																		
Real I	Estate Disclosure Strategies																					
76	Develop an Enhanced Real Estate Disclosure Ordinance	6-66	MH NG	A B																		
77	Real Estate Disclosure Information	6-67	MH NG	A B																		
NEPA	Strategies																					
78	Timely Transmittal of NEPA Documents to Study Area Stakeholders	6-68	MH NG	G																		
79	Timely Transmittal of NEPA Documents to Military	6-68	MH NG	G																		
Zonin	g / Subdivision Strategies																					
80	Utilize Flexible Entitlement Tools	6-70	MH NG	A B																		
81	Ensure FAA Part 77 Compliance	6-70	MH NG		С		С															
82	Develop or Update Light and Glare Controls	6-71	MH NG		С				В													

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#	Strategy	Page in JLUS	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
83	Dark Skies Ordinance	6-71	MH NG		С				В													
84	Modify Subdivision Regulations, Disclosure	6-71	MH NG	A B																		
85	Consider Modifications to the Boise Air Terminal Ordinance	6-71	NG				В															
Other	Strategy																					
86	Update the Idaho JLUS	6-72	MH NG																			

6.2 Area of Military Influence

An Area of Military Influence (AMI) is a formally designated geographic planning area where military operations may impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. In other JLUS documents, terms such as Military Influence Area (MIA), Region of Military Influence (RMI), Military Influence Planning District (MIPD), Military Influence Overlay District (MIOD), Military District Disclose District (MIDD), Airfield Influence Planning District (AIPD), and Areas of Critical State Concern (ACSC) have also been used to describe similar areas.

For the Idaho JLUS, a total of six types of AMIs have been designated. Within each AMI, one or more zones may be defined to more accurately identify the areas to which a specific strategy applies. The AMIs are designed to accomplish the following purposes.

- Protect public health, safety, and welfare.
- Promote an orderly transition between community and military land uses to promote a compatible land use pattern.
- Maintain operational capabilities of military installations and areas.
- Create an enhanced framework for making land use and resource management decisions near military installations and operations.
- Enhance the accuracy in identifying areas that can affect, or be affected, by military missions.
- Promote the awareness of the size and scope of military operations and training areas, in addition to the actual installation (i.e., critical air space) that are critical to maintaining the military's mission.

 Identify the locations where strategies should be applied to address compatibility issues.

Six AMIs are used in the Idaho JLUS. The description of each AMI and any zones within that AMI are presented in the following pages (including a map of each).

On Tables 6-2 thru 6-18, the AMI / zone marked is the overall area that the strategy applies, and will include all areas within that line, including areas within other zones.

AMI 1: General

The General AMI covers three distinct geographic areas and one non-geographic designation. The General AMI is illustrated on Figure 6-2.

- General A covers areas that have concentrated military aircraft operations and is typically used for strategies dealing with issues created by these operations or issues related to flight safety. The area covered by General-A includes:
 - Orchard Training Area
 - Flight operations area around Mountain Home AFB
 - MOAs associated with MHRC
- General B covers a broad area running from around Gowen Field on the north to the northern edge of MHRC to the south. This area is used for strategies related to air operations as well; although, issues are lower in this area. General-A and –B are also used to identify areas requiring enhanced communications and disclosure of the military operations in the area.

This AMI is comprised of the following general boundaries.

- The Airport Influence Area for Boise Airport on the north.
- A corridor around the tank trail (Pleasant Valley Road) that connects Gowen Field to the OTA. This area is bounded by Interstate 84 (I-84) on the east and State Route 69 (SR 69)/ South Meridian Road to the west and extending the SR 69 centerline south to the Snake River.
- An area around the OTA that follows I-84 on the east and the Snake River on the west.
- The final component continues south of OTA around Mountain Home AFB and extending to the northern edge of the MHRC. The connecting area follows I-84 to the Elmore County line on the east, then moving south on the county line to MHRC. On the west, the line follows approximately along Shoofly Road south to Mud Flat Road, and connecting to MHRC.

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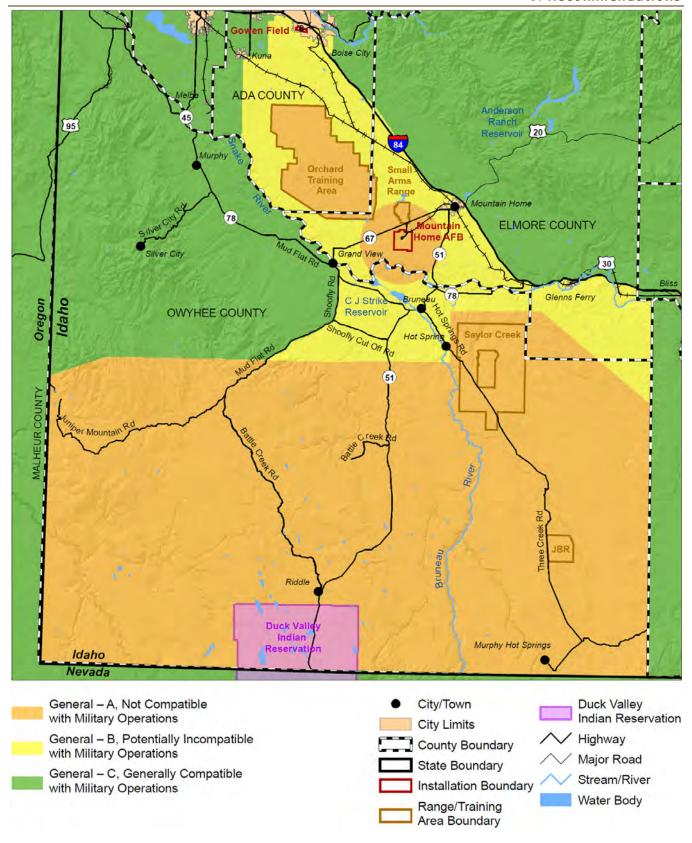






Figure 6-2
GENERAL AMI

- General C covers areas outside of General A and B in the southwestern corner of the State of Idaho. Projects within this AMI that include structures over 50 feet in height should be reviewed with representatives from MHAFB and the Idaho National Guard (IDNG) prior to issuance of permits.
- General G is the only non-geographic AMI in the JLUS. This
 designation is given to strategies that deal with broad issues, such as
 interagency coordination; strategies that are not driven by a specific
 location, but instead, apply broadly to the entire study area.

AMI 2: MHAFB

AMI 2 encompasses areas near MHAFB. The three zones that comprise this AMI are shown on Figure 6-3.

- Mountain Home AFB A is formed by the existing Clear Zone (CZ) and Accident Potential Zones I and II (APZ I and II) at both ends of the runway at Mountain Home AFB (see Section 3 under Compatibility Factor 2, Safety Zones, for a description of CZ and APZ).
- Mountain Home AFB B reflects an area that could be subject to noise levels at or above 65 decibels. To reflect the potential for future missions at MHAFB, the existing 65 dBA contours prepared by the base as part of their Air Installation Compatible Use Zone (AICUZ) study (see Section 3 under Compatibility Factor 7, Noise, for more information) were expanded to reflect a future aircraft airframe that could be louder than the installation's current aircraft. This is not intended to be a scientific assessment of noise, nor an indication that this aircraft will come to MHAFB. This is intended solely to provide flexibility and some basis for protecting the ability of the base to expand to address a future mission.
- Mountain Home AFB C is established to address issues related to vertical obstructions / height issues. Encroachment into the airspace near the base is a major concern to military flight operations and training.

Safety of flight issues associated with the height of structures can include cellular transmission towers, power lines, wind generation structures and building. The flight operations approach and departure areas are typically regulated by more stringent height restrictions.

The boundary of the AMI zone for vertical obstructions is a five statute mile area measured from the center for the MHAFB runway. The AMI boundary is based on the Federal Aviation Administration (FAA) Part 77 height regulations.

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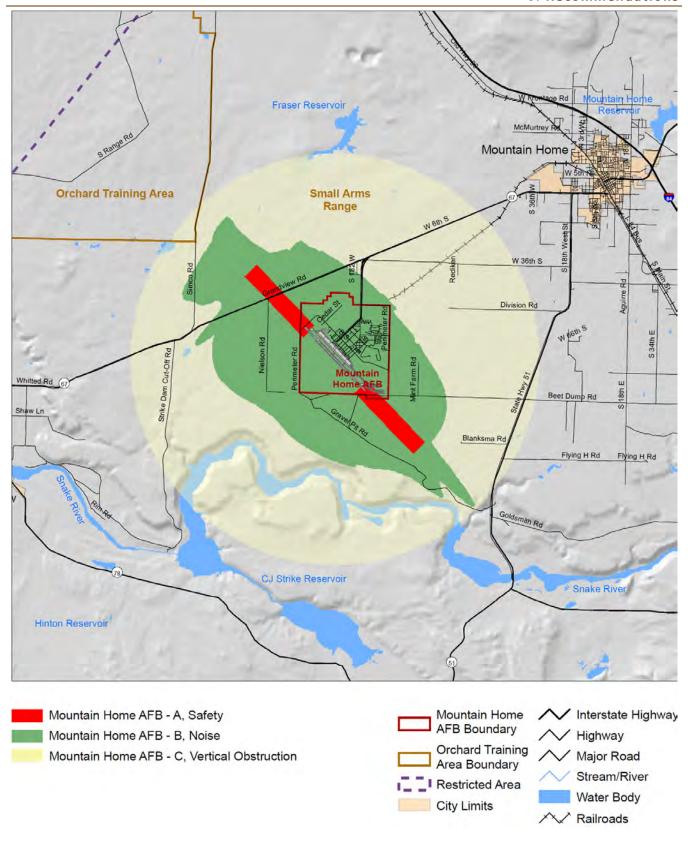






Figure 6-3
MOUNTAIN HOME AFB AMI

AMI 3: MHRC

AMI 3 encompasses the entire MHRC. This AMI and the two zones that define it are shown on Figure 6-4.

- MHRC A for the MHRC AMI encompasses the entire AMI area. This AMI is used for any strategies designed to address air operations over the range complex.
- MHRC B narrows the focus of the AMI to cover only those areas where ground operations or ordinance impact areas exist. This zone includes the general area around the five no-drop target sites, 34 electronic emitter sites, and the Saylor Creek and Juniper Butte ranges.

AMI 4: Gowen Field

The Gowen Field AMI is comprised of areas currently used to protect Boise Airport from encroachment by incompatible land uses (Zones A and B) and the area defined by the FAA for height regulations (see Figure 6-5).

- Gowen Field A is defined based on the City of Boise Comprehensive Plan. The Comprehensive Plan divides the City into 10 planning areas. This AMI zone is based on the Airport Planning Area, which includes Gowen Field, Boise Airport and the additional area covered by the Airport Master Plan.
- Gowen Field B reflects the Airport Influence Area as defined in the Boise Comprehensive Plan. This is the maximum area used to define specific allowed land uses in order to maximize airport compatibility.
- Gowen Field C is designed to protect the safety of flight associated with the height of structures near the airfield. The boundary of the AMI zone for vertical obstructions is a five statute mile area measured from the center for the MHAFB runway. The AMI boundary is based on the FAA Part 77 height regulations.

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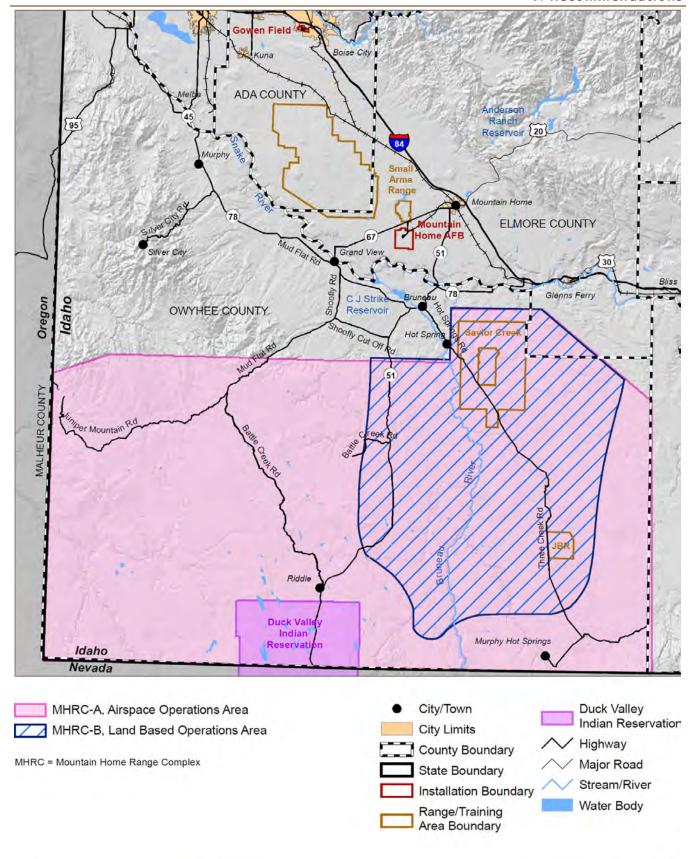






Figure 6-4
MOUNTAIN HOME
RANGE COMPLEX AMI

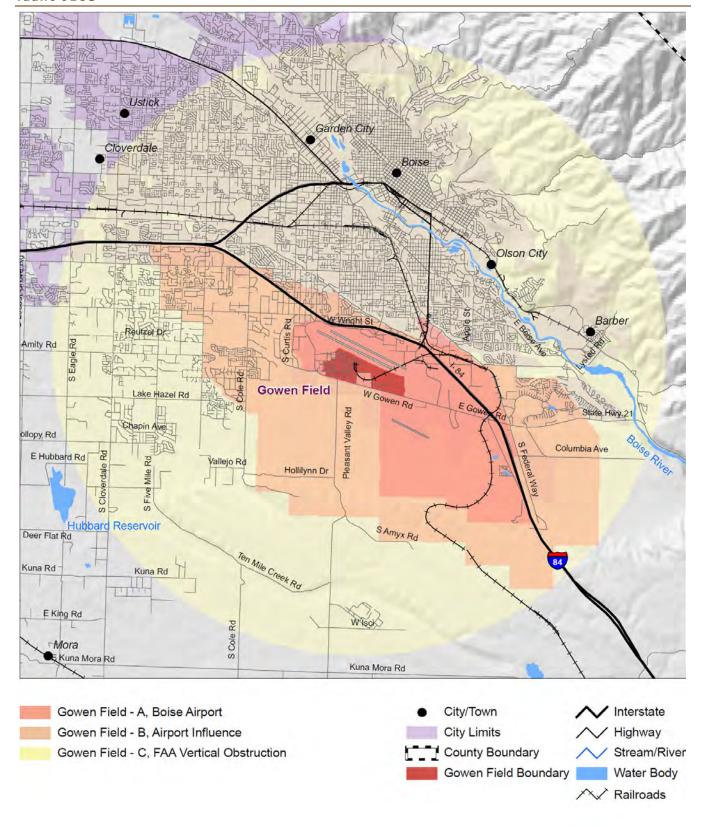




Figure 6-5
GOWEN FIELD AMI

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AMI 5: Tank Trail

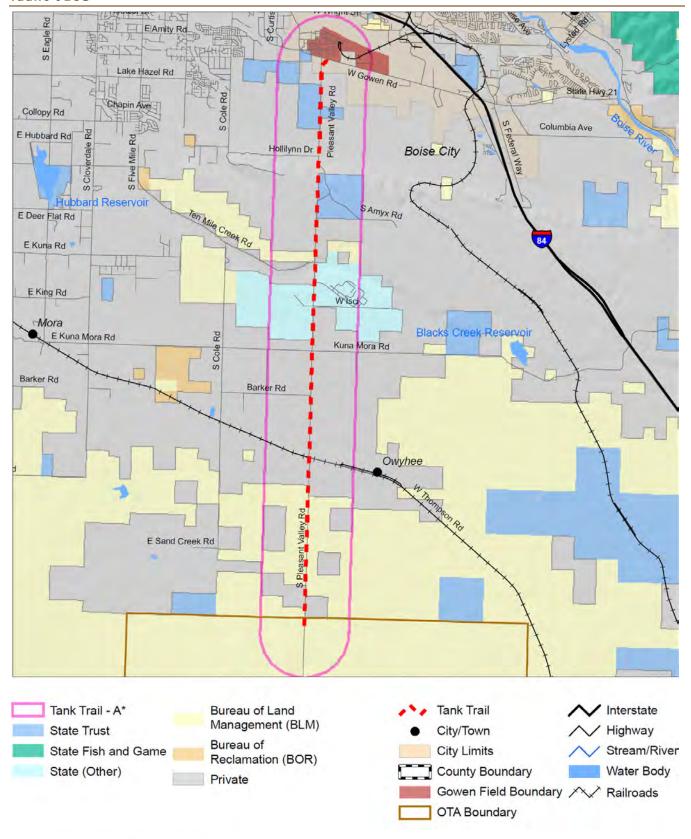
AMI 5 is defined as the area within one mile of the tank trail that connects Gowen Field to the OTA. The tank trail runs parallel to Pleasant Valley Road and is used by track and wheel vehicles. This AMI, which contains only one zone, is shown on Figure 6-6.

 Tank Trail – A is defined by the area that lies within one mile on each side of Pleasant Valley Road.

AMI 6: OTA

The final AMI defines the areas around OTA that are subject to the strategies defined to address compatibility near the training area. AMI and the two zones that define it are illustrated on Figure 6-7.

- Orchard Training Area A is defined by the 115 dB PK15 (met) contour. PK15 stands for the peak sound level, factoring in the statistical variations caused by weather, that is likely to be exceeded only 15 percent of the time (i.e., 85 percent certainty that sound will be within this range). The noise level reported is expected minimum noise level for a single event within this area, with noise levels increasing as you move inward from the line towards the firing location on OTA. This area would be considered to have moderate (at 115 dB) to high (once noise rises to 130 dB) risks for complaints. The 115 dB PK15 line extends a little over 3.5 miles to the east and south of OTA's boundaries, as well as a little over a mile to the west. More information on this topic can be found in Section 3 under Compatibility Factor 7, Noise.
- Orchard Training Area B is a 5-mile area around OTA. This zone addresses primarily the compatibility factor identified as light pollution generated from the surrounding community, which could impact night training missions and operations at the OTA. There are two types of light pollution that can impact military operations: Point Source Lighting, which directly impacts Night Vision Device (NVD) use and training, and Ambient Lighting or Background Lighting, where the cumulative effect of light pollution diminishes the capability of NVDs and NVD training. Light compatibility is defined as the distance from which light pollution is generated. The more distance between the light source and the military installation, the greater the reduction of light pollution impacts. Conversely, when this distance is reduced, light pollution increases.



* 1.0 mile on both sides of Pleasant Valley Road



Figure 6-6
TANK TRAIL AMI

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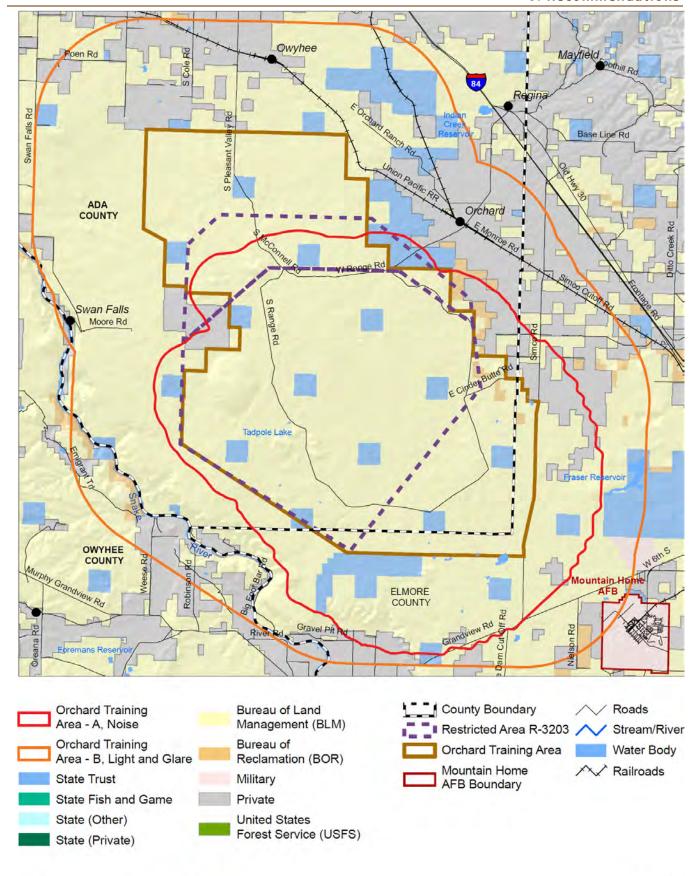






Figure 6-7
ORCHARD TRAINING AREA AMI

6.3 Strategies

Area of Military Influence

The purpose and use of AMIs for compatibility planning were described in Section 5.2. The following strategy is designed to officially establish the AMIs in the planning processes of the stakeholders involved in the Idaho JLUS.

Table 6-2. Area of Military Influence Strategy

					a of Influ		_							ole E Age		j l			Т	imin	ıg
	Area of Military Influence	Focus Area	4Ml 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	er	Years	Years	Ongoing
#	Strategy	Foc	AM	AM	AM	AM	AM	AM	Stai	Ada	Elm	Ŏ	City	City	Shc	lda	Mou	Other	0-3	3+,	Ouć
1	Define and Establish AMI Areas Create six Areas of Military Influence as shown on Figures 6-2 through 6-7. The AMIs should be used by stakeholders to identify the applicability of the strategies presented in this JLUS. State: JLUS Coordinating Committee member departments	МН	G								•	•	•	•		•		•			

Acquisitions

As a land use planning tool, property rights can be acquired through donation, easement, or the outright purchase of property for public purposes. The various types of property acquisition include the following:

- **Fee Simple Acquisition**. This option involves the purchase of property and is typically the most costly method to protect open space, sensitive, or critical areas. The market rate price of the real estate and the need for a willing seller can be constraints.
- Fee Simple/Leaseback. A land trust is established when a government agency purchases the full title to a property and then leases it back to the previous owner. The land's natural resource and open space values are protected through lease controls that restrict land uses.
- Easements. The development rights associated with a parcel of land can be individually purchased from the bundle of rights that are attached to the land which include the right to possess, use, develop, lease, or sell it. An easement involves the purchase of one or more of the rights associated with a property.

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Easements can be acquired through several mechanisms, including donation or purchase. If they are donated, the donor could qualify for a federal income tax deduction making this option more desirable to the property owner. Easements are a more cost effective method to protect land than outright purchase.

- **Lease.** In cases where the landowner does not want to permanently convey certain rights, this can be an option to control land uses.
- Management Agreement. A management agreement is a specified plan under which the landowner or the land trust (or combination thereof) will manage the land. Management agreements last for a specific amount of time making them a short-term approach to protecting land.
- Eminent Domain. A local government can use the power of eminent domain to appropriate private property for public use, in exchange for payment of fair market value, through the process of condemnation.

The purpose of acquisition tools is to eliminate land use incompatibilities through market transactions. Acquisition tools are particularly effective because they advance the complementary goals of shifting future growth away from military installations or operations areas and preserving community assets such as agriculture, open space, rural character, or sensitive natural habitats. Land use compatibility issues can be addressed by:

- Creating a land barrier between active military installations and incompatible land uses;
- Shifting future growth away from critical military lands;
- Protecting public safety by directing incompatible land uses to other locations;
- Protecting the natural environment;
- Maintaining and protecting existing agriculture resources; and,
- Conserving open space.

CURRENT STATUS

As shown on Figure 3-4 in Section 3, Mountain Home AFB maintains easements on private property that protect the majority of the CZ, but do not exist under the portions of APZ I and APZ II that are located over private land.

Mountain Home AFB also maintains easements on the northern, southwestern and southeastern edges of the Base to accommodate the explosives arc safety distances.

The National Guard and the Air Force support numerous native species and habitats, as well as Federal and state-listed threatened and endangered species. Two of the species of principal concern include the Raptor Fairy Shrimp (*Branchinecta raptor*) and the slickspot peppergrass (*Lepidium papilliferum*). If development on the installation causes impacts to a special

status species or its habitat, a land trust mechanism to acquire and hold conservation easements to mitigate these impacts may be advantageous. Such a trust could also be used to mitigate for habitat loss in the area from private development. If these easements are placed along the boundary of OTA or MHAFB, this could also further protect military operations.

Table 6-3. Acquisition Strategies

					ea of Influ						R			ole E Age		<i>j</i> /			Т	imin	g
#	Acquisition Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
2	Identify Priority Locations for Acquisition – Tank Trail Area Identify priority locations for acquisition programs (property purchase or easement purchase), should funds become available. ■ Idaho National Guard (IDNG) will work with Ada County and the City of Boise to acquire additional easements or rights-of-way for areas adjacent to the tank trail as part of future development approvals. ■ If the tank trail is abandoned by the IDANG in the future, Ada County could use it for future right-of-way for Pleasant Valley Road and/or for recreational/multi-modal circulation purposes. ▶ See also Strategy 66	NG					Α			•			•			•					
3	Identify Priority Locations for Acquisition - OTA Identify priority locations for acquisition programs (property purchase or easement purchase), should funds become available. Idaho National Guard (IDNG) will work with Ada and Elmore Counties to acquire additional easements or right-of-way for the tank trail. If the tank trail is abandoned by the IDANG in the future, Ada County could use it for future right-of-way for Pleasant Valley Road and/or for recreational/multi- modal circulation purposes.	NG									•					•					•
4	Identify Priority Locations for Acquisition - MHAFB Identify priority locations for acquisition programs (property purchase or easement purchase), should funds become available. MHAFB, in the event of a mission expansion and/or replacement of a new mission aircraft, will compare existing and future Clear Zone boundaries. If expansion is necessary, expanded easements will be prepared and executed.	МН																			

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					a of Influ						R		nsit tner			y /			Т	imin	g
#	Acquisition Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
5	Maintain Existing Easements MHAFB should monitor and update as necessary, existing easements where Explosives Arcs and Clear Zones extend beyond the boundaries of the installation.	МН		В							•						•				
6	Leverage Appropriate Grant Funding to Leverage Local, Regional and State Resources Consider applying for Land and Water Conservation Fund (LWCF) monies. This program provides funds to states for planning, developing, and acquiring land and water areas for state and local parks and recreation areas.	MH NG		А			Α	Α													
	 This annual program requires a 50% local match, and will expire in January of 2015. Areas identified in Strategies 2, 3 and 4 could augment community active and passive recreation facilities as well as military mission sustainment objectives. State: Department of Commerce 																				
	Other: Consider partnering with the Southwest Idaho RC & D to apply for Natural Resource Conservation Service (NRCS) grants ► See also Strategies 2, 3, and 4																				
7	Use DOD Easement Partnership Program MHAFB and IDANG should pursue additional conservation opportunities near their respective installations using the Department of Defense (DOD) Easement Partnership and other available federal funding sources.	MH NG		А				А													
8	Explore Strategic Land Exchanges Proximate to Military Installations to Achieve Mutual Landowner Objectives Such exchanges will be executed through a defined process, lands to be exchanged and the net benefits to each entity.	MH NG		A				Α													
	State: Idaho Department of Lands Other: Bureau of Land Management (BLM) Idaho Department of Lands Private landowners																				

AICUZ / Noise Modeling Strategies

The Air Installation Compatibility Use Zone (AICUZ) program is a DOD and Air Force planning program that was developed in response to incompatible urban development and land use conflicts around military airfields. The AICUZ program has two objectives: (1) to assist local, regional, state, and federal officials in protecting the public health, safety, and welfare by promoting compatible development within the AICUZ area of influence; and (2) to protect operational capabilities from the effects of land uses that are incompatible with aircraft operations. While prepared by or for a military installation, the primary users of an AICUZ study are the local communities surrounding the installation or an offsite location (such as auxiliary fields or training areas). The AICUZ study is also a tool used by the installation's community planner to evaluate proposed projects (both on and off the installation) for their compliance with the information presented in the AICUZ study.

The Boise Airport Master Plan (Section 8.1) provides information on noise levels and noise contours at Boise Airport.

CURRENT STATUS

The current Mountain Home AFB AICUZ study is dated March 1998. In the AICUZ strategy presented in Table 6-4, the land use guidance presented in the AICUZ is expanded to apply to the potential future mission noise contours prepared as part of this JLUS.

In preparing the Idaho JLUS, the land use compatibility guidance included in the Mountain Home AFB AICUZ Study was thoroughly reviewed and found to be appropriate for application in the study area. The AICUZ standards have been in use for several decades, and are nationally recognized planning criteria. The land use compatibility guidance is also proposed as a method to protect the long-term sustainability of Mountain Home AFB. In past Base Realignment and Closure (BRAC) processes, criteria pertaining to local jurisdiction compliance with AICUZ recommendations have been part of the BRAC evaluation. Implementing the strategy shown in Table 6-4 will provide positive confirmation if this criteria were applied in the future.

Elmore County's Airport Zoning and Development Ordinance discusses the protection of Mountain Home AFB restricting the heights and uses of property in the vicinity of MHAFB. Of the ordinance's sub-zones, one specifically identifies the AICUZ and only allows agricultural related land uses and buildings, is very restrictive relative to new single family residences, and selected commercial uses on lots larger than five acres.

Noise modeling at Boise Airport (Gowen Field) is conducted as part of master planning efforts and in response to FAA requirements.

MHAFB AICUZ

The current AICUZ for MHAFB is included in this JLUS as
Appendix D, which can be
downloaded from:
www.landusecompatibility.com
/idaho/index.htm

A land use compatibility table is included in the AICUZ as Figure 4 in Section 3 of AICUZ Volume I.

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Table 6-4. AICUZ Strategies

Table	e 6-4. AICUZ Strategies				a of						R				intity	ĮΙ			_		
					Influ	ence	9					Par	tner	Age	ncy				T	imin	g
#	AICUZ Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
9	Update the Existing Mountain Home AFB AICUZ For the purposes of this strategy, precise noise contours should be established for a potential mission scenario including the use of next generation fighter aircraft. Within these contours, local jurisdictions can use the Air Force Land Use Compatibility Guidelines to make informed decisions relative to proposed adjacent and proximate proposed development.	МН		B C																	
10	Implement AICUZ Recommendations Implement recommendations contained in the current MHAFB AICUZ, including appropriate updates as updated AICUZ reports are approved in the future. If proposed as part of a future AICUZ, the noise contours used for planning purposes shall be those for the current mission or a potential mission scenario, whichever is larger. Within this area, local jurisdictions meet or exceed the Air Force Land Use Compatibility Guidelines relative to Comprehensive Plan and Zoning designations and to evaluate existing and future land use proposals in this area.	MH		С																	
11	Future Mission Noise Potential, Gowen Field Work with IDNG and/or other military users to define a comprehensive potential future scenario for aircraft operations, including the development of a scenario to include potential future aircraft types and operation levels (above current mission) and potential transient aircraft. This information shall be used with next updating the noise modeling for Boise Airport or as part of NEPA documentation for new military missions. Other: Boise Airport US Air Force	NG				В															
12	Future Mission Noise Potential, MHAFB Work with MHAFB and/or other military users to define a comprehensive potential future scenario for aircraft operations, including the development of a scenario to include potential future aircraft types and operation levels (above current mission) and potential transient aircraft. This information shall be used with next AICUZ or as part of NEPA documentation for new military missions. Other: US Air Force	MH		С																	

Avigation Easement Strategies

An easement is a non-possessory right to use land owned by another party. An avigation easement is an easement that grants one or more of the following rights: the right of flight; the right to cause noise, dust, or other impacts related to aircraft flight; the right to restrict or prohibit certain lights, electromagnetic signals, and bird-attracting land uses; the right to unobstructed airspace over the property above a specified height; and, the right of ingress or egress upon the land to exercise those rights.

Avigation easements transfer certain property rights from the owner of the underlying property to another entity. This entity could be the owner of an airport or, in the case of military airports, to a local government agency or authorized federal agency on behalf of the military. The DOD does not typically accept or hold avigation easements. Historically, if the military desires such easements, there are several ways they can be obtained. The US Army Corps of Engineers typically serves as the negotiator and the principal real estate agent for them.

Entities acquire avigation easements for the airspace over neighboring properties to: (1) prevent construction of buildings and towers, planting of trees, installation of lighting, or any other potential vertical development that might interfere with aircraft takeoff and landing, or (2) protect against liability for any nuisance caused by aircraft using the airport (i.e. noise, fumes, and vibration) that might impact the use and enjoyment of properties adjacent to an airfield or under its flight paths.

CURRENT STATUS

In the City of Boise, all new developments and existing structures within the City's designated Airport Influence Area (AIA) must grant to the airport an avigation easement on the entire property. Boise Airport reviews all new buildings for compliance with federal and local regulations. Avigation easement forms can be obtained online or at the Boise Airport Director's office.

Title 21, Chapter 5 of the Idaho Code defines "Airport" as follows:

[From Idaho Code, 21-201] "Airport" means any area of land or water which is used, or intended for use, for the landing and takeoff of aircraft, and any appurtenant areas which are used, or intended for use, for airport buildings or other airport facilities or rights-of-way, together with all airport buildings and facilities located thereon. The term "airport" shall include such other common terms as aviation field, airfield, intermediate landing field, landing field, landing area, airstrip, and landing strip. For the purposes of this chapter, the term "airport" refers to a publicly owned and managed facility that is open for public use without operational restrictions on its use."

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The definition identifies an "airport" as a publicly owned and managed facility that is open for public use without operational restrictions on its use. Therefore, mandating avigation easements for military airports (similar to the City of Boise AIA requirements), may not be construed as a legal procedure without statutory revision of the definition.

However, requiring avigation easements for parcels adjacent and proximate to military airports may be an extension of the police power. Article 12 Section 2 of the Idaho Constitution states:

"[a]ny county or incorporated city or town may make and enforce, within its limits, all such local police, sanitary and other regulations as are not in conflict with its charter or with the general laws."

Table 6-5. Avigation Easement Strategy

					a of Influ								nsik tner			y /			T	imin	ıg
	Avigation Easement	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	er	Years	Years	Ongoing
#	Strategy	Foc	AM	AM	AM	AM	AM	AM	Sta	Ada	Elm	Õ	City	City	Shc	ldał	Mou	Other	0-3	3+,)uO
13	Develop or Update Avigation Easement Programs Require that an avigation easement be recorded with the local jurisdiction for all land divisions, building permits, and other discretionary actions within the AMI zones designated. Sample language for an avigation easement is included in the Appendix E.	MH		С		В				•	•										
	➤ See also Strategy 71																				

BASH Coordination

The DOD Bird / Wildlife Aircraft Strike Hazard (BASH) program seeks to reduce the potential for collisions between aircraft and birds or other animals, and to minimize damage and injuries when collisions occur. The BASH program promotes both land management practices that minimize bird attractants and safety procedures to recognize, control, and avoid hazardous bird concentrations.

Knowledge of where birds travel, nest, and feed helps DOD avoid problem areas, and therefore save lives and avoid the destruction of valuable aircraft. The program considers not only wildlife within the confines of the airfield, but also in neighboring areas. The BASH program covers predatory birds, nuisance flocking birds (gulls), and migratory geese and ducks. In addition to birds, the BASH program also addresses other animals that could pose a hazard to aircraft operations, such as coyotes, deer, and rabbits that wander onto runways.

CURRENT STATUS

Both MHAFB and Gowen Field experience relatively low numbers of bird strike incidents on an annual basis. Both installations have BASH programs in place, which has helped to identify and control issues. A coordinated approach, working with land management agencies, local jurisdictions, and federal resource management agencies should be formalized and continued.

Table 6-6. BASH Strategies

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#	BASH Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
14	Modify Zoning Ordinances for BASH Require Zoning Codes, subdivision regulations and planned development proposals to address bird attraction potential as part of project design and conditions of approval.	MH NG	A B							•	•	•		•	•						
15	BASH Consideration in Jurisdiction or Agency Projects All projects sponsored by a local/county jurisdiction or state and federal agencies shall consider bird attraction and will formally request comment from IDNG and MHAFB representatives on the review and mitigation of significant direct and indirect bird attraction features that may be generated through the approval of development proposals. Other: BLM US Fish and Wildlife Idaho Department of Lands Idaho Fish and Game	MH NG	A B								•			•				•			•
16	Develop BASH Educational Materials Provide educational information to local and county jurisdictions and agencies in the southern Treasure Valley region to reduce the potential for intended/unintended bird and wildlife attractions that may impede safe air operations. State: Idaho Department of Fish and Game	MH NG	G																		
17	Distribute BASH Educational Materials Agencies should provide information to land owners as part of development or permit application processes. State: Department of Commerce Department of Fish and Game	MH NG	A B							•	•			•							
	➤ See also Strategy 16																				

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		Area of Military Influence							Responsible Entity / Partner Agency									Ti	g		
#	BASH Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
18	Control Bird and Wildlife Attractions Near Installations Work directly with city and county jurisdictions and other agencies to minimize bird and wildlife attractions in the immediate vicinity of MHAFB and Gowen Field. For existing bird attracting land uses, develop measures to reduce birds and wildlife, such as "bird buster" technologies.	MH NG	A B														•				•
19	Approved Access on Private Lands Obtain and maintain written permission to access private property critical to BASH protection. Access would allow military or resource agency personnel access for bird control as needed and agreeable to the private landowner. Other: BLM US Fish and Wildlife Idaho Department of Lands Idaho Fish and Game	MH NG	A B																		

Military Installation Planning and Operations

Similar to local jurisdictions, military installations maintain long-range general plans. The Mountain Home AFB General Plan is the primary document that provides the installation commander and other military decision makers with a condensed picture of whether or not an installation has the physical assets and delivery systems to support its mission. The Mountain Home AFB General Plan provides an assessment of the installation's infrastructure and attributes for the purpose of gauging development and growth potential. In addition to its General Plan, MHAFB maintains a number of plans that describe the operational parameters for activities on the installation and in the airspace around the base. A set of plans aimed at protection of natural resources is also maintained.

The Idaho National Guard maintains a Comprehensive Installation Plan for all Idaho National Guard installations in the State of Idaho including Gowen Field and OTA. Similar to MHAFB, the Idaho Air National Guard (IDANG) and the IDNG maintain several documents that describe the operational parameters for their respective activities including noise management and natural resources management. The following set of strategies pertains to military planning and operational strategies.

Similar to MHAFB, the IDANG and the IDNG maintain several documents that describe the operational parameters for their respective activities including noise management and natural resources management. The following set of strategies pertains to military planning and operational strategies.

CURRENT STATUS

The General Plan for MHAFB is dated June 20, 2007. A Comprehensive Range Plan was approved by the base on October 17, 2009.

The Idaho National Guard maintains a Comprehensive Installation Plan, which was approved in February of 2008. This document includes sections on the OTA, the Mobilization and Training Equipment Site (MATES), Gowen Field, recruiting storefronts, and local training areas. These documents, as explained in more detail in Section 4 of the JLUS, can be instrumental in furthering the implementation of the JLUS.

Table 6-7. Military Planning and Operational Strategies

			Area of Military Influence						Responsible Entity / Partner Agency											Timing		
#	Military Planning and Operational Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing	
20	Flight Operations for Future Missions For future air missions or aircraft types (both transient	МН	G																			
	and future missions), utilize existing flight training routes (to the extent practical) to minimize new noise impacts on developed areas surrounding Gowen Field and MHAFB.	NG																				
21	Update the MHAFB General Plan Update the MHAFB General Plan to incorporate the accepted strategies of the Idaho JLUS.	MH	G																			
22	Involve Stakeholders in Defining Data Needs The Idaho National Guard/Air Guard and Mountain	МН	G																			
	Home AFB will work with the JLUS Coordinating Committee to assist in collecting new and updating existing information to assist jurisdictions and Native American Tribal Governments in ongoing compatibility planning efforts and project reviews.	NG																				
23	Locate New Operations For OTA, new missions and operations utilizing firing ranges and/or explosive ordnance should be located interior to the training area boundary in an effort to expand the distance (and reduce noise levels) from military activities and community uses.	NG	G																			

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			Area of Military Influence						Responsible Entity / Partner Agency										Т	g	
#	Military Planning and Operational Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
24	Conduct Updated Noise Studies for the Orchard Training Area The escalation of training and/or significant mission changes at OTA may increase the generation of noise as a result of increased training and operational activities. A noise study should be conducted / updated to document the noise generated and determine geographical areas where noise impacts are prevalent with any significant change in training. This information would be made available to the public.	NG	G																		

Building Codes

Construction standards and building codes are ordinances and regulations controlling the design, construction process, materials, alteration, and occupancy of any structure to safeguard human safety and welfare. They include both technical and functional standards and generally address the following.

- **Structural Safety.** Buildings should be strong enough to resist internally and externally applied forces without collapsing.
- Fire Safety. Includes requirements to prevent fire from spreading to and from neighboring structures, provide warning to occupants, provide for safe exit routes from the building, and provide access for fire suppression.
- Health Requirements. Relative to compatibility planning, building codes can be used to set noise attenuation standards and establish structural height limits.
- Accessibility. Requires a building to be accessible for persons in wheelchairs or experiencing other disabilities.

Construction standards and building codes are designed to protect the health, safety, and welfare of citizens.

Certain uses are considered acceptable based on noise attenuation measures included in the construction of new buildings. For instance, residential uses may be considered compatible inside the 65 – 69 dB DNL noise zone with sound attenuation materials installed. The strategy on Table 6-8 provides guidance on acceptable noise attenuation based on the Sound Transmission Class (STC) of the materials used in a building construction.

Certain uses are considered acceptable based on noise attenuation measures included in the construction of new buildings. For instance, residential uses may be considered compatible inside the 65 – 69 dB DNL noise zone with sound attenuation materials installed. The strategy on Table 6-8 provides guidance on acceptable noise attenuation based on the STC of the materials used in a building construction.

Sound Transmission Class

Sound Transmission Class (or STC) is an integer rating of how well a building partition attenuates airborne sound. In the USA, it is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations.

The STC number is derived from sound attenuation values tested at sixteen standard frequencies from 125 Hz to 4000 Hz. STC is roughly the decibel reduction in noise a partition can provide, abbreviated 'dB'. The dB scale is a logarithmic one and the human ear perceives a 10dB reduction in sound as roughly halving the volume - a 40 dB noise subjectively seems half as loud as a 50 dB one. (For more detail on equal-loudness curves see: Fletcher-Munson curves.) If an 80dB sound on one side of a wall/floor/ceiling is reduced to 50dB on the other side, that partition is said to have an STC of 30.

Source: http://en.wikipedia.org/wiki/Sound_transmission_class

Code enforcement attempts to ensure that property owners maintain their property and bring substandard structures and conditions up to Building and Zoning Code standards. Code enforcement programs are responsible for enforcing codes that address public health and safety issues, including regulations related to solid waste removal, specific nuisances, removal of vegetation, zoning violations, and structures. Enforcement actions are taken both proactively and in response to complaints from residents.

The purpose of code enforcement programs is to promote and maintain a safe and desirable living and working environment. Related to land use compatibility, code enforcement is a tool used by the community to ensure its rules are enforced. Issues could arise relative to structure heights, light and glare, and fire hazards.

CURRENT STATUS

For all jurisdictions, additional guidance on sound attenuation related to aircraft noise is needed. The City of Boise Air Terminal Ordinance does require sound attenuation for one of the seven zones; however the city's adopted building codes do not provide a technical description of how to achieve the required 60 dB interior noise maximum. It should also be noted that interior sound levels are typically set at 45 dB.

Each jurisdiction maintains staff to conduct code enforcement activities. The major need is to add inspection review for proposed sound attenuation, and better coordination on code compliance needs.

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Table 6-8. Building Code Strategies

	e 6-8. Building Code Strategies	Area of Military Responsible Entity / Influence Partner Agency												Ti	imin	g					
#	Building Code Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
25	Set Interior Noise Levels Jurisdictions will revise or establish interior noise level requirements to equal 45 dB.	MH NG	G							•		•	•								
26	Sound Attenuation for New Construction Amend city and county building codes to require sound attenuation for new construction of sensitive land uses in noise impacted areas (as defined by AMIs designated on this table). Regulations for construction on the Duck Valley Indian Reservation and construction proposed by other agencies (such as local school districts) are also encouraged to adopt these standards. For MHAFB, the noise impacted area will be as defined using the 65 dB Ldn contour projected for the potential mission scenario based on a mix of next generation aircraft, as shown on Figure 6-3, until such time as a new AICUZ is approved. Following approval and release of a new AICUZ, the 65 dB contour for a current mission or potential future mission scenario (whichever is larger in area) will be used. The minimum Sound Transmission Class (STC) rating of structure components shall be provided in compliance with the table shown below. As an alternative to compliance with this table, structures shall be permitted to be designed and constructed so as to limit their interior noise level to no greater than 45 Ldn. Exterior structures, terrain and permanent plantings shall be permitted to be included as part of the alternative design. The alternative design shall be certified by an acoustical engineer. STC of Exterior STC of Doors / Walls and Doors / Walls and Doors / Walls and Society of Boise already maintains appropriate standards. Other: Other agencies with independent building review, such as local school districts.	MH NG		В		В	A	A													

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#	Building Code Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
27	Expansion of Sound Attenuation Requirements - City of Boise and Ada County Expand the requirement for sound attenuation to additional airport zones in an effort to accommodate future aircraft technology which could produce noise at levels higher than existing missions. Update requirements as new noise modeling information becomes available. See also Strategy 11	NG				В				•											
28	Noise and Vibration Along Tank Trail a) State of Idaho shall pursue funding from DOD or other sources (including private funding) to produce an acoustic and vibration study along the Tank Trail. Study shall quantify both noise and vibration effects and provides mitigations that can be incorporated into future projects, to include, but not be limited to, setbacks, walls, and construction techniques and materials. b) AMI Tank Trail-AA will be adjusted based on the results of the study to better reflect the area of concern. State: Department of Commerce Military Division	NG					A												•		
29	Development Near Tank Trail Until such time as quantifiable information is prepared, any residential development greater than 4 units will be required to provide an acoustic and vibration study that will document current and future expected conditions from military operations along the Tank Trail and propose mitigations in site design or unit construction that will be used to mitigate these impacts. ▶ See also Strategy 28	NG					Α			•											

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#	Building Code Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
30	Sound Attenuation for Existing Structures Any extension, enlargement, relocation, reconstruction or substantial alteration of an existing residential use within the noise impacted area shall be subject to the acoustical performance standards as set forth in Strategy 24. Application of this strategy is defined as an activity that modifies, alters or expands an existing use by 50 percent. This shall also apply to changes in a structure that results in an increase in the number of habitable units within the structure (with habitable units as defined by the 2000 US Census). State: Division of Building Safety ▶ See also Strategy 26	MH NG		В		В	A			•			•								
31	Provide Sound Attenuation Technical Support Provide additional materials, either through inclusion in the adopted building codes or as a supplemental educational document, describing building techniques which can be used to achieve the required 45 dB interior noise maximum threshold. State of Idaho shall pursue funding from DOD to produce technical support materials, with other stakeholders distributing and using these materials. See also Strategies 25 and 26	MH NG	G																•		
32	Ensure Construction Standards for Sound Attenuation Are Met Ensure contractors are following appropriate sound attenuation standards as part of new construction or substantial remodels or reconstructions.	MH NG	G																		
33	Potential Lighting on Structures Over 50 Feet in Height In granting any permit for any structure greater than fifty (50) feet in height, the administrative agency may, if it deems such action advisable following discussions with the military and/or FAA, so condition such permit as to require installation, operation and maintenance of markers and lights as may be necessary to indicate to flyers the presence of an airport hazard. State: All permitting departments	MH NG	A B																		

CIP / Infrastructure Strategies

A Capital Improvements Program (CIP) is a detailed fiscal and planning document used to plan and direct a jurisdiction's or agency's (federal or state) investment in facilities, including infrastructure. A CIP identifies the facility plans and programs of the jurisdiction or agency and provides details on expenditures that can be incorporated into the jurisdiction's or agency's annual budgeting process. Most CIPs cover multiple years in order prioritize the major expenditures and projects that are identified to occur over several years. Jurisdictions can influence where and when growth will take place through capital investment decisions, such as the placement of roadways or other infrastructure systems. In addition to facility planning and design, the timing of the facilities is also critical to compatibility. Premature extension of infrastructure can encourage growth in an area. Inversely, lack of funding for regional transportation projects can cause capacity shortages in the short term.

CURRENT STATUS

The key issue to be addressed is to ensure that long-range capital programs do not provide increased capacity in areas where development (encouraged by the CIP) could be incompatible with any of the installations or military operations in the study area.

Table 6-9. CIP / Infrastructure Master Plan Strategies

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#	CIP / Infrastructure Master Plan Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
34	Incorporate Compatibility Planning Concepts into CIPs / Infrastructure Master Plans	MH	A B																		
	Incorporate compatibility planning concepts into CIPs / Infrastructure Master Plans for infrastructure extensions and improvements.	NG																			
	Avoid extension of infrastructure service adjacent or proximate to OTA or MHAFB, except to serve approved community / area plans or approved commercial and industrial development, which provide a more compatible land use pattern.																				
	State: Division of Public Works Idaho Transportation Department Other: Ada County Highway District (ACHD) Elmore-Ada Water Project US Department of Transportation (USDOT) Other infrastructure providers																				
	➤ See also Strategy 66																				

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#	CIP / Infrastructure Master Plan Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
35	Conduct a Traffic Impact Analysis on Pleasant Valley Road A traffic count should be conducted (during peak OTA training times where the tank trail being used) on Pleasant Valley Road, including all east-west intersecting roads and the Union Pacific Railroad. Funding should be sought from State and private development sources as part of an area plan(s) covering the area inside of the Tank Trail AMI. Other: Ada County Highway District (ACHD) See also Strategy 66	NG					A			•									•		
36	Promote Sustainable and Compatibility-Oriented Transportation Projects Work with ITD and US DOT to promote transportation projects that achieve sustainable and compatible land use and circulation patterns. Submit applications for project funds for needed highway and road improvements (i.e., rights of way expansions, overcrossings, etc.) should be promoted. Funding should be sought from State and private development sources as part of an area plan(s) covering the area inside of the Tank Trail AMI. State: Idaho Transportation Department Other: Ada County Highway District (ACHD) US Department of Transportation (USDOT)	NG	A B															•			
37	Investigate Tank Trail Grade Separations for High Volume Road Corridors Work with IDANG, Ada County, and ITD to investigate implementation of grade separation(s) for high volume roadway corridors (i.e. Kuna Mora Road, Lake Hazel extension) that intersect the Tank Trail. Funding should be sought from State and private development sources as part of an area plan(s) covering the area inside of the Tank Trail AMI. Other: Ada County Highway District (ACHD) US Department of Transportation (USDOT)	NG					A														

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#	CIP / Infrastructure Master Plan Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
38	Future Access Points Use adopted roadway corridor studies (i.e. Kuna Mora Road, Lake Hazel extension) as the guideline for determining the location of future vehicular access points for high volume roadways in the JLUS study area. This should be accomplished in a comprehensive manner for the entire roadway network prior to approval of any additional access points. State: Idaho Transportation Department Other: Ada County Highway District (ACHD)	NG	A B				Α						•								•

Communications / Coordination

In any planning effort, plans can only be successfully implemented if there are ongoing communications among the military installations, county and local jurisdictions, regional and state agencies, Native American tribal groups, landowners, and the public. Enhanced communication and coordination is seen as being integral to successful compatibility planning in the study area.

CURRENT STATUS

In the study area, the counties and local jurisdictions, agencies, Tribal Governments, MHAFB and the IDNG have an established, informal working relationship, but additional work is needed relative to establishing communication protocols and an understanding of what information is needed by those involved in land use and resource management decisions.

Relative to the Shoshone-Paiute Tribes, a program called "Wings and Roots" has been used in the past to facilitate discussions between the Tribes and government agencies, such as BLM, MHAFB, and the Idaho Army National Guard (IDARNG) / Idaho Air National Guard. At the time of this document, the memorandum of understanding between MHAFB, IDARNG / IDANG and the Wings and Roots facilitator has expired and is being renegotiated.

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Table 6-10. Communications / Coordination Strategies

	e 6-10. Communications / Coordination S			Are	a of Influ									ole E Age		<i>j l</i>			Ti	imin	g
#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
39	Establish a JLUS Coordinating Committee Establish a JLUS Coordinating Committee to maintain efficient and effective coordination among local jurisdictions, the military, Native American Tribal Governments, state and federal agencies, and other interested parties to focus on the successful implementation of the JLUS.	MH NG	G						•					•							•
	 The JLUS Coordinating Committee shall be formed within one year of the published date of the Idaho JLUS. The JLUS Coordinating Committee shall be made up of two representatives from each of the 																				
	following: - Idaho Department of Commerce - Idaho Department of Lands - Idaho Military Division - Ada County - Elmore County - Owyhee County - City of Boise - City of Mountain Home - Paiute- Shoshone Tribes - MHAFB - IDNG																				
	■ The JLUS Coordinating Committee can invite additional members as agreed upon by the Committee, including land owners and other public members, agencies, and organizations. Other jurisdictions to be considered at first meeting include the cities of Grand View and Kuna.																				
	A standing JLUS Technical Committee (including representatives from the entities noted above, plus other members with expertise needed) will be maintained and will meet as requested to provide technical input to the JLUS Coordinating Committee.																				
	 The JLUS Coordinating Committee shall meet on a regular basis, as agreed upon by the Committee. State: As defined in strategy statement Other: As invited by the Committee 																				

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
40	Establish Procedures for Formal Military Plan Review and Comment: The military shall work with local jurisdictions and relevant agencies to establish formal procedures for consultation between the base and local jurisdictions relative to planning review and comment. This will include: Definition of project types that require review Definition of project types that require military attendance at pre-application meetings Identification of the Points of Contact for all coordination Establishing a formal procedure for requesting and receiving comments Establishing a standard timeline for responses, keeping in mind mandated review time periods as specified by State law and local/county procedures Providing notice to the military on all public hearings regarding projects identified for coordination Procedures should be reviewed annually and updated as appropriate by the JLUS Coordinating Committee Idaho Department of Transportation Other: USDOT	MH	G							•				•		•	•				
41	Military as Part of Pre-Application Review Based on the project types discussed in Strategy 40, incorporate military personnel in pre-application meetings for significant projects such as: Planned Unit Developments in the AMIs Large commercial developments in the AMIs (> 100,000 square feet total leasable space) Communication and transmission towers in the AMIs Residential developments which will utilize and share transportation infrastructure with military operations, such as Pleasant Valley Road and Mayfield Road / South Orchard Access Road. State: Idaho Department of Transportation Other: Other infrastructure agencies	MH	G							•							•	•			

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
42	Transmit Development Applications to the Military for Formal Review and Comment Transmit projects to military officials for formal review and comment as defined under the process developed under Strategy 40. The military shall provide timely written comment on all projects-even those where the installation does not have any concerns. ► See also Strategy 40	MH NG	G																		
43	Transmit Jurisdictional Plans and Programs to the Military for Formal Review and Comment Transmit jurisdictional or agency plans, such as Comprehensive Plan Updates, Comprehensive Plan Amendments, Zoning Ordinance Updates, Specific Plans, or other related public agency prepared plans defined under Strategy 40. The military shall provide timely written comment on all projects-even those where the installation does not have any concerns. See also Strategy 40	MH	G														•				
44	Involve Military Officials in General Aviation Facility Planning Ensure military officials are involved in an advisory capacity, relative to operational changes at the Boise Airport and Mountain Home Municipal Airport and in the update of airport master plans and expansion plans for all other airports in the surrounding region. State: Military Division Idaho Department of Transportation	MH NG	G						•				•			•					
45	Educational Outreach on Aviation Planning Request that the ITD and FAA provide assistance and technical information that assists local decision making, especially during comprehensive plan or zoning ordinance updates. State: Idaho Department of Transportation Other: FAA	MH NG	G																		
46	Coordination on School Siting Communicate with the Boise and Mountain Home School Districts to identify areas that are not suitable for school development due to noise, safety, or other operational concerns.	MH NG	G													•					

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
	 Provide information on the location of AMIs and the desire of the military and jurisdictions not to locate school sites in these areas. Request that the Boise, Mountain Home and any other applicable school districts consult with the military on school site selection in AMIs to provide a cooperative foundation for more informed land use decisions. State: Department of Education Other: Boise School District Mountain Home School District Canyon-Owyhee School Services Agency 																				
47	Develop and Implement a Public Outreach Program The military shall administer a public outreach program relative to operations at MHAFB, MHRC, Gowen Field, the Tank Trail, and OTA. Materials developed shall provide information on the respective installation's existing and potential programs, land use, noise, safety, and operational overviews. Printed summaries on these issues should be provided to local jurisdictions within the study area for staff education and as a handout to the public. Information on these topics should be provided on the publicly available portion of the installation's website. The military should provide timely updates as key operational and/or training activities change to ensure local/county jurisdictions, agencies, and the public are informed in a timely manner. State of Idaho shall pursue funding from DOD to produce technical support materials, with other stakeholders distributing and using these materials. State: Department of Commerce	MF NG	G													•					

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
48	Technical Support for Local Decision Making Process The military should assign point of contact personnel that have the ability or can collect the appropriate technical input and provide assistance to local jurisdictions in an effort to gather and present facts on projects with potential compatibility issues at Ada, Elmore and Owyhee County Board of Commissioners, Boise and Mountain Home City Council and Planning Commission meetings. This information should be provided as needed relative to projects defined under Strategy 40. ▶ See also Strategy 40	MH	G													•					
49	Establish and Maintain Compatibility Clearinghouse Create a clearinghouse of planning information regarding military/ community compatibility planning through collaboration with county and local jurisdictions. This clearinghouse should provide web access to this information. Information of local importance should be maintained by the member agencies of the JLUS Coordinating Committee State of Idaho shall pursue funding from DOD to produce technical support materials, with other stakeholders distributing and using these materials. State: Department of Commerce	MH NG	G																		
50	Leverage Existing Organizations to Provide Compatibility Planning Training for Jurisdictions and Resource Agencies Utilize organizations such as the American Planning Association and the Department of Defense (Office of Economic Adjustment) to provide training for local staff involved in compatibility planning. Training to be arranged as part of the JLUS Coordinating Committee's activities. State: All planning / permitting departments Other: JLUS Coordinating Committee See also Strategy 39	MH NG	G																		

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
51	Work to Ensure Availability of SUA Information Working with the military, the State of Idaho will ensure information on Special Use Airspace (floors, ceilings, time of operations, etc) is easily available to jurisdictions, land management agencies, an other affected stakeholders. State: Department of Commerce Other: FAA	MH NG	G						•									•			
52	Refer Specific BLM and Idaho Department of Lands Development and Use Permit Applications to Military Installations for Review / Comment BLM and Idaho Department of Lands to modify application process to ensure early notification to military installations and local jurisdictions of specific development requests on managed lands when the initial application is received. The military will provide a list of the types of projects and locations requiring this level of notification as per recommendation in Strategy 40. Other: BLM Idaho Department of Lands See also Strategies 40 and 75	MH NG	A B																		
53	Partnering for Sustainable Use – MHRC BLM and Idaho Department of Lands to partner with Elmore and Owyhee counties, Native American tribal governments and MHAFB regarding the sustainable use of lands within the MHRC. Proposed actions include the identification and assessment of BLM and State Trust Lands within the MHRC; identification of designated lands that may have use restrictions due to a potential negative impact on military missions; and identification of areas to use for BLM or Idaho Department of Lands land transfers. Other: BLM Idaho Department of Lands	МН			A																

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
54	Partnering for Sustainable Use – OTA BLM and Idaho Department of Lands to partner with Elmore and Ada counties, Native American tribal governments and IDNG regarding the sustainable use of lands within the OTA. Proposed actions include the identification and assessment of BLM and State Trust Lands within and adjacent to the OTA; identification of designated lands that may have use restrictions due to a potential negative impact on military missions; and identification of areas to use for BLM or Idaho Department of Lands land transfers.	NG						В													
	Other: BLM Idaho Department of Lands	NAL I			Б												_				
55	Signage at MHRC Evaluate and determine areas within the MHRC where trespassing is or is anticipated to be an issue and sign area accordingly.	MH			В												•				
56	Establish Procedures to Avoid Frequency Conflicts / Issues Establish procedures for identifying types of proposed projects that involve a source of frequency emissions (including WiFi) within the Idaho study area. Local jurisdictions, potentially affected stakeholders, and the Frequency Management Office of the appropriate installation will be contacted for review of their projects to avoid potential frequency conflicts. All coordination between local governments and the affected installation will go through the installation's established single Point of Contact.	MH NG	G														•				
57	State: Department of Commerce Review of Military Planning Documents MHAFB and IDNG shall provide public versions of key planning documents for review and comment prior to finalization. Key planning documents would include the following (list to be finalized by the JLUS Coordinating Committee): AICUZ and other noise studies Comprehensive Plan / General Plan / Master Plan Integrated Natural Resource Management Plan State: Appropriate department (based on topic) Other: BLM	MH	G														•				

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#	Communications / Coordination Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
58	Housing Needs for Military Members MHAFB and IDNG will provide local jurisdictions in the study area with current information on housing demands; amount of housing provided by the installation; generalized income, by rank, of personnel living off-base; and current distribution data of personnel living off-base by zip code. This will assist local jurisdictions in their planning efforts. State: Idaho Housing and Finance Association Other: Other affected jurisdictions	MH NG	G													•	•				•
59	Noise Data MHAFB and IDNG will provide updated noise data to local jurisdictions and agencies. Noise data will be updated to reflect: Significant changes in mission or number or type of weapon systems Studies prepared to provide new or additional information on current and/or proposed activities (such as noise on the Tank Trail).	MH NG	G													•					
60	Public Affairs Liaison Establish a Public Affairs liaison with JLUS Coordinating Committee to address noise and other community issues	MH NG	G																		
61	Coordination with Shoshone-Paiute Tribes MHAFB and IDNG will continue to engage the Shoshone-Paiute Tribal government in discussions on proposed changes in use or intensity at MHRC and OTA and provide an on-going process for government-to-government consultation and coordination on issues relevant to the Tribe.	MH NG	G													•					

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Deed Restrictions / Notifications / Covenants

Deed restrictions, or covenants, are written agreements that restrict or limit some of the rights associated with property ownership. These restrictions are recorded with the deed for the property and are attached to the property when it is sold to a new owner (i.e., remain in effect). Deed restrictions are private agreements or contracts between an interested buyer and a seller. Deed restrictions are often established by the initial subdivider, either voluntarily or as a condition of approval on the subdivision.

Deed restrictions may include a wide range of limitations, but can be tailored to meet specific needs. They can also be used to eliminate or mitigate impacts associated with local development on military installations. This is accomplished through the incorporation of restrictions or limitations on development types or certain land uses. Examples include specifying a maximum height for trees and structures, restricting the use of motorized vehicles, or limiting lighting.

A deed notification is a statement recorded with a property's deed that provides notification of a condition or circumstance related to the property and its environs. For compatibility planning, these are used to provide another form of notification (disclosure) about the military operations that occur near or over the property.

CURRENT STATUS

In some jurisdictions, avigation easements and deed restrictions are used interchangeably for the purpose of protecting air operations. However, these tools can accomplish their objective in two very different ways. An avigation easement provides acknowledgement that the airspace over a specific property is used for air operations, and that these operations have the potential to create noise and/or safety issues. The easement provides a "right" to a portion of the rights that are attached with property ownership. In this case, the right to fly over the property is permitted, similar to an easement that can be executed for a shared driveway.

A deed restriction not only records a notice on the property's deed, but it also provides a portion of the rights that are attached to the property. Besides notification, the deed restriction can also be used to restrict the use of a property. It can discuss height restrictions, building locations and intensities, and other use restrictions.

Deed restrictions should be part of the toolkit for protecting the military installations within the study area, but whereas the avigation easement is used broadly across the area, deed restrictions should be carefully utilized to limit uses within specific areas.

Table 6-11. Deed Restrictions / Deed Notifications / Covenants Strategy

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#	Deed Restrictions / Deed Notifications / Covenants Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
62	Recommend Deed Notifications All land divisions, building permits, and other discretionary actions within a current Accident Potential Zone (APZ) (AMI-2, Zone A) or the Gowen Field Planning Area (AMI-4, Zone B), shall be required to file a deed notification that identifies the property's location within this area and describes the area of the property located within the APZ as defined by the military. The notice shall state that the property is subject to operational impacts associated with flight operations at Gowen Field or MHAFB.	MH NG		А		В	A	В		•	•		•			•	•				

Comprehensive Plans / Area Plans / RMP Strategies

A comprehensive plan is designed to serve as the jurisdiction's "construction" or "blueprint" for future decisions concerning land use, infrastructure, public services, and resource conservation. Typically, there are three defining features of a comprehensive plan:

- A. **General.** A comprehensive plan provides the general guidance that will be used to direct future land use and resource decisions.
- B. **Comprehensive.** A comprehensive plan covers a wide range of social, economic, infrastructure, and natural resource factors. These include topics such as land use, housing, circulation, utilities, public services, recreation, agriculture, economic development and many other topics.
- C. **Long-range.** Comprehensive plans provide community guidance on reaching a future envisioned in 20 or more years.

Within the State of Idaho, the statutes establish the primacy of the comprehensive plan. The comprehensive plan is the cornerstone for any planning process and serves as the foundation of local land use planning. Development regulations (zoning, subdivision, and other controls) must be consistent with comprehensive plans.

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The BLM uses Resource Management Plans (RMPs) to guide land use decisions and management actions on the public lands it manages. RMPs identify lands that are open or closed for certain uses, including any applicable restrictions.

CURRENT STATUS

The City of Boise is in the process of updating their 1997 Comprehensive Plan. The update, called Blueprint Boise, address Idaho Army National Guard use of Gowen Field. Due to the incomplete status of the Blueprint Boise plan, recommendations stemming from the JLUS may be adapted into the final comprehensive plan document.

The City of Mountain Home addresses Mountain Home AFB in their 2008 Comprehensive Plan, however, the main issue addressed in regards to the installation is housing. Noise issues are discussed including an action step which sates that the city will encourage open space. Planting, construction materials and other noise attenuation methods are implemented to reduce the noise impact from aircraft on surrounding land uses near Mountain Home AFB. Although the comprehensive plan outlines a strong relationship between the City and MHAFB, specific protocol for coordination on impacts between the two entities are not outlined in the comprehensive plan document.

Ada County's 2007 comprehensive plan does not address land use surrounding military installations including OTA. Fiscal Impacts of the military presence, mission sustainment policies, interagency coordination strategies, and encroachment policies are additionally absent from the comprehensive plan document. Elmore County's 2004 comprehensive plan does set forth policies pertaining to the military presence at Mountain Home AFB. Elmore County's comprehensive plan includes an Air Base Hazard Zone and an Air Base Commercial Zone, both created to prevent encroachment while allowing use of private lands that do not conflict with air base operations. MHAFB is additionally mentioned in terms of an economic driver and a conservation opportunity in Elmore County. The plan outlines objectives for coordination between land use planning and military operations, evaluating environmental compatibility between land use proposals and military operations, and for review of zoning near military installations to ensure compatibility.

The BLM has several RMPs (or similar plans) within the JLUS study area. These include: Owyhee RMP, Jarbidge RMP, Bruneau Management Framework Plan, Four Rivers RMP, and the Snake River Birds of Prey National Conservation Area RMP. Information on each of these plans can be found in Section 4.3.

Table 6-12. Comprehensive Plan / Area Plan / RMP Strategies

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#	Comprehensive Plan / Area Plan / RMP Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
63	Update Comprehensive Plans with the Compatibility Policy Set The goals and policies contained on pages (starting on Page 6-58) following this table are proposed for inclusion into each county / city comprehensive plan, as appropriate to supplement the jurisdiction's existing policies. These changes provide a complete policy package for compatibility planning and provide a policy basis for many of the other strategies contained in this JLUS.	МН	Α								•	•		•	•						
64	Include a Policy Statement on Sound Attenuation To provide a policy basis for sound attenuation requirements, jurisdiction should augment their existing/add a policy or implementing program to require sound attenuation mitigation measures to all remodeled or new sensitive land uses within the 65 Ldn contour for the existing/potential fixed/rotary air wing mission scenario at both Gowen Field and Mountain Home AFB as shown on Figure 6-2. ▶ See also Strategy 59	MH NG		В		В	Α	Α			•	•			•						
65	Incorporate Military Housing Needs in City / County Comprehensive Plans The next major update of the Boise / Mountain Home / Ada County / Elmore County Comprehensive Plan should include a discussion and programs to address military housing needs in the respective housing section/chapter of the plan. See also Strategy 58	MH NG	G						•		•	•									

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#	Comprehensive Plan / Area Plan / RMP Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
66	Encourage Planned Communities Encourage the development of planned communities to provide land use / transportation / public facilities plans in areas where growth is expected, and in areas where compatibility issues need to be addressed on a larger scale than an individual project. Potential areas include: Tank Trail Area. The areas within the Tank Trail AMI (i.e. within one mile of Pleasant Valley Road). Key issues to be addressed will be how to incorporate and protect the ability of the military to continue to use this vital connection while minimizing impacts to future residents. Concepts to address include establishing another alignment for vehicle traffic, realignment of the Tank Trail, and so forth. North OTA. Area north of OTA that is within AMI Tank Trail-A and AMI OTA – B East OTA. Area east of OTA in Ada and Elmore counties, especially for areas within AMI OTA – B. For this to occur, the jurisdictions involved would need to designate these areas as requiring an adopted community plan before a new subdivision or other development application would be processed. The area plans should be funded by the development / landowner entities in the area of benefit. For Ada County, these planned communities would be developed under the County's Planned Community Zoning Ordinance requirements. For Elmore County, a similar ordinance should be considered as needed.	NG					A	В													

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#	Comprehensive Plan / Area Plan / RMP Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
67	Vertical Obstruction Management For purposes of planning structures greater than fifty (50) feet in height, the following guidance should be used by local jurisdictions and land management agencies (the areas below are shown on Figure 6-2). It is assumed that FAA regulations (such as Part 77) will be utilized in the planning process as well when applicable. ■ General – A. Areas within this AMI are routinely used for low level flight operations, and the construction of new structures greater than fifty (50) feet in height is considered a potential safety hazard, and as such, structures at or above this height are not considered compatible and should not be approved. ■ General – B. Areas within this AMI are used for flight corridors and as part of routine flight operations and new development could pose a compatibility issue relative to flight safety. Projects within this AMI that include structures over fifty (50) feet in height should be reviewed with representatives from MHAFB and IDNG prior to issuance of permits. ■ General – C. Areas within this AMI are used for flight corridors and as part of routine flight operations and new development could pose a compatibility issue relative to flight safety. For proposed projects within this AMI that are 1) in an unincorporated area and 2) include structures over fifty (50) feet in height, the jurisdiction or agency reviewing the project should provide notice of the application to MHAFB and IDNG prior to issuance of permits State: All permitting departments Idaho Department of Lands Other: BLM	MH	A B C																		
68	Wind Generation Facilities on BLM Lands The BLM should continue to exclude wind generation facilities as part of the Snake River Birds of Prey National Conservation Area RMP for areas within AMI General – A and General – B. ► See also Strategy 67	MH NG	A B																		

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#	Comprehensive Plan / Area Plan / RMP Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
69	Consolidation of Training Facilities at OTA For purposes of long-range planning, IDNG should consider the potential to consolidate training activities associated with vehicle transit between Gowen Field and OTA to facilities at or near OTA.	NG	G																		
70	Land Use Change Guidelines Within OTA-A, land use designations (comprehensive plan or zoning code) in place as of September 1, 2010, shall be reviewed using the following criteria prior to any designation change:	MH NG						А		•											
	Land currently designated for non-residential use shall not be redesignated to a residential use category. It may be redesignated to another non- residential use category (except for mixed use) as long as conditions of approval require appropriate noise attenuation requirements for new construction.																				
	All new construction shall be required to do an acoustical study and provide appropriate noise attenuation.																				
	Land currently designated for a residential use shall not be modified to another residential designation that allows a higher density of use than allowed in the current designation.																				
	Existing, approved subdivisions or other residential development approvals shall not be amended or otherwise modified to increase the number of residential units previously approved. Changes to reorient or redistribute approve units on a given site are not restricted by this strategy.																				
	This does not change an owner's right to divide a parcel and construct a residence as provided for under the zoning regulations for Ada and Elmore counties.																				
	State: Military Division Department of Commerce																				

Sample Policy Framework (see Strategy 63)

General

Goal MIL-1

To ensure that future land uses are compatible with the continued operation of Gowen Field, Orchard Training Area, Mountain Home AFB and Mountain Home Range Complex to avoid risk to life, property and the well-being of existing and future residents from hazards associated with fixed wing and rotary aircraft operations, artillery operations and training and air-to-air and air-to ground training.

Policy: Role of Military Installations

Continue to support the roles of Gowen Field, Orchard Training Area, Mountain Home AFB, and the Mountain Home Range Complex as significant contributors to the economic base of the community, region and state.

Policy: Development Constraints

The [County / City] shall not allow development in areas where the risks to potential health and safety cannot be mitigated to an acceptable level.

Policy: Local Supplies and Services

The [County/City] will work with the respective military installation(s) to enhance the use of local and regional contractors and services, and to purchase material, equipment, and supplies from in-City or in-County sources. The [County/City] should identify and support development of businesses and suppliers to the military and their contractors that are compatible with the National Guard and/or Air Force.

Communications / Coordination

Goal MIL-2 To provide opportunities for the [County/City], military installations, residents, industry, and agencies to collaboratively participate in all phases of the comprehensive planning, zoning and/or development review process.

Policy: Coordinate with on JLUS Implementation

The [County/City] shall coordinate closely with those jurisdictions, agencies, organizations, and Native American tribal governments in and near the JLUS Study Area to ensure their policies and regulations are consistent with the City/County Comprehensive Plan, the Mountain Home AFB AICUZ, and the Idaho JLUS.

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Policy: Increase Public Awareness

Assist property owners in proximity to Gowen Field, Orchard Training Area, or Mountain Home AFB and those property owners within the Mountain Home Range Complex to increase their understanding of the installation's mission, potential impacts associated with military aviation operations, land use constraints, and potential mitigation measures to guide appropriate development proximate to these regional economic engines.

Policy: Development Review

Development proposals shall be reviewed to determine their propensity to cause hazards for aircraft take offs and landings as well as in flight, including: uses that release any substance such as steam, dust and smoke into the air which would impair pilot visibility; uses that produce light emissions, glare or distracting lights which could interfere with pilot vision or be mistaken for airfield lighting; sources of electrical emissions which would interfere with aircraft communications or navigation; and uses which directly or indirectly attract birds or waterfowl to the extent that they would pose a danger to aircraft operation in the vicinity of Gowen Field, OTA, Mountain Home AFB or the Mountain Home Range Complex.

Policy: Information Exchange with Military Installations

The [County/City] shall work with Gowen Field, OTA, Mountain Home AFB and Mountain Home Range Complex to establish an on-going formal consultation mechanism between the County/City and the proximate military installation (i.e. Idaho National Guard (Gowen Field and OTA), Air Force (Mountain Home AFB and Mountain Home Range Complex) on issues of mutual concern. This will include:

- Early notification by the [County/City] to National Guard/Air Force or officials of development applications
- Early notification by Idaho National Guard or Mountain Home AFB to the [County/City] of potential changes in aircraft operations (patterns, number, type, etc.)

Policy: Military Involvement and Review Process

The [County/City] shall provide notifications to the Idaho National Guard and Mountain Home AFB for review and comment on [County/City] discretionary land use actions to include, but not limited to, Comprehensive/Specific Plan amendments or updates, zone changes, tract maps, parcel maps, master plans, and conditional/special use permits.

Policy: Coordinate Military Compatibility Planning with Other Local Jurisdictions

The [County/City] shall maintain close contact with their counterparts in other county/local jurisdictions to coordinate military compatibility planning and management activities.

Policy: Meeting Military Housing Needs

The [County/City] will work with the Idaho National Guard and Mountain Home AFB officials in identifying strategies to meet the housing needs of military personnel during updates to the [County's/City's] housing chapter (or housing subsection in the land use chapter) in their respective Comprehensive Plan.

Policy: Enhanced Real Estate Disclosure

Develop an enhanced Real Estate Disclosure Ordinance to ensure appropriate information about the missions and operations at Gowen Field, OTA, and Mountain Home AFB are fully disclosed at the earliest possible point in the interaction between realtor / real estate agent and a buyer or renter.

Policy: Staff Training on Military Compatibility Planning

The [County/City] and Idaho National Guard and Mountain Home AFB shall cooperate to provide [County/City] staff with on-going training opportunities to maintain their awareness of the latest technology and regulations concerning military compatibility issues.

Policy: Infrastructure Capacity for Military Installations

The projected need for additional infrastructure and other municipal services by the Idaho National Guard and Mountain Home AFB should be considered in the development of new infrastructure master plans.

Policy: Infrastructure Expansion

The [County / City] shall review and address capital improvement plans (CIP) and master infrastructure plan projects that may impact the missions at Gowen Field, OTA and Mountain Home AFB. These plans should be reviewed on an annual basis or when an agency is updating their respective CIP or other plans. Coordination with the Idaho National Guard and/or Mountain Home AFB during these reviews will be conducted.

Mitigating Compatibility Issues

Goal MIL-3 To mitigate encroachment issues associated with land uses and development.

Policy: Avigation Easements

The [County/City] shall require the dedication of avigation easements when development is proposed on property within [insert geographic reference using AMI General – A or AMI General – B] and airport safety zones.

Policy: Major Plan Coordination with Military

Require that specific plans, area plans, and other regional plans (either new plans or updates/revisions) in the Idaho JLUS Study Area specifically address compatibility issues involving the military, such as dark skies, water availability and quality, density, cluster development, and other development design issues.

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Policy: Mountain Home AFB AICUZ Recommendations

The [County/City] shall review and, to the greatest extent possible, take actions to implement the recommendations provided in the current and future Mountain Home AFB AICUZ studies.

Policy: Vertical Obstructions

All new development and substantial redevelopment in the [County/City] shall conform to FAR Part 77 height limits and developed to not pose a safety hazard to air operations in the region.

Policy: Outdoor Lighting

The [County/City] shall ensure that future development includes provisions for the design of outdoor light fixtures to be directed / shielded downward and screened to avoid nighttime lighting spillover effects on adjacent land uses and nighttime sky conditions.

Policy: Lighting

The [County/City] shall continue to improve and maintain proper lighting at [County/City] facilities and assist in reducing undue nuisance light and glare spillage on adjoining areas.

Habitat Conservation Tools

The Federal Endangered Species Act allows for the development of Habitat Conservation Plans (HCPs). Incidental take permits help landowners legally proceed with activities that might otherwise result in illegal impacts to a listed species. An HCP is a document that supports an incidental take permit application pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act. HCPs are an evolving tool. Initially designed to address individual projects, HCP are currently more likely to be broad-based plans covering a large area. The geographically broader HCP is used as the basis for an incidental take permit for any project within the boundaries of the HCP. Regardless of size, an HCP should include measures that, when implemented, minimize and mitigate impacts to the designated species to the maximum extent possible, and how these efforts will be funded.

CURRENT STATUS

While several threatened and endangered species exist in the area, current tools were seen as adequate in terms of compatibility planning. Therefore, no strategies area proposed under this type.

See the discussion of BLM Resource Management Plans in Section 4.3.

Hazard Mitigation Plans

Hazard mitigation is defined as any sustained, cost-effective action instituted to reduce or eliminate long-term risk to people, property, and the environment from natural and man-made hazards and their effects. Hazard Mitigation Plans include actions that have a positive impact over an extended period of time. This distinguishes them from emergency planning or emergency services, which are associated with preparedness for immediate response to, and short-term recovery from, a specific natural or man-induced event. Hazard mitigation actions, which can be used to eliminate or minimize the risk to life and property, are organized into three categories: (1) those that keep the hazard away from people, property, and structures; (2) those that keep people, property, and structures away from the hazard; and (3) those that reduce the impact of the hazard, such as property insurance.

A hazard mitigation plan identifies hazard mitigation goals, objectives, and recommended actions that will reduce or prevent injury to people and damage to property from natural and man-made hazards. The hazard mitigation plan provides guidance for hazard mitigation activities in the designated planning area.

CURRENT STATUS

No strategies under this type were identified to be necessary.

Legislation

State legislation can have a significant impact on compatibility planning by allowing, restricting or limiting the tools available to local jurisdictions to control land use planning activities. Legislative strategies are designed to encourage changes in state law to accomplish a desired end state. Under Idaho law, local jurisdictions are provided with certain powers over which they can regulate land uses and activities. If additional local control is desirable, state enabling legislation would be required to create or amend existing regulatory authority.

On the local level, new or expanded regulation would be accomplished through the development, consideration, and passage of new ordinances or procedures. These changes would need to be consistent with the provisions of state law.

CURRENT STATUS

Although the State enabling legislation for Idaho allows for most compatibility tools to be used, legislation which could limit military operations should be monitored as it could limit future military missions especially pertaining to low flight training in the range complex and OTA.

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Table 6-13. Legislative Strategies

	e 0-13. Legislative Strategies				a of Influ						Re		nsik tner		intity ncy	y /			Ti	imin	g
#	Legislative Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
71	Amend the Local Land Use Planning Act The Act should include military related goal(s), the	МН																			
	ability to enact a JLUS (for those counties and/or jurisdictions with a military installation within its jurisdictional boundaries), and the ability to adopt AMI boundaries (as designated in the JLUS).	NG																			
	State: State Legislature Governor																				
	➤ See also Strategy 13																				
72	Provide Legislative Support for Avigation Easement Programs	MH	G																		
	Work with the Idaho Attorney General's office to modify State law to clearly define and allow avigation easements.	NG																			
	State: State Legislature Governor																				
	➤ See also Strategy 13																				

Memorandum of Understanding

A Memorandum of Understanding (MOU) is a contract between two or more government entities. The governing bodies of the participating public agencies must take appropriate legal actions, often adopting of an ordinance or a resolution before such agreements become effective. These agreements are also known as Joint Powers Agreements or Interlocal Agreements.

The Idaho Statutes allow public agencies to enter into MOUs. The definition of public agency includes, but is not limited to, the federal government or a federal agency, the state or any state department or agency, a county, city, county board of education or school superintendent, public corporation, or public district.

The purpose of a MOU is to establish a formal framework for coordination and cooperation. These agreements may also assign roles and responsibilities for all of the agreement's signatories. MOUs generally promote:

- Coordination and collaboration by sharing information on specific community development proposals, such as rezonings and subdivisions.
- Joint communication between participating counties, local jurisdictions and the military ensures that residents, developers, businesses, and local decision makers have adequate information about military operations, possible impacts on surrounding lands, procedures to submit comments, and any additional local measures to promote land use compatibility around installations.
- Formal agreement on land use planning activities, such as implementation of the Idaho JLUS.

CURRENT STATUS

While the county and local jurisdictions in the two focus areas work together on planning in the study area, the only formal agreements on compatibility planning that exist are focused on the Boise Airport. This strategy type is proposed to formalize other specific actions contained in this JLUS to help ensure a coordinated regional approach is fostered.

Table 6-14. MOU Strategies

					a of Influ						Re		onsil tner			y /			Ti	imin	g
#	MOU Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
73	Develop a Memorandum of Understanding (MOU) to Implement the Joint Land Use Study County and local jurisdictions and agencies that are members of the JLUS Coordinating Committee should create and execute a general MOU to initiate implementation of the recommendations adopted by each jurisdiction. This MOU will detail the expectations for coordination and agreement to establish and maintain the JLUS Coordinating Committee. State: Idaho Department of Lands Other: BLM	MH NG	A B						•				•	•	•						

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					a of Influ								onsik tner			y /			Ti	imin	g
#	MOU Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
74	Develop Specific MOUs to Implement JLUS Recommendations Identify, create and execute specific MOUs among affected jurisdictions and the military as tools are adopted. MOUs should cover: Interagency coordination (see Strategies under "Communication / Coordination") Other tools involving the interaction of two or more jurisdictions, agencies, or the military. State: Idaho Department of Lands Idaho Transportation Department Other: BLM USDOT FAA	MH NG	A B						•	•			•	•	•			•	•		
75	Seek Military Input on Permit Applications Develop a Memorandum of Understanding with Federal and State agencies to allow the military to review for communication and power transmission towers, land transfer, and other permits as defined as a result of Strategies 40 and 52. State: Idaho Department of Lands Other: BLM See also Strategies 40 and 52	MH NG	A B																		

Real Estate Disclosure

The purpose of real estate disclosure is to protect the seller, buyer, and sales agent from potential litigation resulting from specified conditions (i.e., hazard areas, existing easements) of the property. Real estate disclosure can be used to inform potential buyers and renters of the possible affects from nearby military installations. This disclosure can be one of the most practical and cost effective land use compatibility tools.

CURRENT STATUS

The Idaho Statutes Title 55-2506 requires real estate disclosures and states that disclosure forms are to be used to:

"... disclose material matters relating to the physical condition of the property to be transferred including, but not limited to, the source of water supply to the property; the nature of the sewer system serving

the property; the condition of the structure of the property including the roof, foundation, walls and floors; the known presence of hazardous materials or substances."

Title 55-2514 also identifies:

"... Idaho Code, does not limit and shall not be construed as limiting any obligation to disclose an item of information that is created by any other section of the Idaho Code or the common law of the state of Idaho."

The same section proceeds to further state that the disclosure requirements do not bar:

"... application of any legal equitable defense that a transferor of residential real property may assert in a civil action commenced against the transferor by a prospective or actual transferee of the property."

Acknowledging the existing state statutes, the code does not specifically require disclosure of location in proximity to a military installation or proximity to military operations that may cause noise, dust, vibration or other perceived negative affects.

Table 6-15. Real Estate Disclosure Strategies

					a of Influ								nsik Iner		ntity ncy	j l			Ti	imin	g
#	Real Estate Disclosure Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
76	Develop an Enhanced Real Estate Disclosure Ordinance Augment the language of the Real Estate Disclosure Ordinance with information that identifies the missions, operations and location of proximate military installations in Idaho. It is critical that this information is fully disclosed at the earliest possible point in the interaction between realtor or real estate agent and a buyer or renter.	MH NG	A B						•									•			
	 Work with the Idaho Real Estate Commission, the Idaho Association of Realtors, and local real estate representatives to develop and implement adequate language for inclusion in disclosure notices. Work with the Idaho Real Estate Commission, the Idaho Association of Realtors, and local real estate representatives to ensure compliance with notification requirements. 																				

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					a of Influ						R		onsil tner			y /			Ti	imin	g
#	Real Estate Disclosure Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
	State: Idaho Real Estate Commission Other: Idaho Association of Realtors																				
77	Real Estate Disclosure Information County and local jurisdictions and military installations should work cooperatively to make available the information required for real estate disclosure (as defined by this strategy) regarding operational issues at military installations in Idaho (rotary and fixed wing aircraft, artillery, gunnery, and explosive noise potential; overflight; light and glare; traffic; vibration; etc.). State: Idaho Real Estate Commission Other: Idaho Association of Realtors	MH NG	A B						•										•		

NEPA

The National Environmental Policy Act (NEPA) provides a mechanism to identify environmental impacts resulting from state and local governmental decisions. NEPA is the federal law, effective on January 1, 1970, that established a national policy for the environment and requires federal agencies (1) to become aware of the environmental ramifications of their proposed actions, (2) to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision making, and (3) to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

NEPA ensures that the environmental impacts of a proposed action, and potential alternatives to the action, will be considered by an agency before it decides to fund and implement the action. The process required is intended to increase the quality of decisions because it demands a full understanding of the various impacts, and because input must be received from a range of stakeholders. Emergency exceptions are made when the immediate health and safety of people are threatened.

CURRENT STATUS

NEPA documentation requirements are typically administered by federal agencies (such as BLM), the Idaho National Guard and Mountain Home AFB, and other agencies, as required by law. The purpose of the following strategies are to ensure early and full disclosure relative to future projects / actions. NEPA documents are meant to enhance decision making through

disclosure of potential impacts and the mitigations and alternatives considered. This is another form of interagency coordination / communication which can enhance compatibility planning.

Table 6-16. NEPA Strategies

	e 0-10. NEFA 3tt ategies				a of Influ								nsik tner			y /			Ti	imin	g
#	NEPA Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
78	Timely Transmittal of NEPA Documents to Study Area Stakeholders	МН	G																		
	MHAFB, IDNG and DOD will ensure that all stakeholders (members of JLUS Coordinating Committee) are provided timely notice of all NEPA documentation, except for categorical exemptions, or as otherwise refined by the JLUS Coordinating Committee, for comment. This strategy applies to jurisdictions with land within the JLUS study area. Other: DOD	NG																			
79	Timely Transmittal of NEPA Documents to Military BLM and other federal agencies will ensure that	МН	G																		
	MHAFB and IDNG are provided timely notice of all NEPA documentation, except for categorical exemptions, or as otherwise refined by the JLUS Coordinating Committee, for comment.	NG																			
	Other: BLM FAA US Fish and Wildlife Other Federal agencies with projects in study area																				

Zoning / Subdivision

ZONING

Zoning is the division of a jurisdiction into districts (zones) within which permissible uses are prescribed and restrictions on building height, bulk, layout, and other requirements are defined.

The primary purpose of zoning is to protect the public health, safety, and welfare. Refining this goal further, zoning provides opportunities for the implementation of regulations supporting land use compatibility, as shown in the following examples.

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- Zoning provides protections against:
 - Physical danger, particularly safety considerations for properties in proximity to military ranges or within military flight areas.
 - Nuisances associated with military operations, such as noise, vibration, air emissions, etc.
 - Heavy traffic flows or truck routes in residential areas.
 - o Aesthetic nuisances impacting military installations.
 - Psychological nuisances, such as perceived and actual dangers associated with military operations.
 - o Light and glare, air emissions, and loss of privacy.
- Zoning also provides the ability to:
- Provide open space and preserve agricultural areas.
- Establish consistency between the zoning ordinance and the comprehensive plan. These two documents are inexorably tied to each other. Policies recommended within the comprehensive plan should be reflected within the zoning ordinance or development code.
- Allow for flexibility. Zoning ordinances requiring rigid separation of uses or inflexible provisions can minimize creative solutions to land use compatibility, such as cluster development.
- Understand jurisdictional limitations. When designating military compatible use districts, the ordinance should recognize that the local community has no regulatory control over development or activities on federal property.

SUBDIVISIONS

Land cannot be divided in Idaho without local government approval. Dividing land for sale, lease or financing is regulated by local ordinances. The local comprehensive plan, zoning, subdivision, and other ordinances govern the design of the subdivision, the size of its lots, and the types of required improvements, such as street construction, sewer lines, and drainage facilities.

Subdivision ordinances set forth the minimum requirements deemed necessary to protect the health, safety, and welfare of the public. Specifically, the subdivision ordinances are designed to accomplish the following initiatives:

- Assure that effective protection is provided for the natural resources of the community, especially ground water and surface waters.
- Encourage well-planned subdivisions through the establishment of adequate design standards.
- Facilitate adequate provisions for transportation and other public facilities.

- Secure the rights of the public with respect to public lands and waters.
- Improve land records by the establishment of standards for surveys and plats.
- Safeguard the interests of the public, the homeowner, the subdivider, and units of local government.
- Prevent, where possible, excessive governmental operating and maintenance costs.

CURRENT STATUS

The City of Boise has adopted the Boise Air Terminal Ordinance in conjunction with Ada County to designate appropriate uses and desired sound attenuation zones near Gowen Field. Although this ordinance takes a large step towards achieving compatibility between land use and military air operations, it does not address key topics such as light, glare, and frequency. Furthermore, by allowing sanitary landfills in zones close to the runway, a bird aircraft strike hazard may be created. Additional sound attenuation provisions could also be included. Additionally, none of the subdivision ordinances around MHAFB requires subdivision plat notes for developments within proximity to the installation.

Ada County's zoning ordinance does not specifically address land use compatibility with military operations at OTA, nor does it contain lighting standards, compatible noise levels, height restrictions, light restrictions, or glare prevention. Interagency communication on subdivision matters is not required by in the Ada County Subdivision Ordinance. Plat notes for development near OTA are not required at this time.

Table 6-17. Zoning / Subdivision Strategies

					a of Influ						R		onsik tner		intity ncy	<i>j</i>			Ti	min	g
#	Zoning / Subdivision Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
80	Utilize Flexible Entitlement Tools Use planned community, planned unit development, planned development district or other flexible entitlement techniques to assist property owners allocate appropriate uses and locations in an effort to enhance compatibility proximate to MHAFB, MHRC, Gowen Field, the Tank Trail and OTA.	MH NG	A B							•	•	•	•	•							
81	Ensure FAA Part 77 Compliance For all new, redeveloped or rehabilitated structures (including electrical transmission towers/lines, cellular and radio transmission towers, etc.), ensure	MH NG		С		С			•								•				

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			Area of Military Influence						Responsible Entity / Partner Agency										Timing		
#	Zoning / Subdivision Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
	compliance with FAA Part 77 height limit requirements to minimize vertical obstructions (i.e. buildings, telecommunications facilities recreational facilities, energy transmission/generation towers, etc.). In addition, ensure the developments and structures are compatible with, and do not pose a safety hazard to, air operations in the region. NOTE: For further information on Part 77, please refer to the discussion under Compatibility Factor 3, Vertical Obstructions, in Section 3 and Appendix F. State: Idaho Department of Lands Idaho Transportation Department																				
	➤ See also Strategies 40, 67, and 75																				
82	Develop or Update Light and Glare Controls Develop or update municipal and/or county light and glare controls to protect the operational environment near MHAFB and OTA. These controls should be designed to reduce the amount of light that spills into military training areas and impacts night training operations.	MH NG		С				В											•		
83	Dark Skies Ordinance Adopt and/or revise a county/city dark sky ordinance within the JLUS Study Area.	MH NG		С				В											•		
84	Modify Subdivision Regulations, Disclosure Modify subdivision regulations to require appropriate disclosures are recorded as part of a property's deed upon sale of land. Disclosure shall notify the purchasing parties within the General AMI, Zones A and B of the military operations in the study area and their respective operations and potential compatibility issues.	MH NG	A B																		
85	Consider Modifications to the Boise Air Terminal Ordinance Potential updates include: Adding provisions for uses which create light, glare, and frequency. Prohibiting sanitary land fills in Air Terminal Zone B Adding sound attenuation provisions for all zones	NG				В															

Other

One strategy did not fit specifically under any of the previously described strategy types. This strategy, which discusses the future of the base, are shown on Table 6-18.

Table 6-18. Other Strategy

			Area of Military Influence						Responsible Entity / Partner Agency									Timing			
#	Other Strategy	Focus Area	AMI 1: General	AMI 2: MH AFB	AMI 3: MHRC	AMI 4: Gowen Field	AMI 5: Tank Trail	AMI 6: OTA	State of Idaho	Ada County	Elmore County	Owyhee County	City of Boise	City of Mtn. Home	Shoshone-Paiute Tribes	Idaho National Guard	Mountain Home AFB	Other	0-3 Years	3+ Years	Ongoing
86	Update the Idaho JLUS The State of Idaho will pursue federal grants to update	MH	G																		
	the Idaho JLUS should an Idaho installation be selected for the beddown of a new aircraft.	NG																			

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Please see the next page.



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TDAHO

DEPARTMENT OF COMMERCE

C.L. "BUTCH" OTTER, GOVERNOR